

FUSION USER MANUAL

**SCC P/N
20-00367**

**FUSION MODELS GMS4H,
GMS6H & GMS8H HEATED
SERVICE CASES**

**Model GMS6H
Shown at Right**



**Model GMS8H
Shown at Left**



Model GMS4H.....51"L* x 43 3/8"D^ x 51 51 5/8~
Model GMS6H.....75 3/8"L* x 43 3/8"D^ x 51 51 5/8~
Model GMS8H.....99 3/4"L* x 43 3/8"D^ x 51 51 5/8~
**Includes End Panels (Deduct 2 1/4" If No End Panels)
~From Floor to Top of Unit ^50 3/8" With Rear Ledge Raised*

Structural Concepts®

DELIVERING FRESH. ALWAYS.™ Structural Concepts Corp. · 888 E. Porter Rd · Muskegon, MI 49441 Phone: 231.798.8888 Fax: 231.798.4960 · www.structuralconcepts.com

TABLE OF CONTENTS

OVERVIEW / CONDITION TYPE / TEMP / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING	3-4
INSTALLATION INSTRUCTIONS: SKID REMOVAL / CASE ALIGNMENT, ADJUSTING & SEALING	5
INSTALLATION INSTRUCTIONS, CONT'D: SEALING AND BOLTING HEATED CASES TOGETHER	6
START-UP / LIGHTING / CASE TEMPERATURE / PROGRAMMABLE CONTROLLER / OPERATION	7
ELECTRICAL CONNECTIONS: ACCESS AND FIELD WIRING	8
WELL HEAT	9
OVERHEAD CERAMIC HEATERS	10
OVERHEAD CERAMIC METAL HALIDE LIGHT FIXTURES	11
FRONT GLASS / REAR DOORS / OPTIONAL REAR LEDGE	12
OPTIONAL SCALE STAND	13
REMOVING PANS AND DIVIDERS (FOR CLEANING)	14
CLEANING SCHEDULE	15
TROUBLESHOOTING	16
SERIAL LABEL LOCATION & INFO LISTED / TECH INFO & SERVICE - AMBIENT/HEATED CASES ONLY	17
PROGRAMMABLE CONTROLLER INFORMATION	18
TECHNICAL SERVICE CONTACT INFORMATION / WARRANTY INFORMATION	19

OVERVIEW

This Fusion merchandiser is designed for dry heating operations throughout product area. Heat is generated from electric rod well warmers as well as ceramic heaters and overhead ceramic metal halide lamps.

- This merchandiser is designed for display of perishable, unpackaged heated products.
- This merchandiser IS NOT designed to heat products up; product must be pre-heated PRIOR to its display.
- Cases should be installed and operated according to this operating manual's instructions to ensure proper performance.
- Improper use will void warranty.

NSF/ANSI TYPE I vs. II ENVIRONMENTAL CONDITIONS

This unit is designed for the display of products in ambient environmental conditions where temperatures and relative humidity are maintained within a specific range.

- NSF/ANSI Type I Conditions: Product is displayed in store conditions with maximum ambient temperature of 75 °F (24 °C) and relative humidity of 55%.

INTEGRATED AVERAGE PRODUCT TEMPERATURE

- The Structural Concepts® Fusion Service Deli Merchandisers are designed to merchandise product at an integrated average product temperature of 150 °Fahrenheit / 66 °Celsius.

COMPLIANCE

- Performance issues when in violation of applicable NEC, federal, state and local electrical and plumbing codes are not covered by warranty.
- See below compliance guideline.

WARNINGS

- This page contains important warnings to prevent injury or death.
- Please read carefully!

PRECAUTIONS and WIRING DIAGRAMS

- See next page for **PRECAUTIONS** and **WIRING DIAGRAM** information.



**ATTENTION
INSTALLER**

COMPLIANCE

This equipment **MUST** be installed in compliance with all applicable NEC, federal, state and local electrical and plumbing codes.

WARNING

**ELECTRICAL
HAZARD**

**WARNING**

Risk of electric shock. Disconnect power before servicing unit.
CAUTION! More than one source of electrical supply is employed with units that have separate circuits.
Disconnect ALL ELECTRICAL SOURCES before servicing.

WARNING

**HOT
SURFACE**

**WARNING**

Pans and Wells Are Hot!
Disconnect and allow to cool
before cleaning or removing from case.

WARNING

**HOT
SURFACE**

**WARNING**

Ceramic Heaters and Ceramic Metal Halide Lamps Are Hot!
Turn Off or Disconnect and Allow to Cool
Before Servicing or Replacing.

PRECAUTIONS

- Following are important precautions to prevent damage to unit or merchandise. Please read carefully!
- See previous page for specifics on **OVERVIEW**, **CONDITION TYPE**, **COMPLIANCE** and **WARNINGS**.

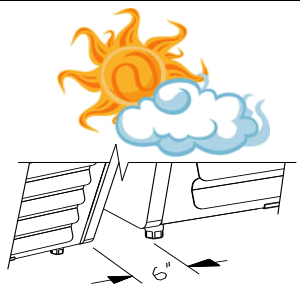
WIRING DIAGRAM

- Each case has its own wiring diagram folded and in its own packet. Wiring diagram placement may vary; it may be placed near ballast box, field wiring box, raceway cover, or other related location.

REFRIGERANT DISCLOSURE STATEMENT

- This equipment is prohibited from use in California with any refrigerants on the "List of Prohibited Substances" for that specific end-use, in accordance with California Code of Regulations, title 17, section 95374.
- This disclosure statement has been reviewed and approved by Structural Concepts and Structural Concepts attests, under penalty of perjury, that these statements are true and accurate.

CAUTION



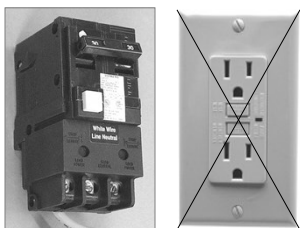
CAUTION! ADVERSE CONDITIONS / SPACING ISSUES

- Performance issues caused by adverse conditions are NOT warranted.
- To prevent damage to end panels due to condensation, apply industrial grade silicone sealant and tightly join to opposite end panels. When not adjoining cases, keep end panels at least 6" away from walls/structures. Rear panels must also be kept at least 6" from walls and structures.
- Case must not be exposed to direct sunlight or any heat source.
- To maintain proper case temperature, keep case at least 15-feet from exterior doors, overhead HVAC vents or any air curtain disruption.
- Self-contained case clearance: 6" min. air intake / 6" min. air discharge.

CAUTION

CAUTION! LAMP REPLACEMENT GUIDELINES

Allow to cool before accessing lamps.
Lamps are NOT manufactured to resist breakage.
Replace with similarly manufactured lamps of same wattage.
See *Maintenance Fundamentals* section in this manual for specifics.



CAUTION! GFCI BREAKER USE REQUIREMENT

If N.E.C. (National Electric Code) or your local code requires GFCI (Ground Fault Circuit Interrupter) protection, you **MUST** use a GFCI breaker in lieu of a GFCI receptacle.



CAUTION!

DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR ACTUAL PRODUCT (FOOD) TEMPERATURES.

- Thermometers & thermostats reflect air temperatures **ONLY**.
- For **ACTUAL** product (food) temperatures, use a calibrated food thermometer.



WARNING: This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to P65Warnings.ca.gov.

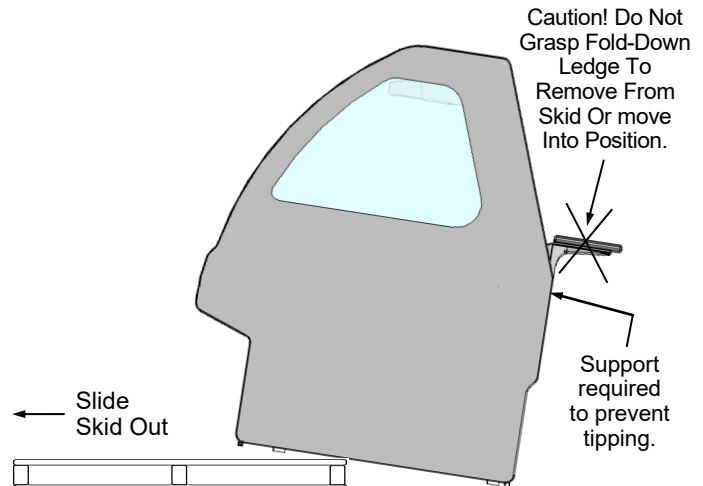
INSTALLATION INSTRUCTIONS: SKID REMOVAL / CASE ALIGNMENT, ADJUSTING & SEALING

Installation

Note: Units shown may not depict an exact representation of your particular unit being installed.

1. Remove Unit From Skid

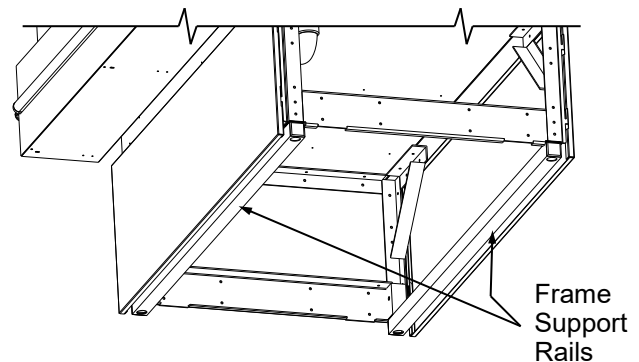
Caution: case must always remain supported or center of gravity will allow case to fall. Slide unit to rear of skid and tip backward off skid.



2. Case Aligning, Adjusting and Sealing

For service glass to align properly, case must be level and plumb.

- Shims will be provided with all cases that have frame support rails.
- **Note:** After case is in position, it must be sealed to floor to prevent entry or leakage of liquid or moisture.
- **Caution!** These units **MUST BE** sealed to the floor to maintain conformance to equipment mounting standards.
- Align multiple units.
- See next page for information on sealing and bolting heated cases together.

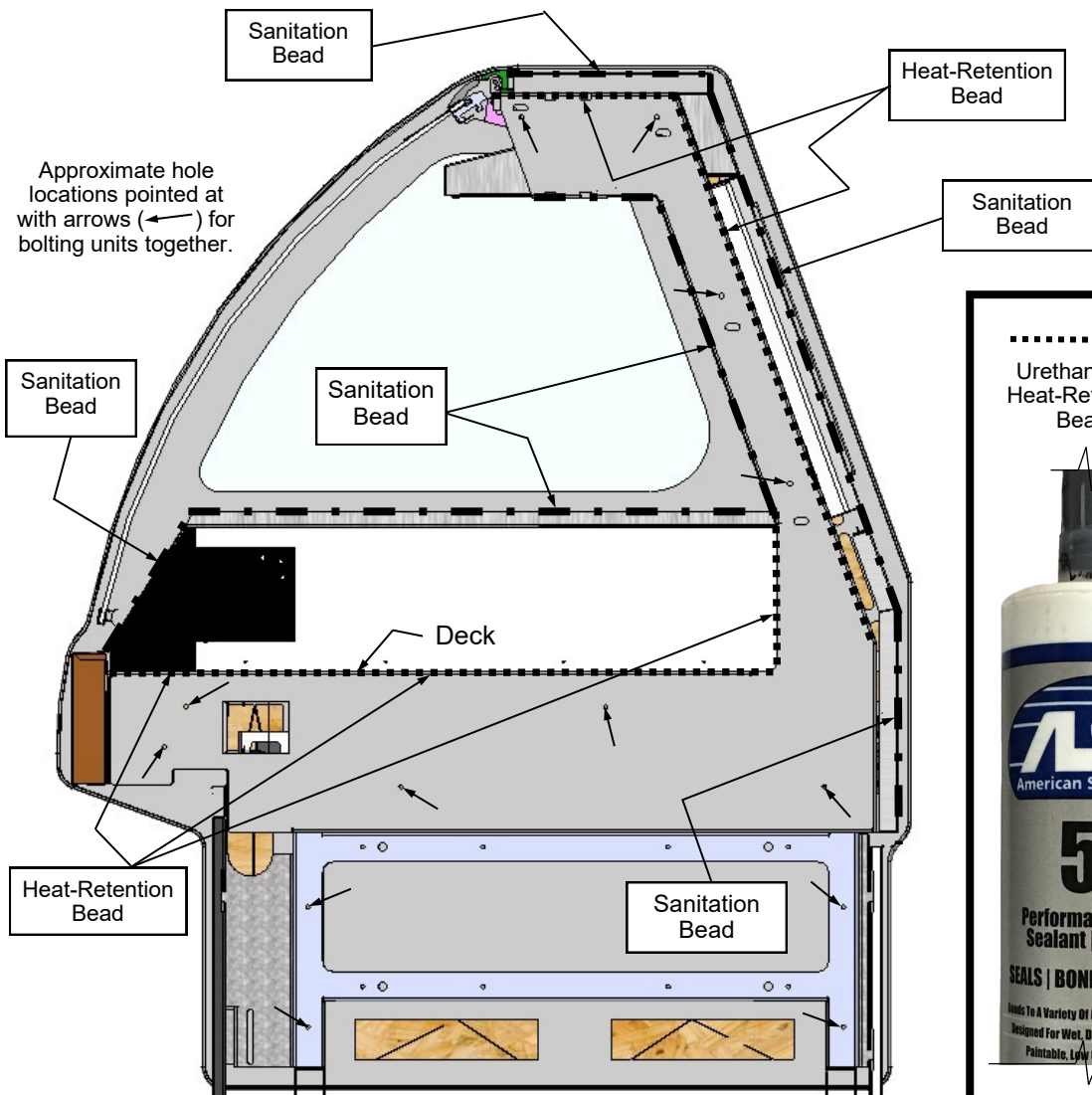


INSTALLATION INSTRUCTIONS, CONT'D: SEALING AND BOLTING HEATED CASES TOGETHER

3. Sealing and Bolting Heated Cases Together

Follow these steps to assure a secure, level lineup.

- A. Begin all lineup leveling from highest point of floor.
- B. After the 'first' case is level, check that front and/or rear doors smoothly open and close.
- C. Apply a heat-retention bead of industrial grade urethane adhesive on NON-VISIBLE areas (at case ends) as directed below. See sample product at lower-right.
- D. Line up 'second' case bolt-hole to bolt-hole to 'first' case.
- E. Using SCC-supplied bolts (found in installation packet or inserted in holes); connection points are shown with floating arrowheads below (↔). You may need to remove decking, side covers, 'perf' panel, etc. to access certain holes. Insert bolts.
- F. Caution! Front of cases MUST be flush with each other! After leveling, all cases to be same height.
- G. Using SCC-supplied nuts & bolts, **lightly tighten** each of the 5 to 8 bolts in a cross-wise pattern. Work your way around the pattern, tightening more firmly at each pass. **Do not** firmly tighten one bolt and then start on the next!
- H. After the cases are bolted together, level the 'second' case. Repeat this process for each case to be adjoined.
- I. After all lined-up cases are level, apply a sanitation bead of industrial grade, heat-rated silicone sealant as directed below. See sample product at lower-right.



1. Merchandiser Start-Up

- Case must be field wired.
- When power is supplied, throw main power switch at case rear-right and case will power-up.
- See illustration below-right.

2. Lighting

- Overhead light switch is at case rear, right side.
- See illustration below-right.

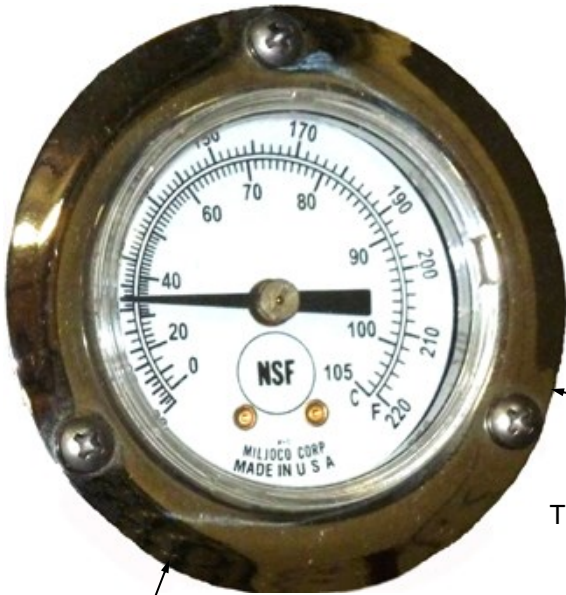
3. Case Temperature

- Well temperature is dependent upon both the waterless well temperature and the overhead ceramic heater temperatures.
- Preheat case to 170 °F on case temperature dial (photo shown below-left) before placing food into case.

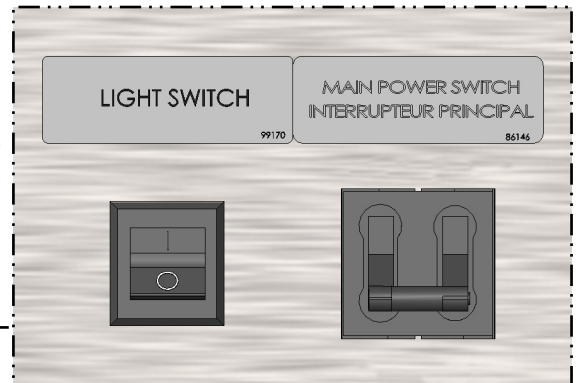
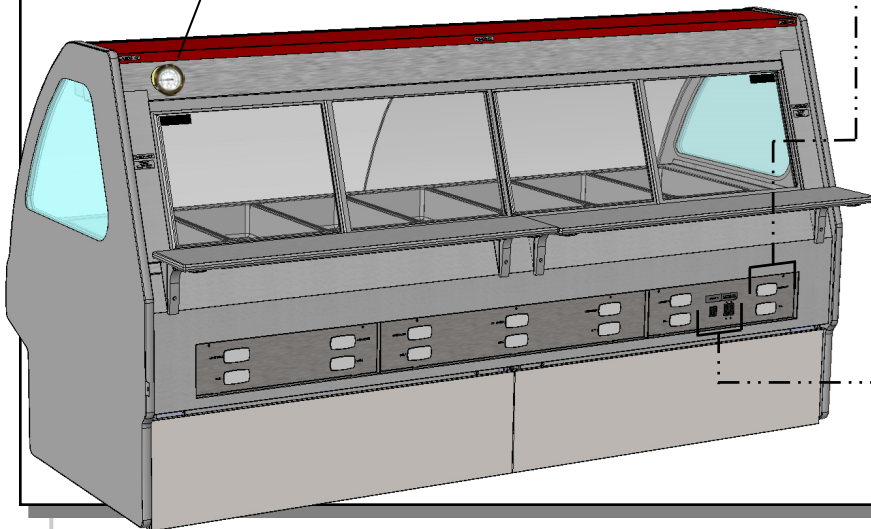
- **Caution:** Case Temperature dial reflects internal case temperature **ONLY** (not product temperature). Use a food probe to determine **ACTUAL** product temperature!

4. Product Heating Guidelines / Programmable Controllers

- Well and overhead ceramic heaters are controlled by **Programmable Controllers**.
- These controllers are located on rear wireway cover (as shown in illustration below-right).
- Programmable controllers are pre-set at the factory to heat both overhead and well at proper temperatures. Modifications to these settings should be rare.
- Should programmable controllers need to be revised, see **PROGRAMMABLE CONTROLLER INFORMATION** section in this User Manual for additional information.



Case Temperature Dial



ELECTRICAL CONNECTIONS: ACCESS AND FIELD WIRING

1. Electrical Connections: Access

- A. View of case rear. Power to case must be turned off before accessing rear control panel.
- B. Partially transparent view of case showing screws (to be removed) and tabs.
- C. View of rear control panel in lowered position.
- D. Enlarged view of rear control panel in lowered position (as well as field service wiring knockout). Access is now available to

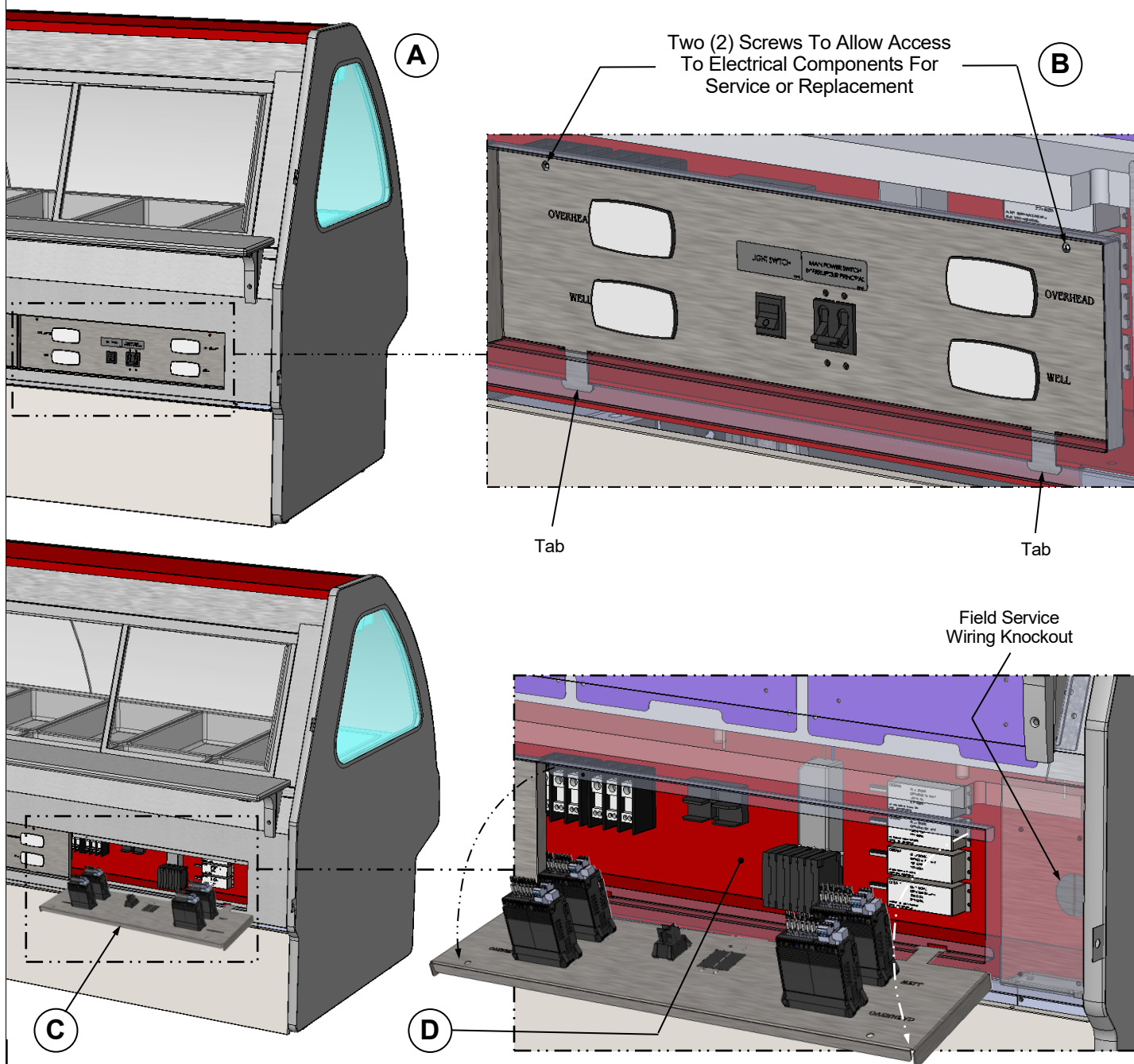
programmable controllers, terminal strip, ballasts, terminal block, LED, etc.

> After accessing electrical components (for service or replacement), return rear control panel to vertical position and reattach with screws.

2. Electrical Connections: Field Wiring

Field service wiring knockout is shown in the lower-right view below.

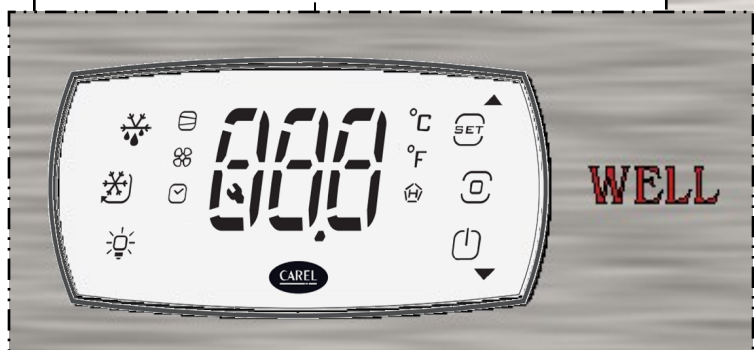
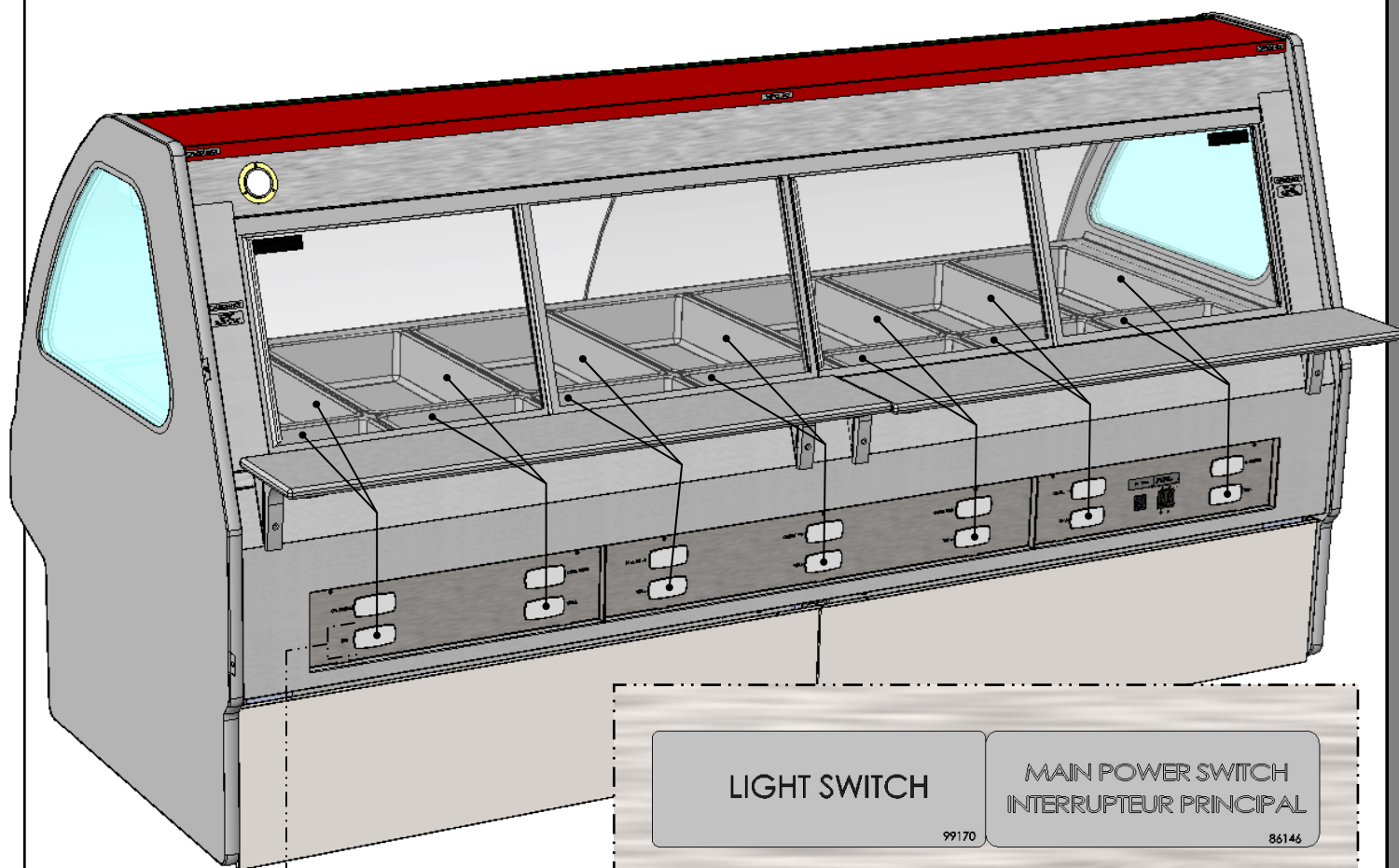
- See wiring diagram for additional information.



WELL HEAT

Well Heat

- Turn on main power switch.
- Well heat is controlled by **Programmable Controllers**.
- Each programmable controller controls the heat to one set of pans (as illustrated below).
- Programmable controllers are pre-set at the factory to heat wells at proper temperatures. Modifications to these settings should be rare.
- Should programmable controllers need to be revised, see **PROGRAMMABLE CONTROLLER** section in this User Manual for additional information.

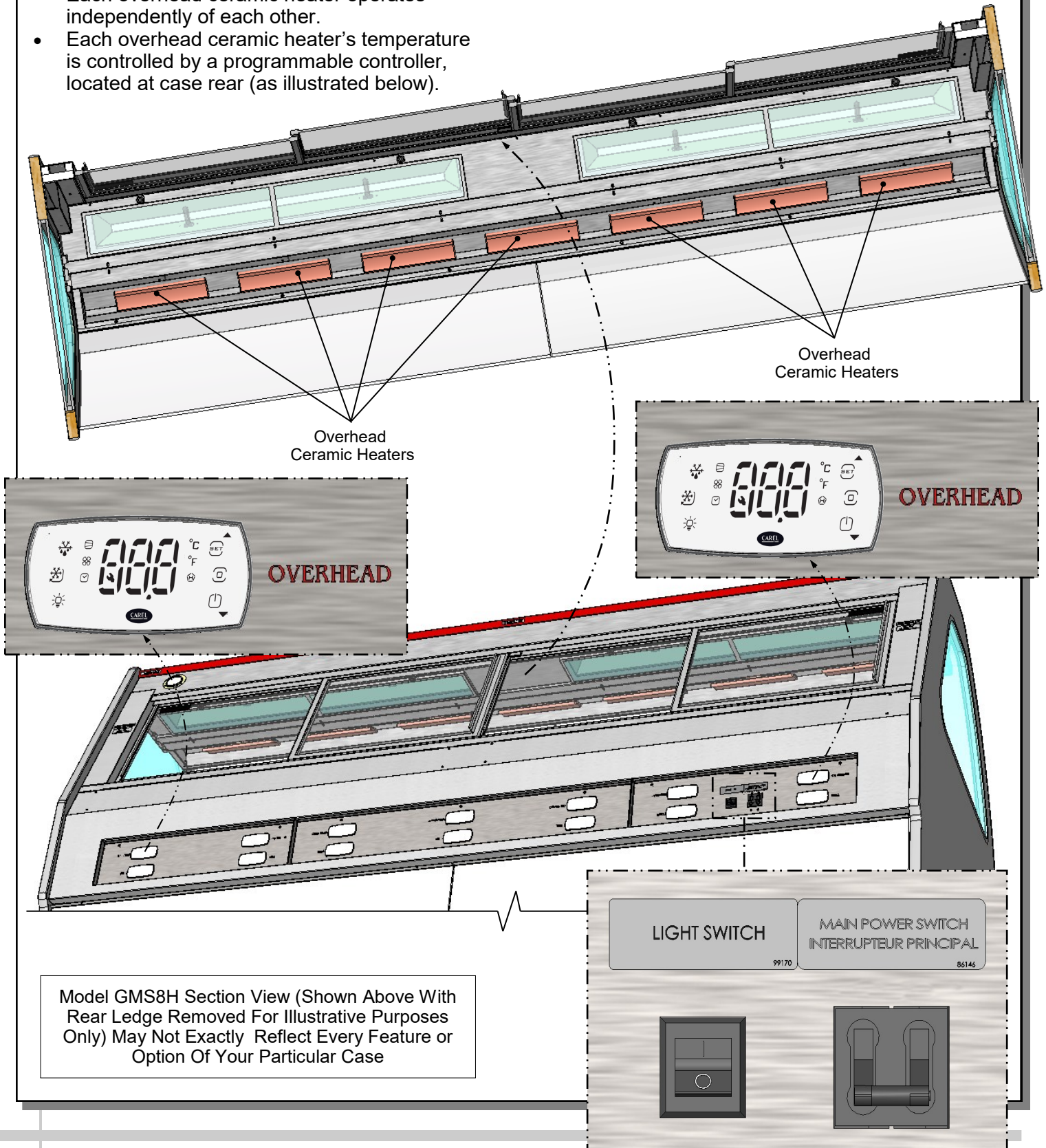


OVERHEAD CERAMIC HEATERS

Overhead Ceramic Heaters

- When main power switch is turned on, overhead ceramic heaters are energized.
- Each overhead ceramic heater operates independently of each other.
- Each overhead ceramic heater's temperature is controlled by a programmable controller, located at case rear (as illustrated below).

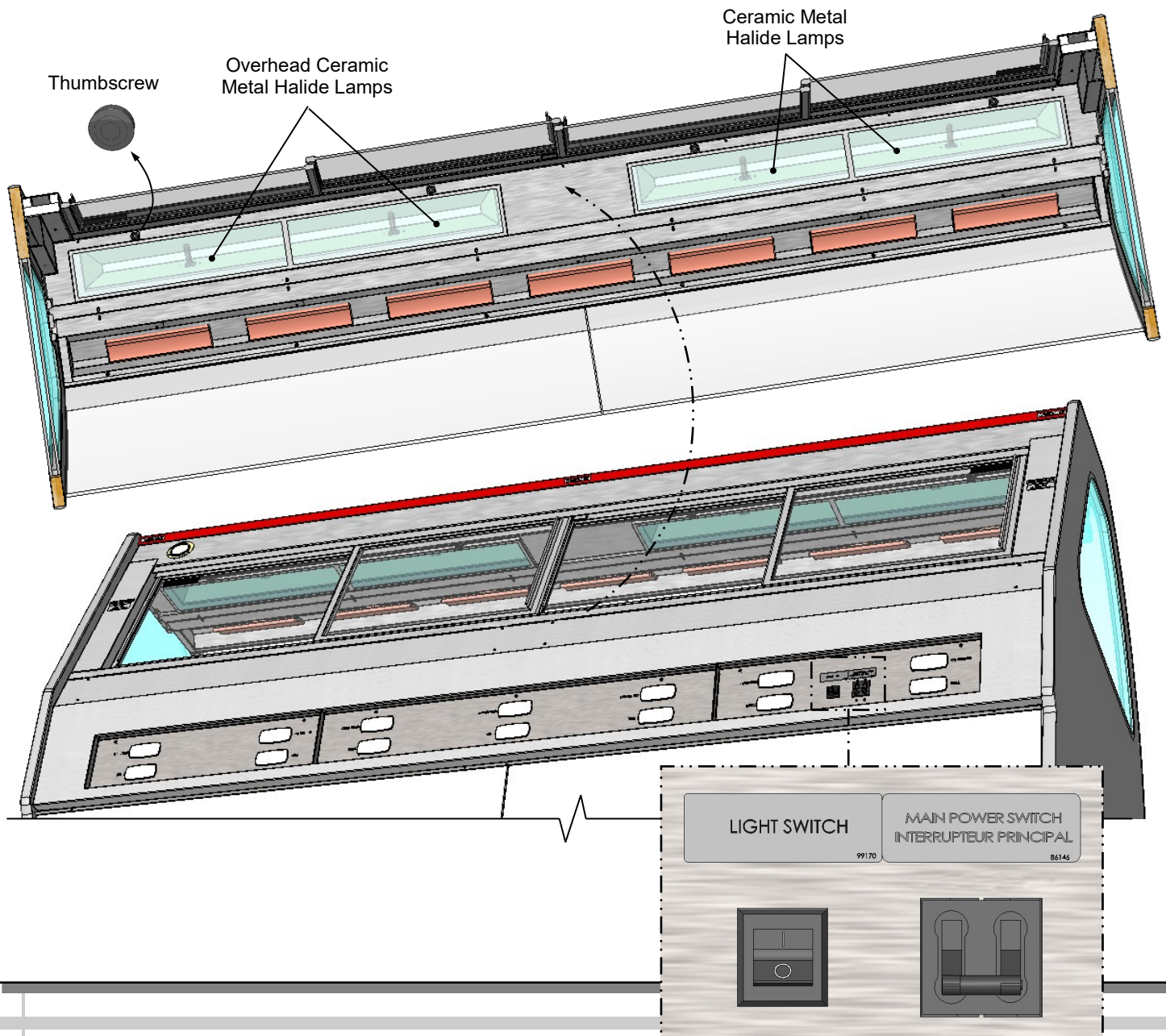
- See **Programmable Controller** section in this manual for specifics.
- ***Warning! Disconnect power before providing maintenance & service to unit.***



OVERHEAD CERAMIC METAL HALIDE LIGHT FIXTURES

Overhead Ceramic Metal Halide Light Fixtures

- **Warning!** Lamps are **NOT** manufactured to resist breakage. Replace with same wattage ceramic metal halide lamps (similarly manufactured). If uncertain of wattage, refer to label near rear sliding doors for specifics.
 - **Warning!** Ceramic heaters also heat up light fixtures. So check that entire area has been allowed to cool before touching light fixtures.
 - See illustration below for location of overhead light switch.
 - Light switch turns on lamps to entire overhead section of case.
- As ceramic metal halide lamps may take up to 15 minutes to gain full illumination, turn on lamps BEFORE loading product into case. This will allow proper time for proper illumination.
 - **Warning! Disconnect power before providing maintenance & service to unit. Allow to cool for at least 15 minutes before accessing.**
 - After case has been allowed to cool, ceramic metal halide light fixtures may now be accessed.
 - To access light fixtures, unscrew thumbscrews and lower the light fixture (consisting of metal housing and glass).
 - Then, access lamps for service, removal, replacement, etc.



1. Raise the Curved Glass

- To raise the front glass, secure the lift handle extrusion on the bottom edge of the door and lift up. Gas cylinders hold the glass open for hands-free access to case interior.
- **Caution:** Gently return curved glass to original position.
- See illustration at right.

2. Removing the Rear Doors

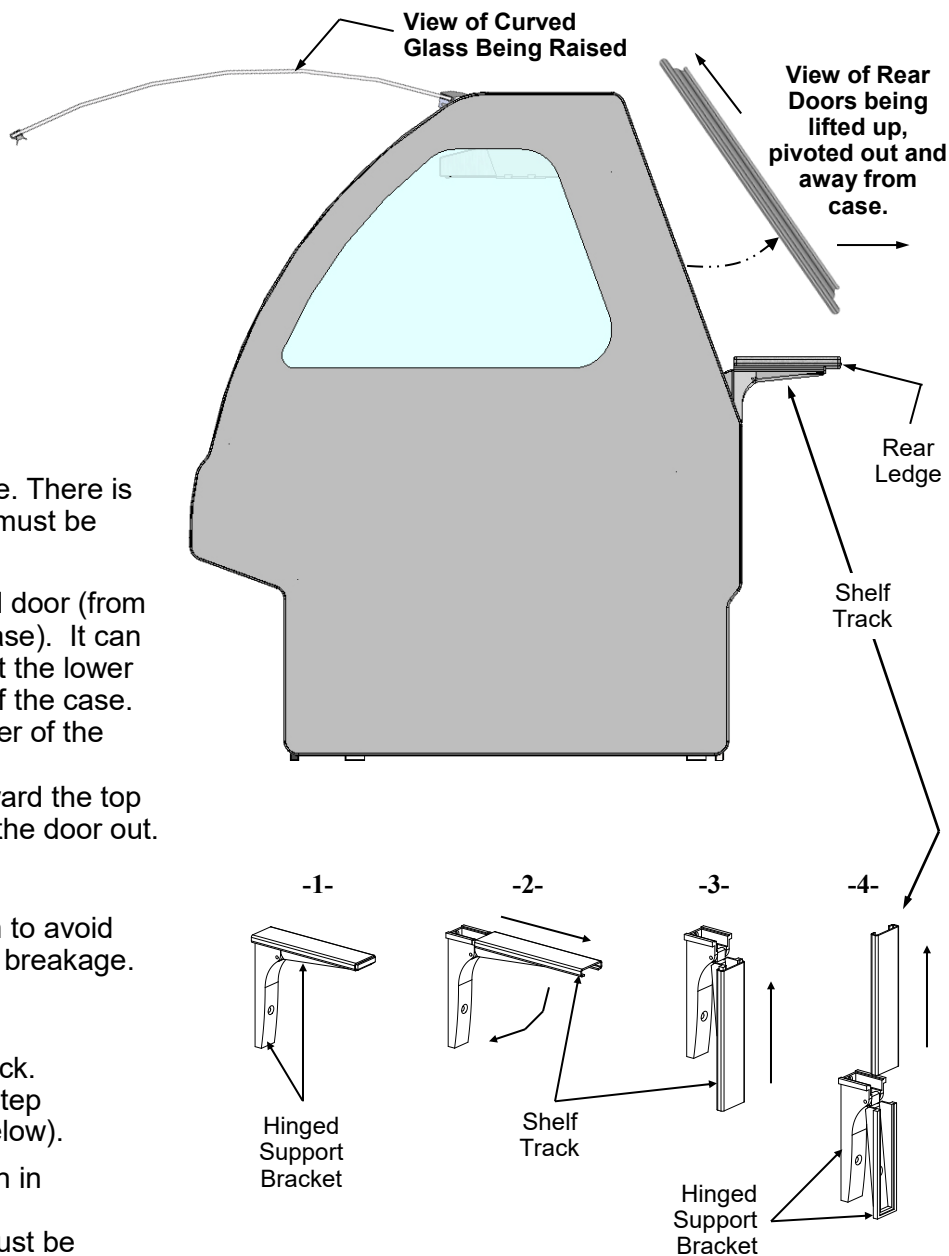
Note: Doors are not interchangeable. There is an inner and outer door. The outer must be removed first and replaced last.

- 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 bottom of the door out.
- Reverse to install.
- See illustration at right.
- **Caution:** Gently set doors down to avoid marring, scraping, scratching or breakage.

3. Rear Ledge Removal Steps

Rear ledge is connected to shelf track. Illustrations at right reflect step-by-step removal method (as enumerated below).

1. Hinged support bracket is shown in its standard upright position.
- 2 & 3. While upright, Rear Ledge must be slid away from case and then rotated downward to vertical position.
- 3 & 4. From the shelf's lowered position, lift from bottom edge upward to disengage shelf track (and attached Rear Ledge) from bracket.



Rear Ledge Removal Steps

Note: For clarity, only Shelf Track is shown being removed. Rear Ledge is attached to Shelf Track.

OPTIONAL SCALE STAND

Optional Scale Stand

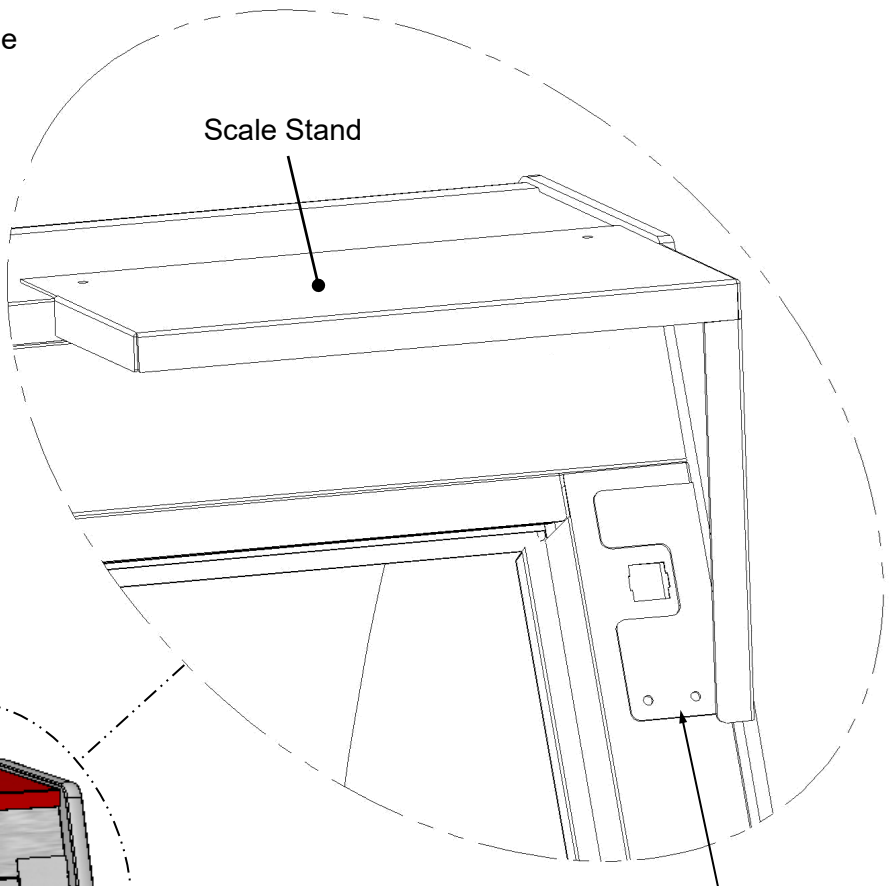
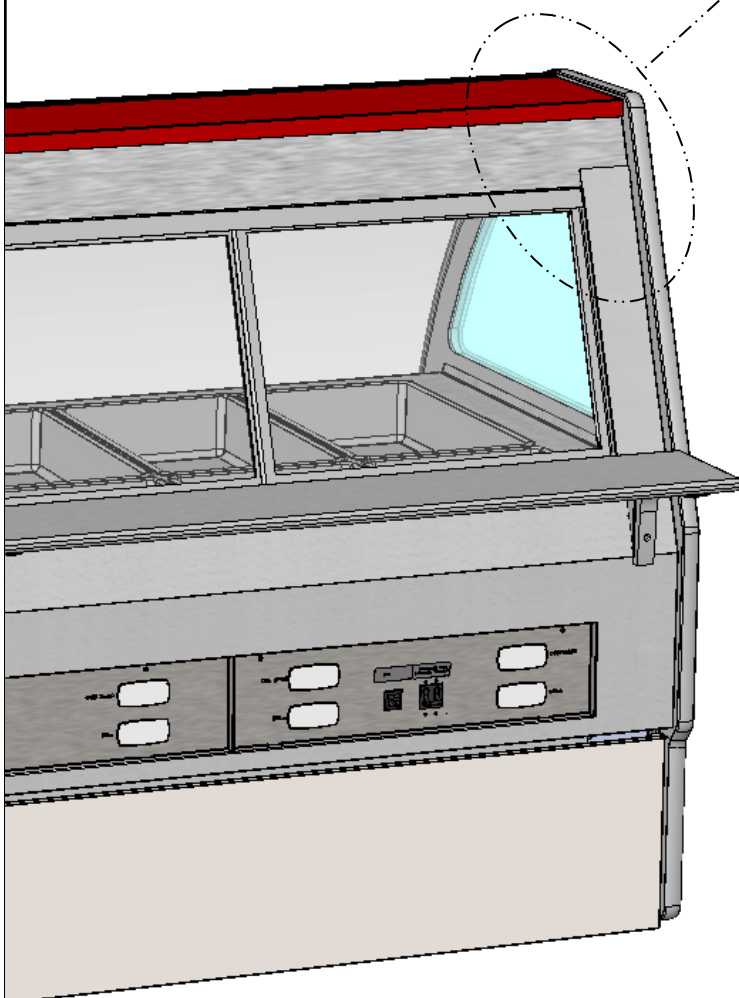
- Scale stand is provided with receptacle which is to be wired separately.
- Depending upon order, scale stand may be at either left or right of case.

View of Typical Case With
Scale Stand and Receptacle

Scale Stand

Scale Stand
Receptacle

View of Case Without
Scale Stand and
Receptacle



REMOVING PANS AND DIVIDERS (FOR CLEANING)

Removing Pans and Dividers (for Cleaning)

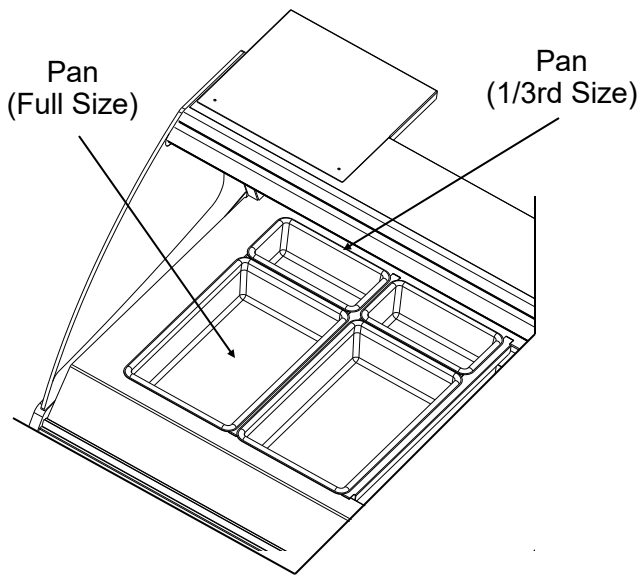
Note: Make certain that unit has been turned off and allowed to cool before accessing.

1. Remove 1/3rd-Size and Full Size Pans.
2. Remove pan dividers.

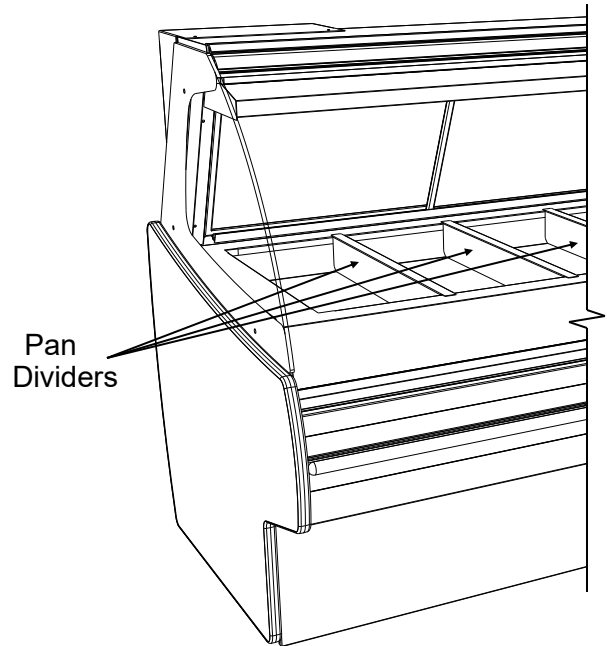
3. Perform cleaning service on pan warmer shield.
4. Replace pan dividers and pans in reverse order they were removed.

Note: See cleaning schedule for specifics on method and frequency of cleaning.

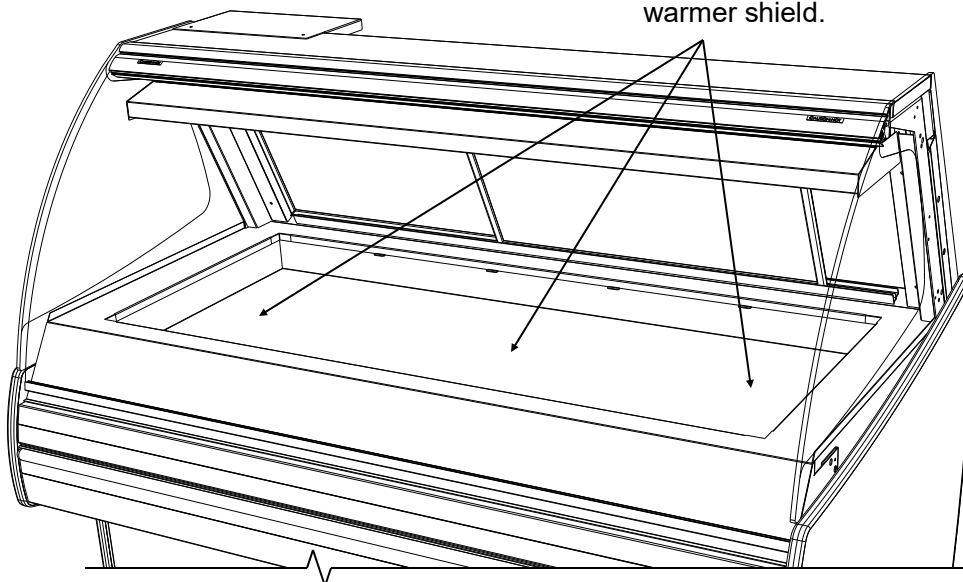
Below Illustration May Not Exactly Reflect Every Feature or Option of Your Particular Case



1. Remove 1/3rd-Size, Full Size and Drip Pans



2. Remove pan dividers



4. Replace pan dividers and pans in reverse order they were removed

CLEANING SCHEDULE

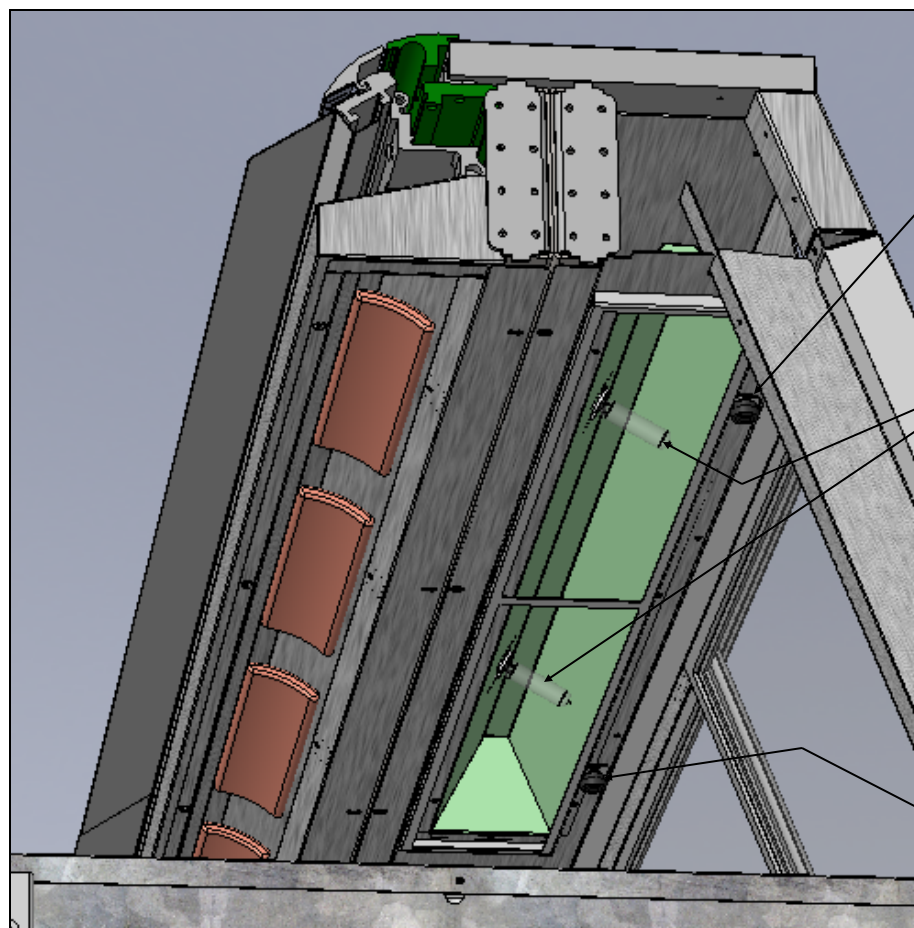
Warnings:

1. **DO NOT** clean heated wells while hot. Flip Well Heater Switches to OFF position. Allow wells to cool to room temperature before cleaning.
2. Lowering the front glass with items inside top cap can cause damage to case.
3. Lowering the front glass with fingers inside top cap can cause serious injury.

Cleaning	Daily	Weekly	Task
Clean Case Exterior	X		Clean side glass, front curved glass and sliding rear doors (glass) with a household or commercial glass cleaner.
	X		Stainless Steel Rear Work Surface: • Wash with a solution of hand dishwashing liquid detergent and water; or a solution of baking soda and water. Rinse and polish dry with paper towel or soft cloth. • Never use scouring powders or steel wool as they will scratch stainless steel. • Brighten by polishing with a cloth dipped in vinegar or in ammonia; sprinkle baking soda on sponge and rub gently; rinse. Polish dry with paper towel. • Remove streaks or heat stains from stainless steel by rubbing with club soda.
	X		Flip-down rear ledge: • Use a clean cloth with a solution of hand dishwashing liquid detergent and hot water. Rinse and wipe dry with paper towel or clean cloth.
Clean Case Interior	X		Clean inside surface of front curved glass and glass ends with a household or commercial glass cleaner.
	X		Remove pans (see full size and 1/3rd size pans illustrations in MAINTENANCE FUNDAMENTALS section of this manual) and submerge in with warm soap and water solution. Thoroughly dry before returning to case.
		X	• Pan Warmer Shield (surface under removable pans). • Caution! Turn OFF Main Power Heater Switch. Allow wells to cool to room temperature before cleaning. • Clean with mild soap and water solution and a soft cloth.
		X	Remove rear doors and clean with a household or commercial cleaner

TROUBLESHOOTING

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.
Warmers will not heat	Check that temperature controllers (at case rear) are at proper settings.
Warmers slow to heat	Check that temperature controllers (at case rear) are at proper settings.
Case lights not working	Check that Overhead Light Switch is turned on.
	Check lamps for proper installation and connection. • Caution! Ceramic metal halide lamps are extremely hot! Use caution when accessing! • Unscrew thumbscrew to remove cover. <i>Caution! Securely hold lamp cover when removing thumb screw! Both lamp cover and glass will fall downward when thumbscrew is removed!</i>
	Check for burned out bulbs.



Thumb Screw For Lamp Access (Typical)

Ceramic Metal Halide Lamps (Typical)

Note: Model Shown Partially Disassembled For Illustrative Purposes Only.

Thumb Screw For Lamp Access (Typical)

Serial Label Location & Information Listed / Technical Information & Service

- Serial labels are affixed at a wide range of places (on the header, at case rear, behind panels or toe-kicks, on electrical boxes, etc.).
- Serial labels contain electrical information as well as regulatory standards to which the case conforms.
- Sample serial label is shown. A variety of models is displayed on serial label for illustration purposes only. Your case's serial label will reflect only one model.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.

Structural Concepts®

888 E. Porter Rd - Muskegon, MI 49441



Intertek

3048256

CONFORMS TO UL STD 970

SAMPLE ONLY

Certified to Can/CSA C22.2 No. 9.0/0.4

Addenda

Impulse

SAMPLE ONLY

Reveal

120 VOLTS 60 HZ

FOR PARTS OR SERVICE CALL

STRUCTURAL CONCEPTS

AT 1-800-433-9490

SAMPLE ONLY

SAMPLE ONLY

Harmony

SHS5454.7981

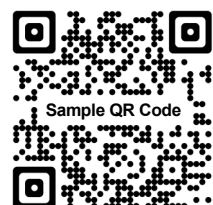
2688037CA408728

SINGLE PHASE 2.0 AMP

SAMPLE ONLY

SAMPLE ONLY

SCAN FOR PRODUCT LITERATURE



--- Sample Serial Label For Ambient/Heated Cases ---



Determine Which Programmable Controller Is On Your Case (Controllers That Are Commonly Used By Structural Concepts Are Shown Below). Your Particular Programmable Controller May Differ.



Carel® PJEZ Platform



Carel® ir33 Platform



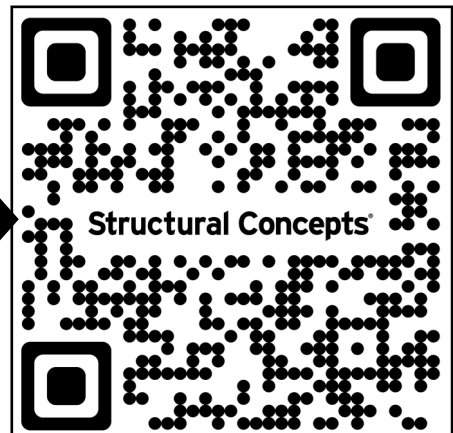
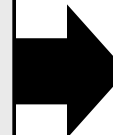
Carel® iJF Platform



Dixell® XM670K-XM679K Platform

To Access Information About The Programmable Controller That Is Used On Your Case, Follow These Instructions:

- > If Viewing This Document on Smart Phone, Tablet or Computer, Select/Click On The QR Code at Right.
- > If Viewing This Document In Print (Hard Copy), Scan The QR Code at Right With Your Smart Phone or Tablet.



STRUCTURAL CONCEPTS TECHNICAL SERVICE CONTACT INFORMATION & LIMITED WARRANTY

TECH SERVICE/WARRANTY CONTACT INFO:
1 (800) 433-9490 / EXTENSION 1

DAYS/HOURS AVAILABLE:
MONDAY - FRIDAY (CLOSED HOLIDAYS)
8:00 AM to 8:00 PM EST

**YOU MUST HAVE THE FOLLOWING INFO AVAILABLE
BEFORE CONTACTING STRUCTURAL CONCEPTS:**

SERIAL NO. / MODEL NO. / STORE NO. / STORE
ADDRESS / DETAILS (PHOTOS, LEAK LOCATIONS,
DAMAGE, STORE'S AMBIENT CONDITIONS, ETC.)

**To Access The Limited Warranty To Your
Case, Follow These Instructions:**

- > If Viewing This Document on Smart Phone, Tablet or Computer, Select/Click On The QR Code at Right.
- > If Viewing This Document In Print (Hard Copy), Scan The QR Code at Right With Your Smart Phone or Tablet.

