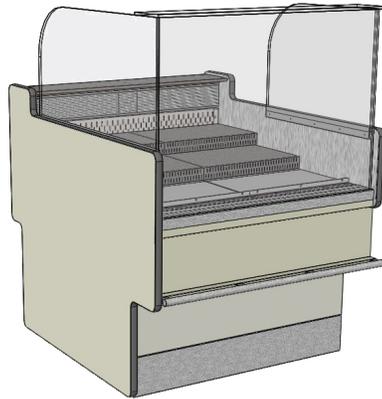


CAREFULLY FOLLOW THESE INSTRUCTIONS

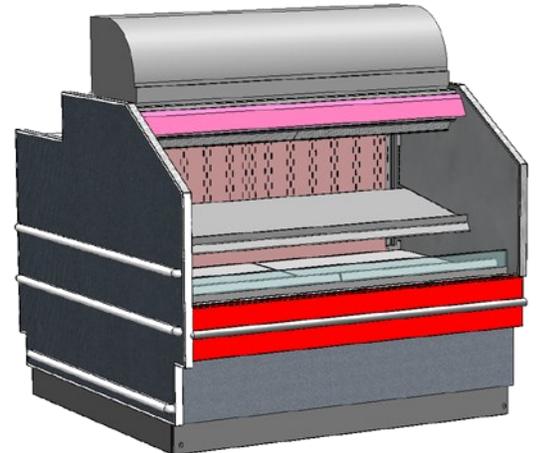
# FUSION USER MANUAL

SCC P/N  
20-00045

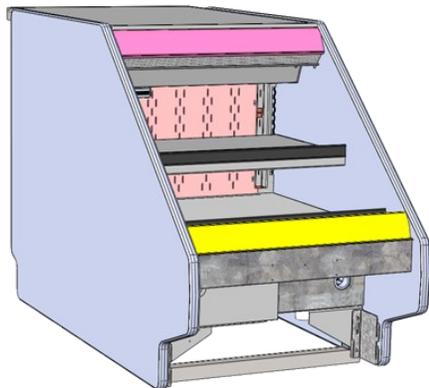
REFRIGERATED SELF-SERVICE SALAD/SANDWICH /BEVERAGE (GRAB-N-GO)



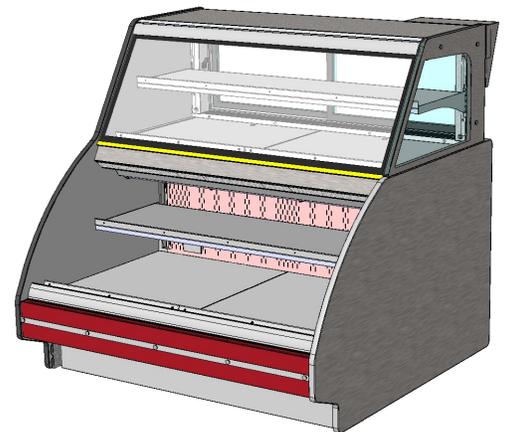
Model GP340DRLB.5580



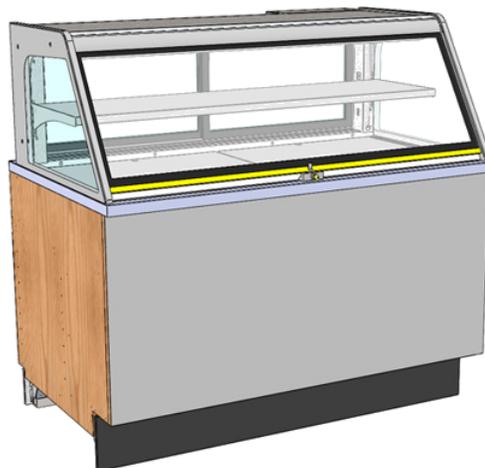
Model GP441RG.6122 /  
GP441RRC.6122.6527 (With Upper  
Display Refrigeration Unit)



Model GP236DRLB (Front Panel  
To Be Attached As Part of Lineup)



Model GP540RRLB.5571B



Model CDR5745A

**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 / MODELS INCLUDED IN MANUAL**

TABLE OF CONTENTS / MODELS INCLUDED IN MANUAL .....	2
OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS .....	3-4
<b>INSTALLATION / SETUP / STARTUP / THERMOMETER / LED &amp; FLUORESCENT LIGHTING / EVAPORATOR COIL FAN DISCHARGE, ETC.....</b>	<b>5</b>
INSTALLATION: SKID REMOVAL / ALIGNING CASE / FRAME SUPPORT RAILS .....	6
CASE START-UP / THERMOMETER FUNCTION & LOCATIONS .....	7
LED LIGHT REMOVAL/REPLACEMENT, PLUG/CORD POSITIONING, PLUG INSERTION .....	8
FLUORESCENT LIGHT REMOVAL/REPLACEMENT .....	9
DECKING, EVAPORATOR COIL FAN DISCHARGE, TXV LOCATION .....	10
<b>GENERAL LAYOUT OF VARIOUS MODELS (COMPONENTS) .....</b>	<b>11</b>
MODEL GP236DRLB (DRY TOP UNIT) - REAR PANEL / FIELD ACCESS / TEMP. CONTROLLER ..	12
MODEL GP236DRLB (DRY TOP UNIT) - LED LIGHTS / THERMOMETER / HONEYCOMB / EVAPORATOR COIL .....	13
MODEL GP441RRC.6122.6527 - ELECTRICAL BOX (FIELD ACCESS / ETHERNET / THERMOSTAT)..	14
MODEL GP540RRLB.5571B (SIMILAR TO GP440RRLB.5571) - OVERVIEW OF CASE .....	15-18
MODEL GP540RRLB.5572C - OVERVIEW OF CASE .....	19
MODEL CDR5745A (SERVICE CASE ONLY) - OVERVIEW OF CASE .....	20-24
MODEL GP441RG.6122 (REFRIGERATED SELF-SERVICE GRAB-N-GO - OVERVIEW OF CASE ...	25-26
MODEL GENERIC - OPTIONAL NIGHT AIR CURTAIN INSTALLATION / OPERATING INSTRUCTIONS .....	27
<b>CLEANING SCHEDULE / PREVENTIVE MAINTENANCE / TROUBLESHOOTING .....</b>	<b>28</b>
CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL) .....	29-32
PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER) .....	33-34
TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL) .....	35
TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS) .....	36
<b>TECHNICAL INFORMATION (THERMOSTAT / SERIAL LABEL / WARRANTY / TECHNICAL SERVICE INFORMATION, ETC.) .....</b>	<b>37</b>
SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE .....	38
PROGRAMMABLE CONTROLLER INFORMATION .....	39
TECHNICAL SERVICE CONTACT INFORMATION / WARRANTY INFORMATION .....	40

**OVERVIEW**

- These Structural Concepts cases are designed to merchandise packaged products at 41 °F (5 °C) or less product temperatures (unless custom cases with wire rack shelving).
- Product must be pre-chilled to 41 °F (5 °C) or less before being placed in merchandiser.
- 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 maximum relative humidity of 55%.
- NSF/ANSI Type II Conditions: Product is displayed in

store conditions with maximum ambient temperature of 80 °F (27 °C) and maximum relative humidity of 55%.

- If you are unsure if your unit is classified as NSF/ANSI Type I or Type II, see tag next to serial label on your case.

**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.



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



**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**  
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**  
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](http://P65Warnings.ca.gov).



**WARNING**  
Condensate pan and overflow condensate pans are **HOT!** Disconnect and allow to cool before cleaning or removing from case.

**PRECAUTIONS**

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

**WIRING DIAGRAM**

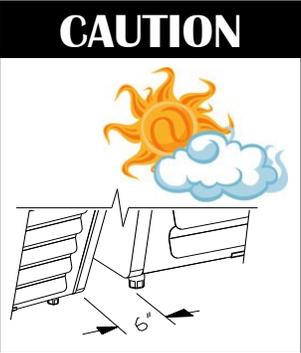
- Each case has its own wiring diagram folded and in its own packet. It may be placed near ballast box, field wiring box, raceway cover, or other related location.

**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! GFCI BREAKER 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! 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.

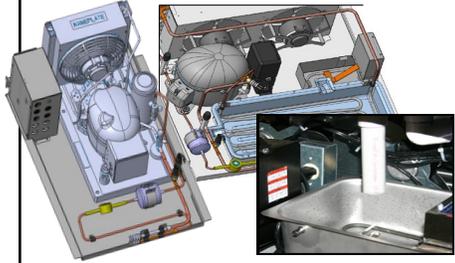


**CAUTION! POWER CORD AND PLUG MAINTENANCE**  
 Risk of electric shock. If cord or plug becomes damaged, replace only with cord and plug of same type.



**CAUTION! DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR PRODUCT (FOOD) TEMPERATURES.**

- Thermometers & thermostats reflect air temperatures **ONLY**.
- For **ACTUAL** product (food) temperatures, use a calibrated food probe thermometers **ONLY**.
- For accurate readings, **DO NOT** use infrared food thermometers.



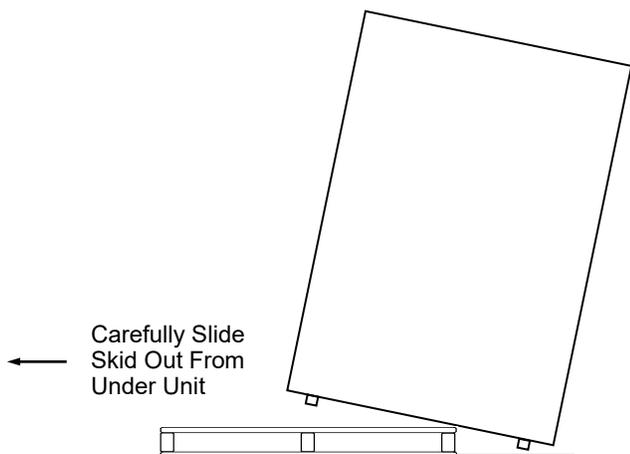
**CAUTION! CHECK CONDENSATE PAN, ITS POSITION & PLUG!**  
 Water on flooring can cause extensive damage!

- Before powering up case, check that condensate pan is positioned directly under case’s condensate drain.
- Before powering up case, check that condensate pan’s electrical plug is **SECURELY** connected to condensate system’s receptacle.
- If wicking material is used in condensate pan, check that it is **secure**.

**INSTALLATION /  
SETUP / STARTUP /  
THERMOMETER /  
LIGHTING /  
EVAPORATOR COIL  
FAN DISCHARGE,  
TXV LOCATION, ETC.**

### 1. Remove Unit From Skid

- **Caution!** To prevent damage, support case while sliding skid out from under case.
- **Note:** Illustration below reflects general outline of sample case and does not reflect any particular model or options).

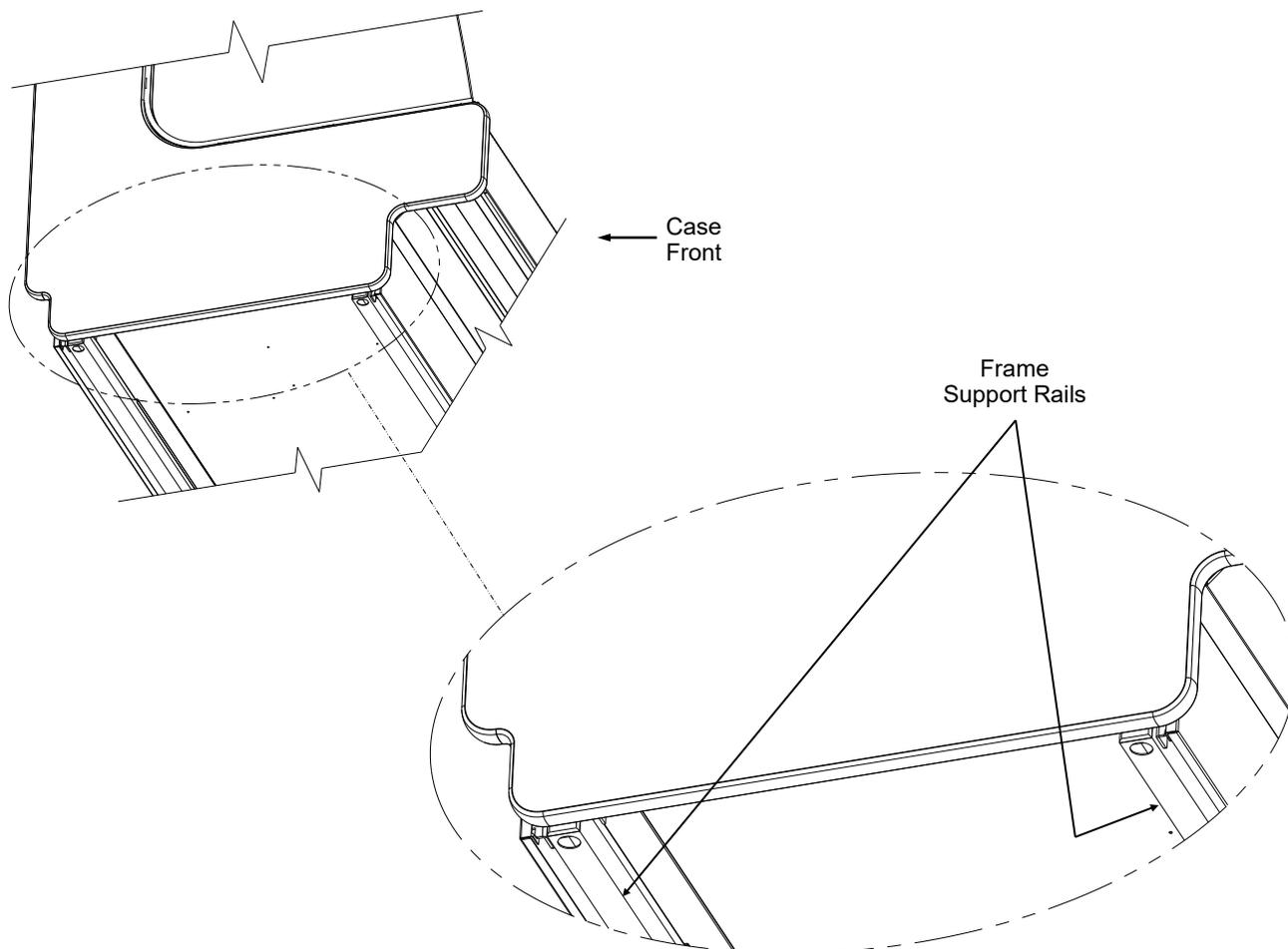


### 2. Position & Align Case Alongside Others

- Before adjusting levelers, make certain that the case is in proper position and, if required, aligned with adjoining case(s).
- This may require repositioning of the case you are installing or the already positioned case.

### 3. Frame Support Rails

- Illustration below shows case with frame support rails (sample case - may not exactly reflect your particular model).
- Shims will be provided with all cases that have frame support rails.
- Use shims to level case.
- **Note:** After case is in position, it must be sealed to floor to prevent entry or leakage of liquid or moisture.



## CASE START-UP / THERMOMETER FUNCTION & LOCATION

### **1. Case Start-Up**

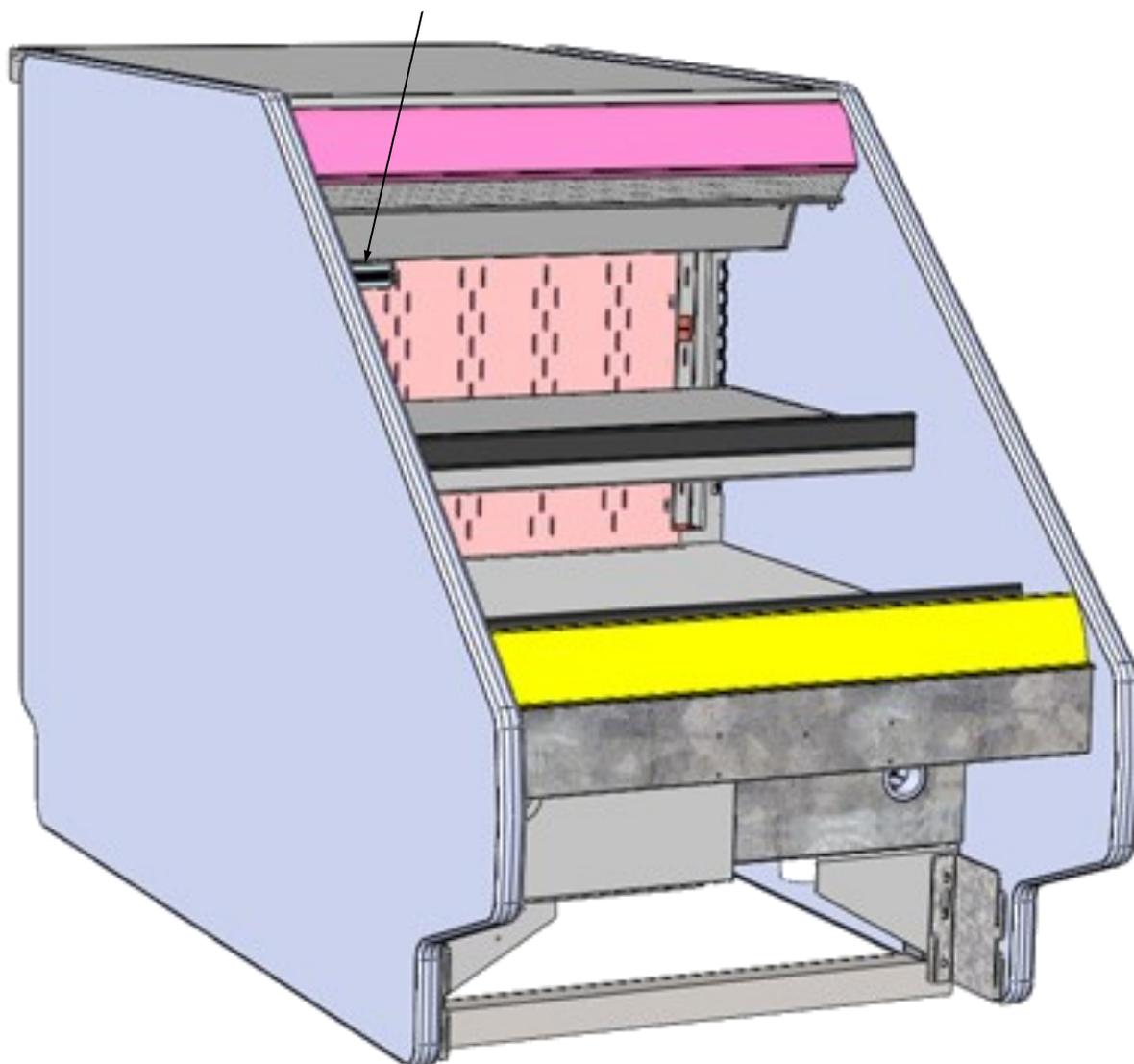
- Case will energize when properly field-wired.
- Refrigeration system will supply cold air to rear drawers, rear door compartment and front grab-n-go section upon being energized.
- Front refrigerated section shown below. Light switch (if any) will turn on light at front of case.
- When properly field-wired, coil fans should turn on. From inside of the case, check for discharge air from the air diffusing honeycomb to confirm that fans are functioning properly. See next page for honeycomb location.

- When case is in start-up mode (or has been idle for a long period of time), unit requires 75 minutes of run time to pull-down temperature.

### **2. Thermometer Function & Placement**

- A. Thermometers may provide temperature to separate areas in the case.
- B. Thermometers reflect warmest air temperature in merchandiser. They do not provide actual food temperature.
- C. Use probe thermometers to determine actual product temperatures.

Thermometer to Refrigerated Front Grab-N-Go Section



# LED LIGHT REMOVAL/REPLACEMENT, PLUG/CORD POSITIONING, PROPER PLUG INSERTION

## 1. LED Style Light Fixtures

### Removal of Faulty LED Lights:

- Contact Structural Concepts' Technical Service Department for replacement LED lights.
- Turn off LED light switch.
- To remove faulty LED light, follow these steps:
  - A. Disconnect plug from LED light.
  - B. Using both hands, grasp LED light assembly (with its magnetic mounting clips). Pull downward and off its shelf (or header).
  - C. Remove magnetic mounting clips from LED light by pressing against flange part of clip with thumb.

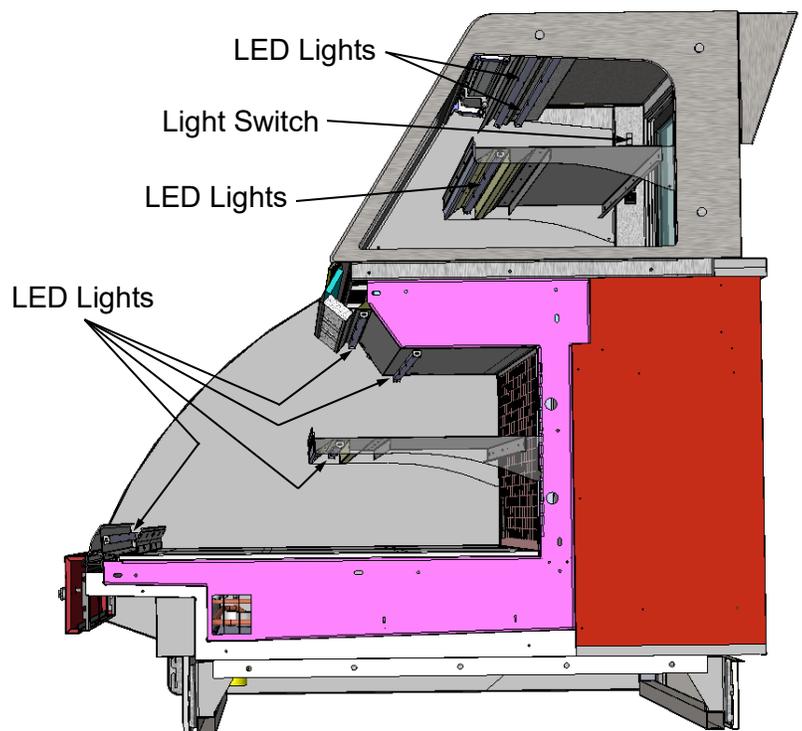
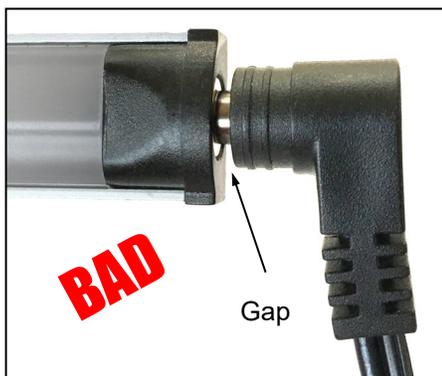
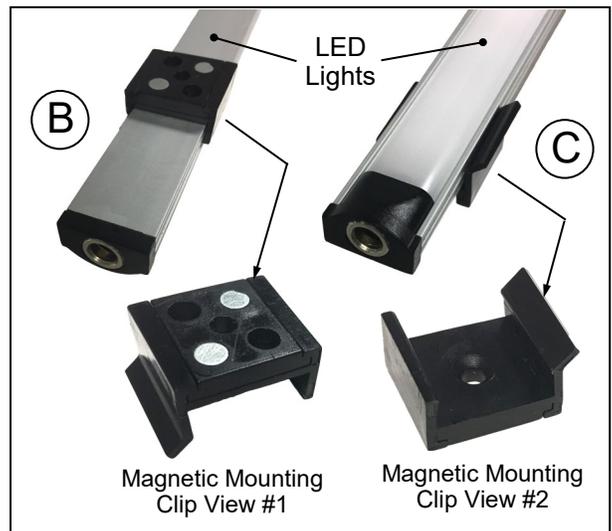
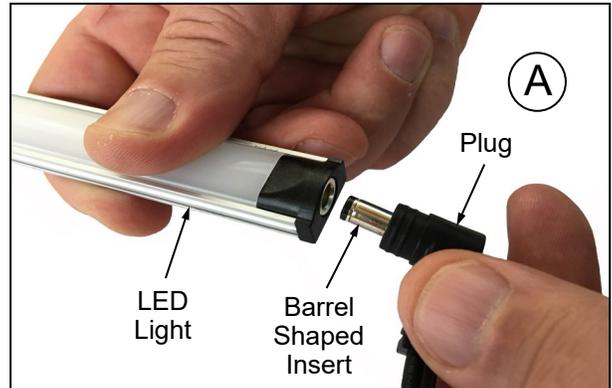
>> **Note:** Mounting clips **MAY** be riveted to shelf or header. In such instances, simply remove LED light from mounting clips by pressing against flange part of clips with thumb.

### Replacement of LED lights:

- Attach magnetic mounting clips onto LED light.
- Adjust magnetic mounting clips so they are equally spaced on LED light.
- Reattach LED light assembly to its shelf/header.
- Position properly in shelf/header.

>> **Note:** If mounting clips are riveted to shelf (or header), attach by placing LED in base of clip and then snapping into clip at **FLANGE SIDE**.

- Press plug's barrel-shaped insert deep into LED light.
- **Important:** If plug is not inserted **ALL THE WAY IN** the LED light's orifice, the light may not energize. See **"BAD"** vs. **"GOOD"** insertion illustrations below-right.
- Turn LED light switch back on.



## FLUORESCENT LIGHT REMOVAL/REPLACEMENT (FLUORESCENTS ONLY)

### Light Fixture

#### Removal of lamp:

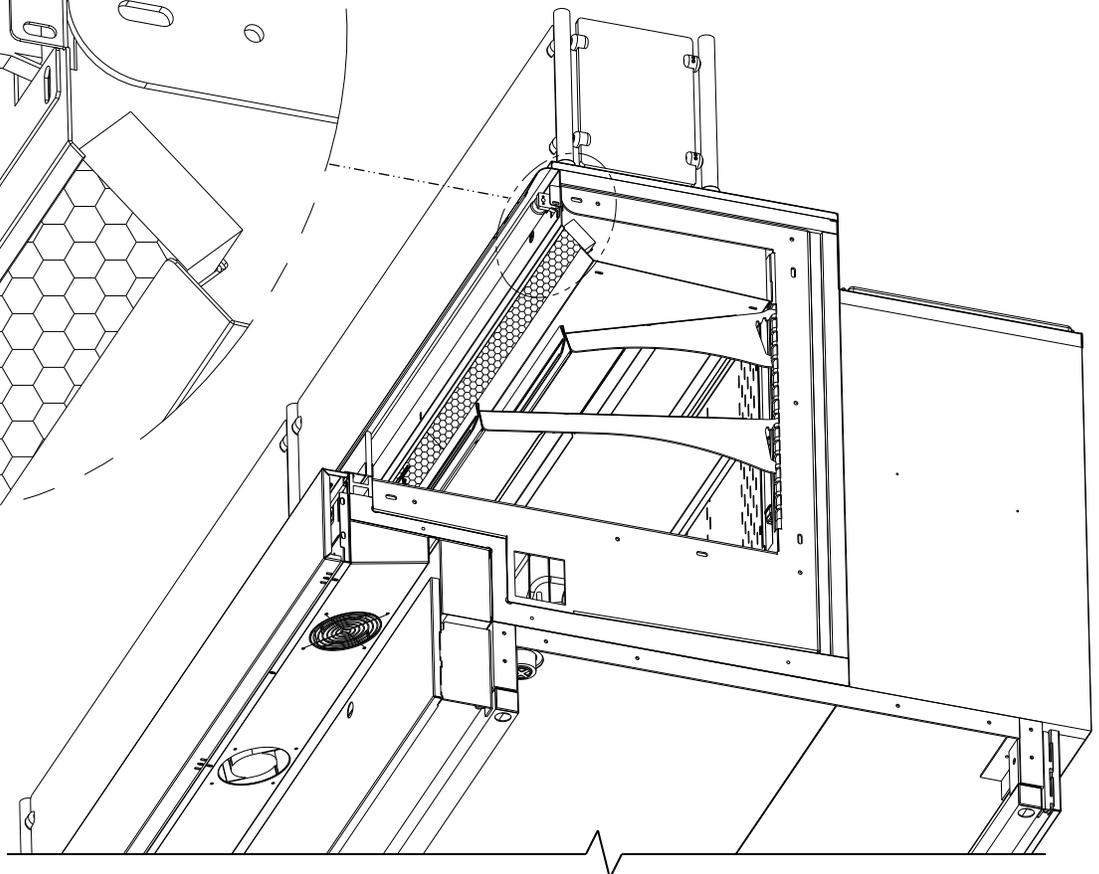
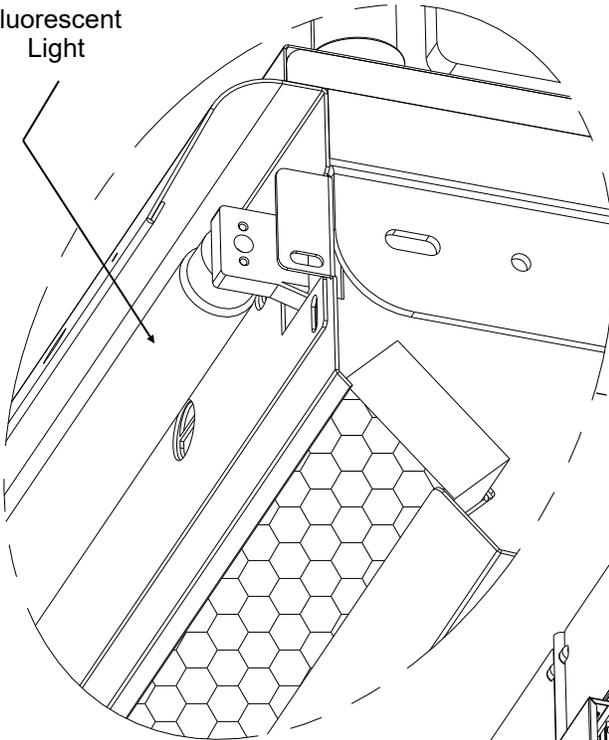
- Rotate lamp (1/4-turn) either direction to disengage (upper or lower) pins/contacts from lamp mounting sockets.
- Remove bulb by applying even pressure from the back side at the bulb ends and pulling the remaining contact from the sockets.
- See illustration at below-left.

#### 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.
- See illustration below.

**Note:** Illustrations Shown May Not Reflect Every Feature or Option of Your Particular Case.

Fluorescent  
Light



## DECKING, EVAPORATOR COIL FAN DISCHARGE, TXV LOCATION

### 1. Coil Fan Discharge

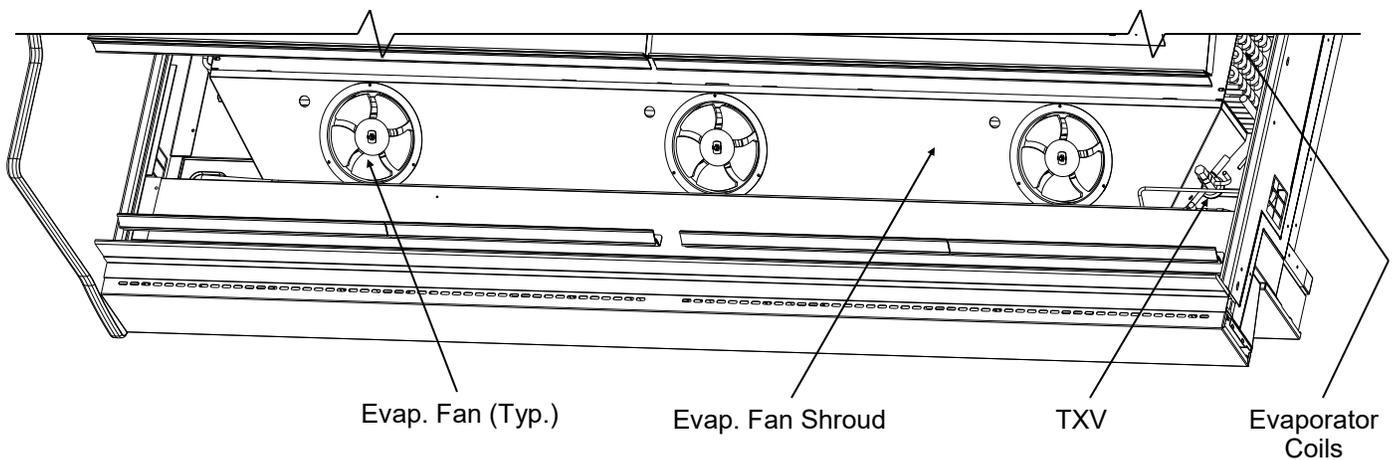
When Main Power Switch is turned on, refrigeration section will energize (see **CASE START-UP** section in this manual).

- Evaporator coil fans should turn on. From inside of the case, check for discharge air from fans to confirm that they 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 of run time to pull-down temperature.
- See below illustration.

### 2. TXV (Thermostatic Expansion Valve)

- TXV is under access panel (at customer front-right of case).
- Decking must be removed for access.
- See illustration below for location.
- Note: Partially disassembled view below shown for illustrative purposes only.

**Note:** Illustrations Shown May Not Reflect Every Feature or Option of Your Particular Case.



View of Case With Decking and End Panel Removed for Illustrative Purposes Only

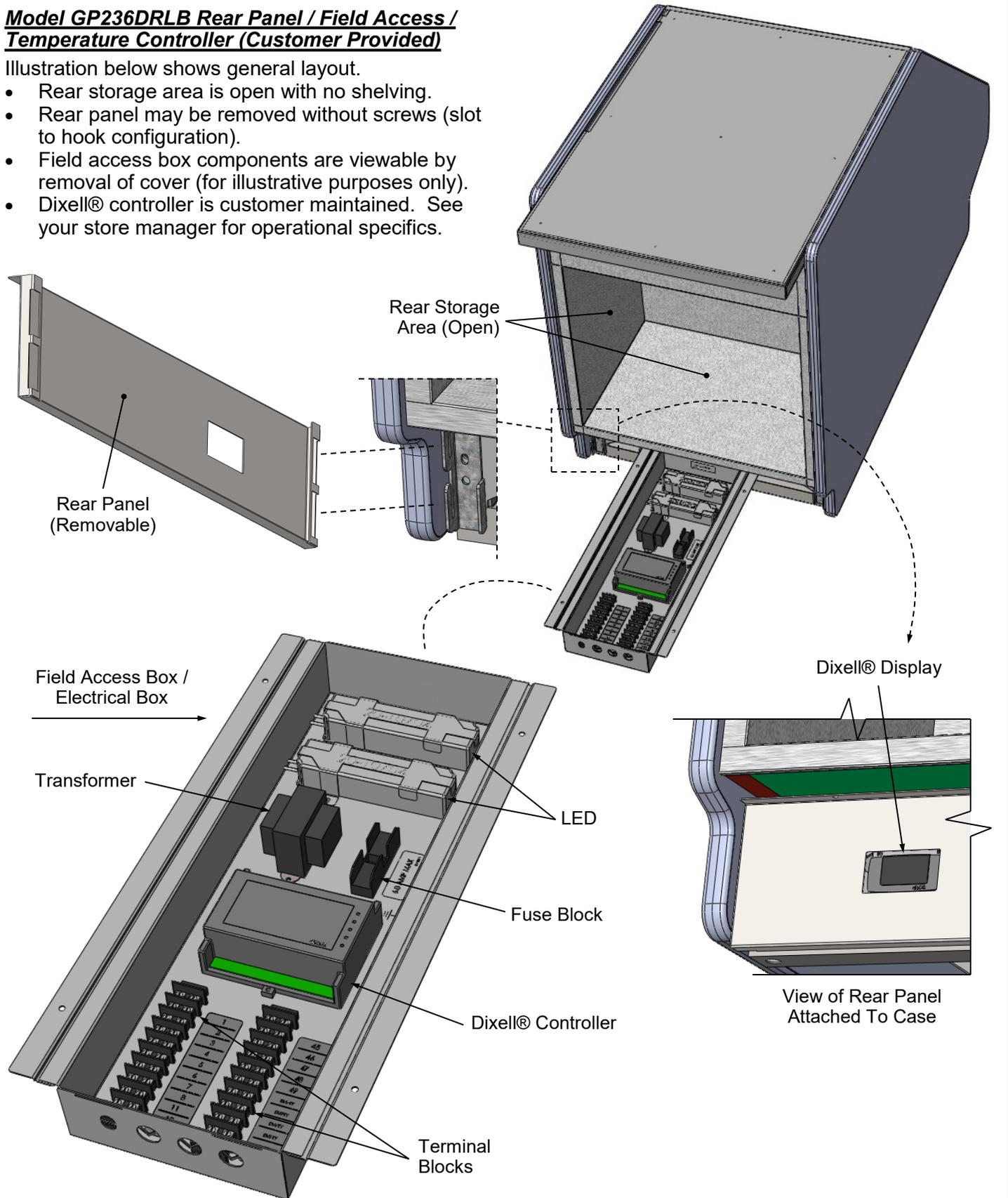
**GENERAL LAYOUT OF  
VARIOUS MODELS  
(WIDE RANGE OF  
COMPONENTS,  
THERMOSTATS,  
THERMOSTAT PROBES,  
ELECTRICAL BOXES,  
TRANSFORMERS,  
THERMOMETER, FIELD  
SENSORS, SCALE  
STANDS, CAT-5 ETC.)**

## MODEL GP236DRLB (DRY TOP UNIT) - REAR PANEL / FIELD ACCESS BOX / TEMP. CONTROLLER

### Model GP236DRLB Rear Panel / Field Access / Temperature Controller (Customer Provided)

Illustration below shows general layout.

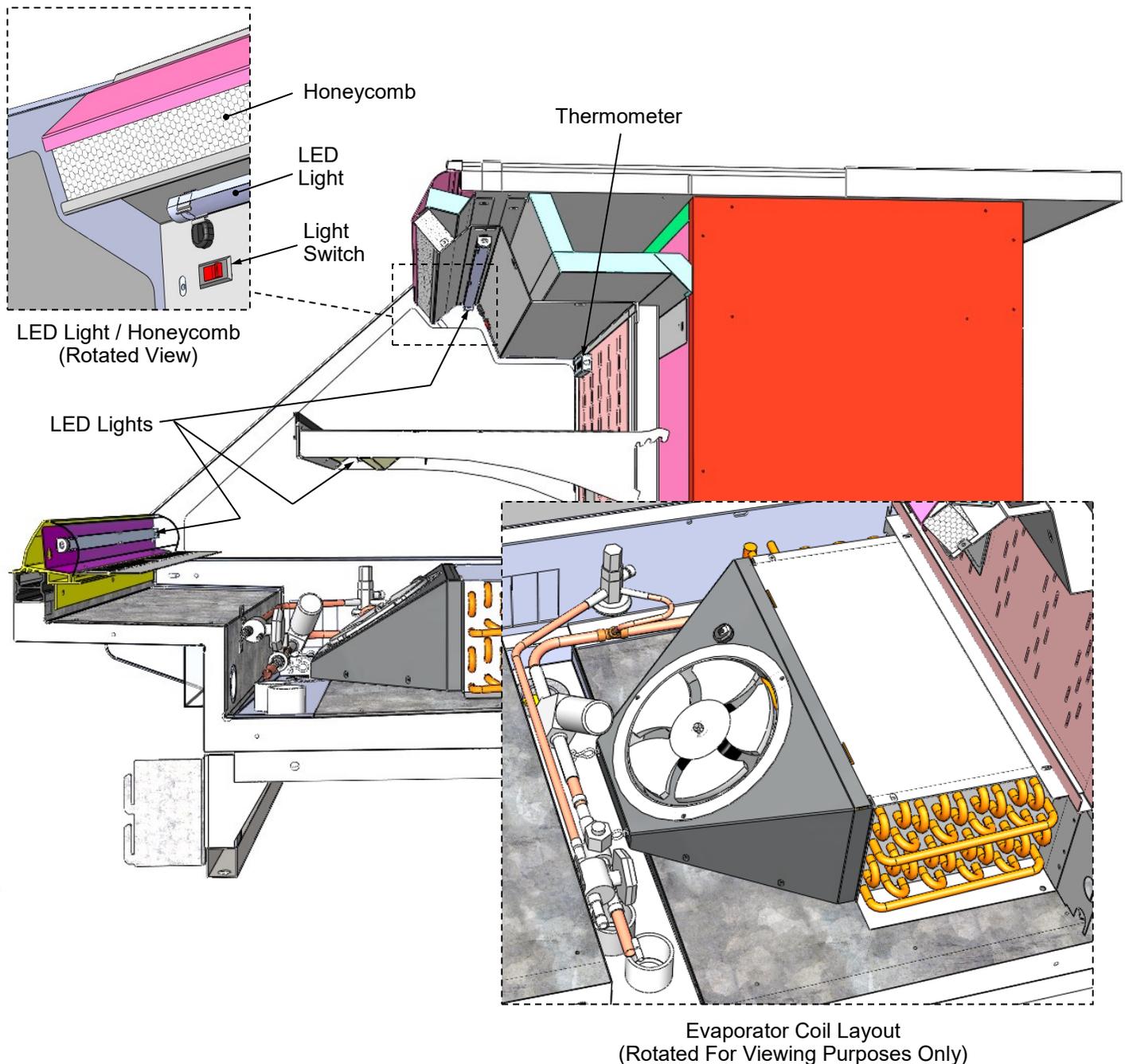
- Rear storage area is open with no shelving.
- Rear panel may be removed without screws (slot to hook configuration).
- Field access box components are viewable by removal of cover (for illustrative purposes only).
- Dixell® controller is customer maintained. See your store manager for operational specifics.



**Model GP236DRLB LED Lights / Thermometer / Honeycomb / Evaporator Coil**

Illustration below is shown with end panel and deck pan removed for illustrative purposes only.

- LED lights are at nose, shelf and upper section (behind honeycomb).
- Light switch is at upper left below thermometer.
- Thermometer reflects warmest air temperature in merchandiser. They do not reflect actual food temperature. Use probe thermometers to determine actual product temperatures.
- See **MAINTENANCE FUNDAMENTALS - HONEYCOMB AIR DIFFUSERS** section in this operating manual for honeycomb cleaning specifics.
- Evaporator coil layout is shown rotated for layout purposes.



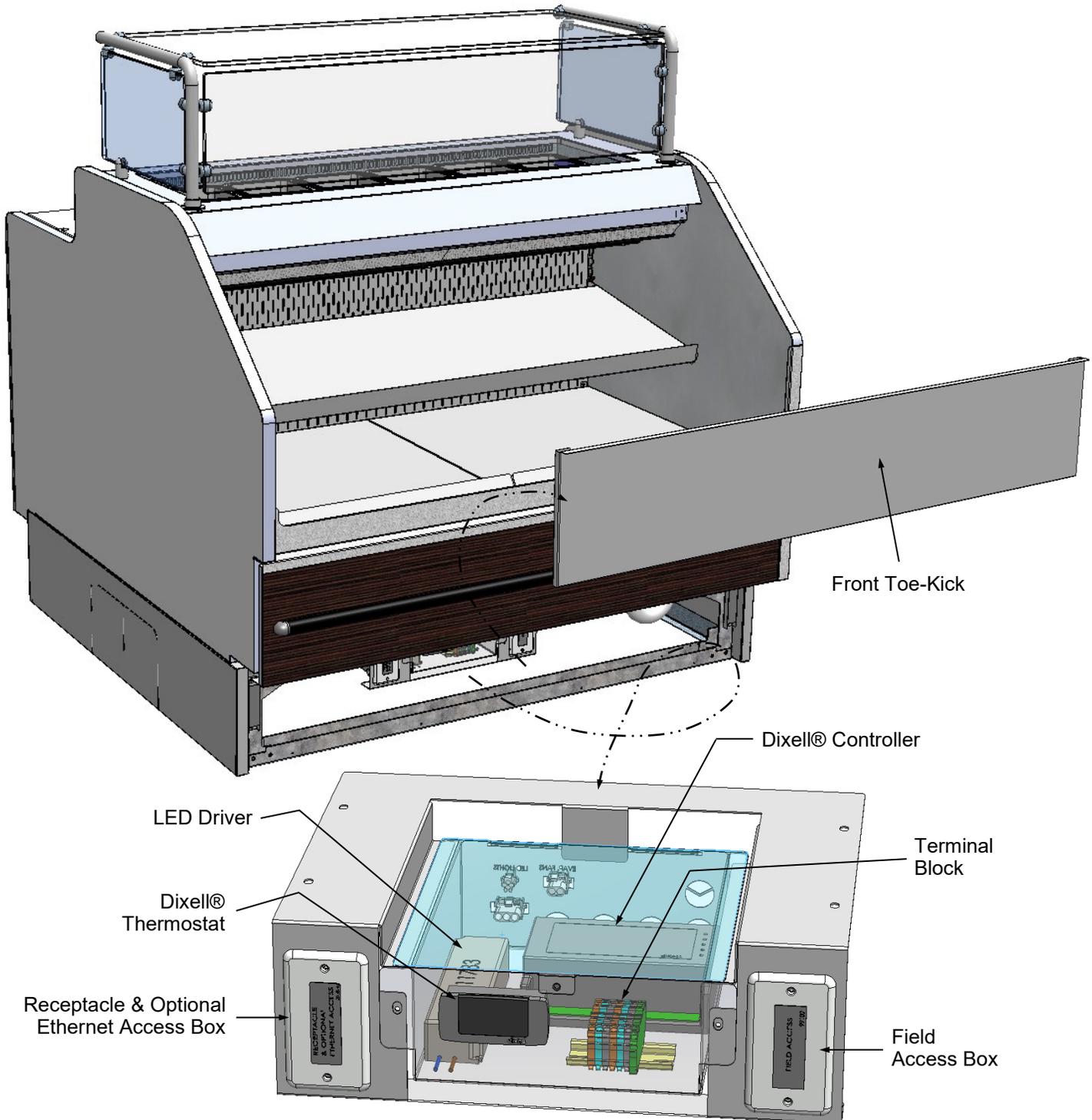
**MODEL GP441RRC.6122.6527 - ELECTRICAL BOX (FIELD ACCESS / ETHERNET / THERMOSTAT, ETC.)**

**Model GP441RRC.6122.6527 Electrical/Field Access / Ethernet Access Box / Thermostat, Etc.**

Illustration below shows general layout.

- Front toe-kick (held in place with magnets) may be removed by simply lifting up and off.

- Electrical box contains wide range of electrical components .
- Electrical box may be slid outward (toward front of case) to access electrical components.
- Dixell® controller is customer maintained. See your store manager for operational specifics.



## MODEL GP540RRLB.5571B (SIMILAR TO GP440RRLB.5571) - OVERVIEW OF CASE FRONT

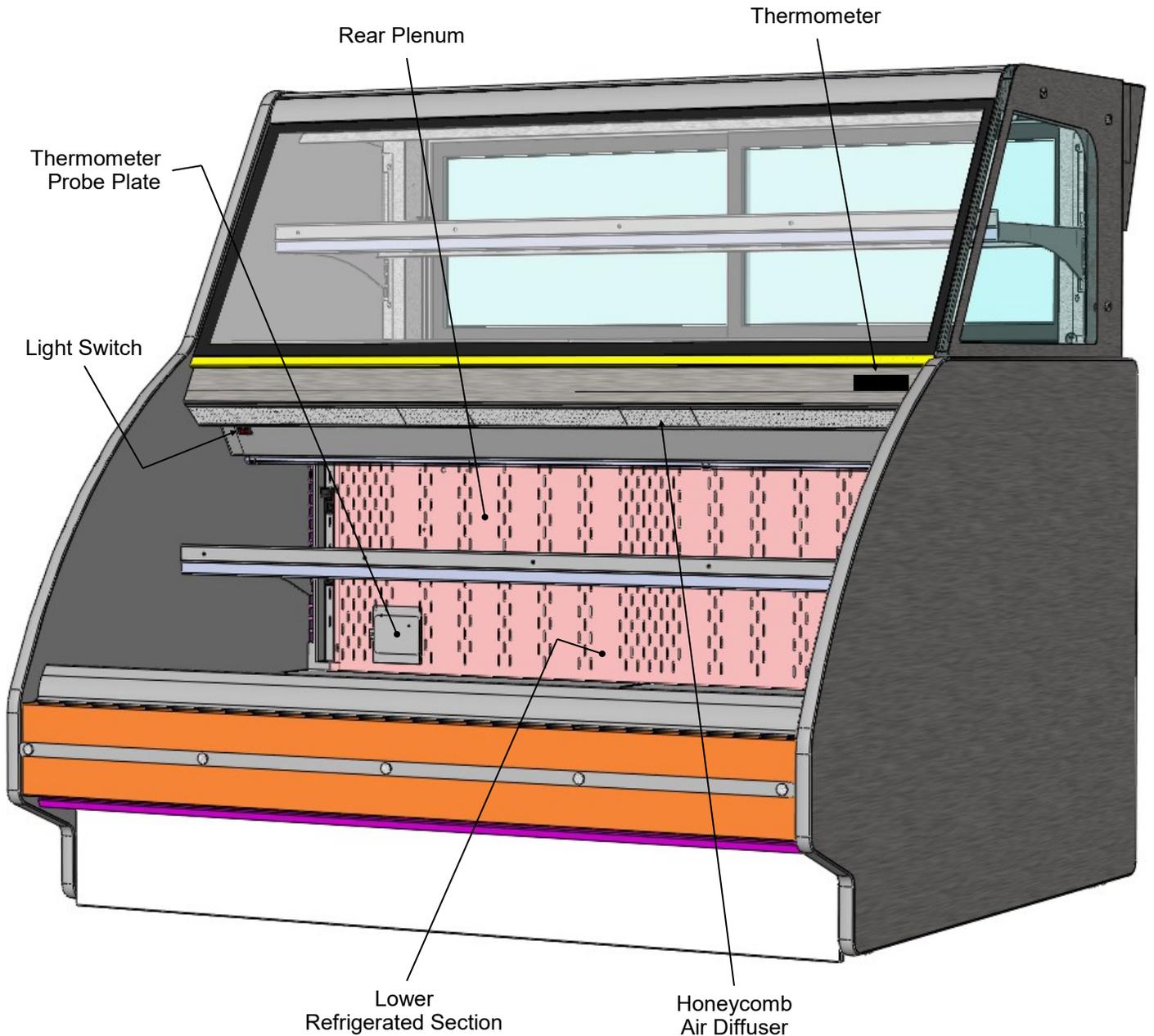
### 1. Thermometer Probe Location - Front Section

View below shows location of probe plate.

- Probe is positioned behind protective plate.
- See approximate location in illustration below.
- Thermometer probe is attached by spacer and screw assembly.
- Spacer allows probe to garner accurate temperature readings and transmit to thermometer.

### 2. Thermometer

- Thermometer is located at front-right (as shown in illustration below)
- Note 1: Thermometers reflect warmest air temperature in merchandiser. They do not provide actual food temperature.
- Note 2: Use probe thermometers to determine actual product temperatures.



## MODEL GP540RRLB.5571B (SIMILAR TO GP440RRLB.5571) - OVERVIEW OF CASE REAR

### **1. Scale Stand and Outlet**

- Scale stand and outlet provides support and electrical means for scale.
- Caution! Use only approved plug for outlet.

### **2. Rear Sliding Doors**

- Rear sliding doors are removable for cleaning and/or serving.

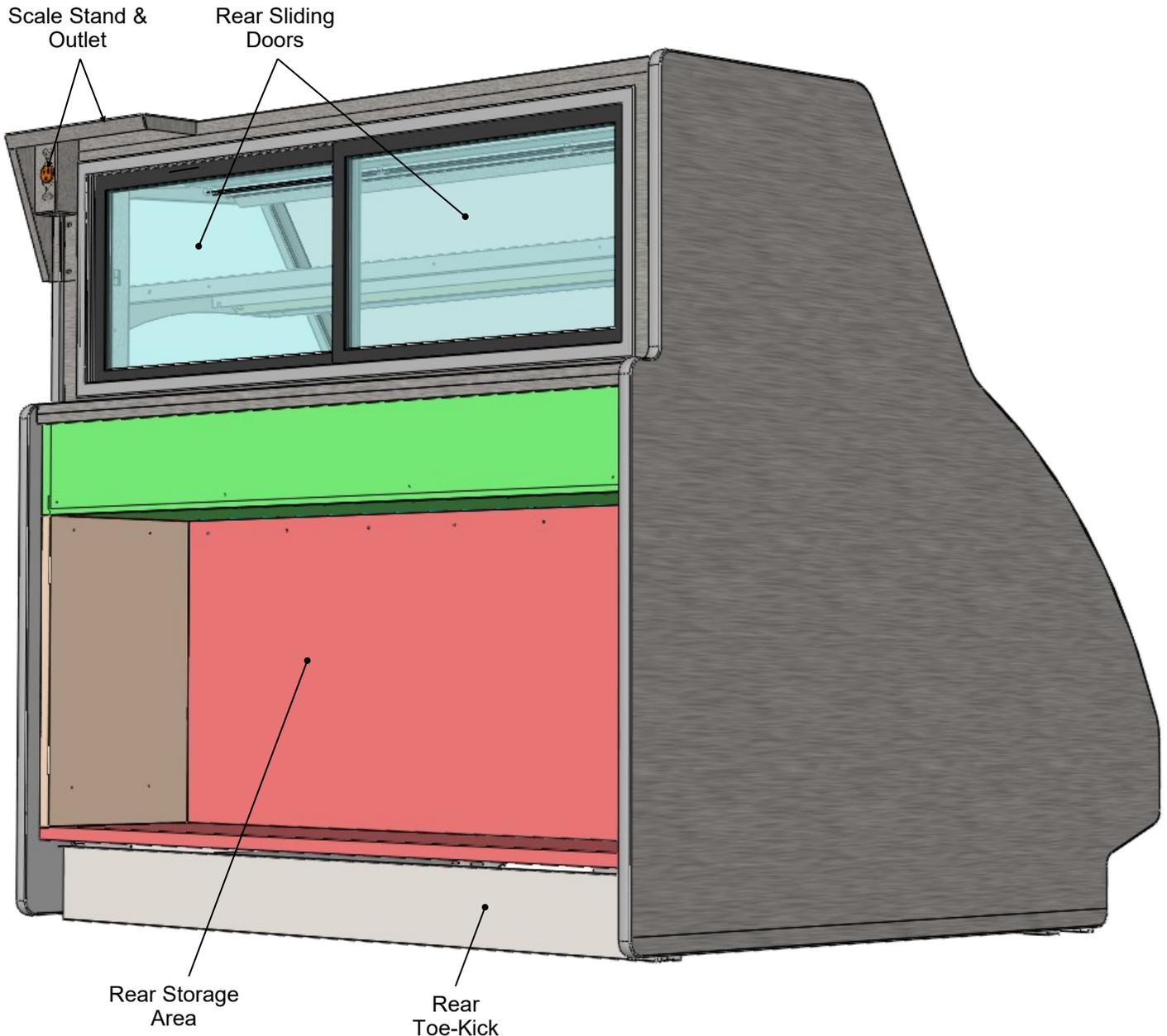
- Use care when removing from case to prevent glass breakage.

### **3. Rear Storage Area**

- Rear storage area may be used for storing store supplies.
- See cleaning section in manual.

### **4. Rear Toe-Kick**

- Rear toe-kick may be removed by lifting up and off.
- No screw removal is required.



**1. Adjustable Shelving**

- Upper shelving can be tipped downward either 5° or 10° for display purposes.
- Lower shelving may either be tipped downward OR raised or lowered (by simply removing and placing in notches above or below).

**2. Air Discharge/Crumb Tray**

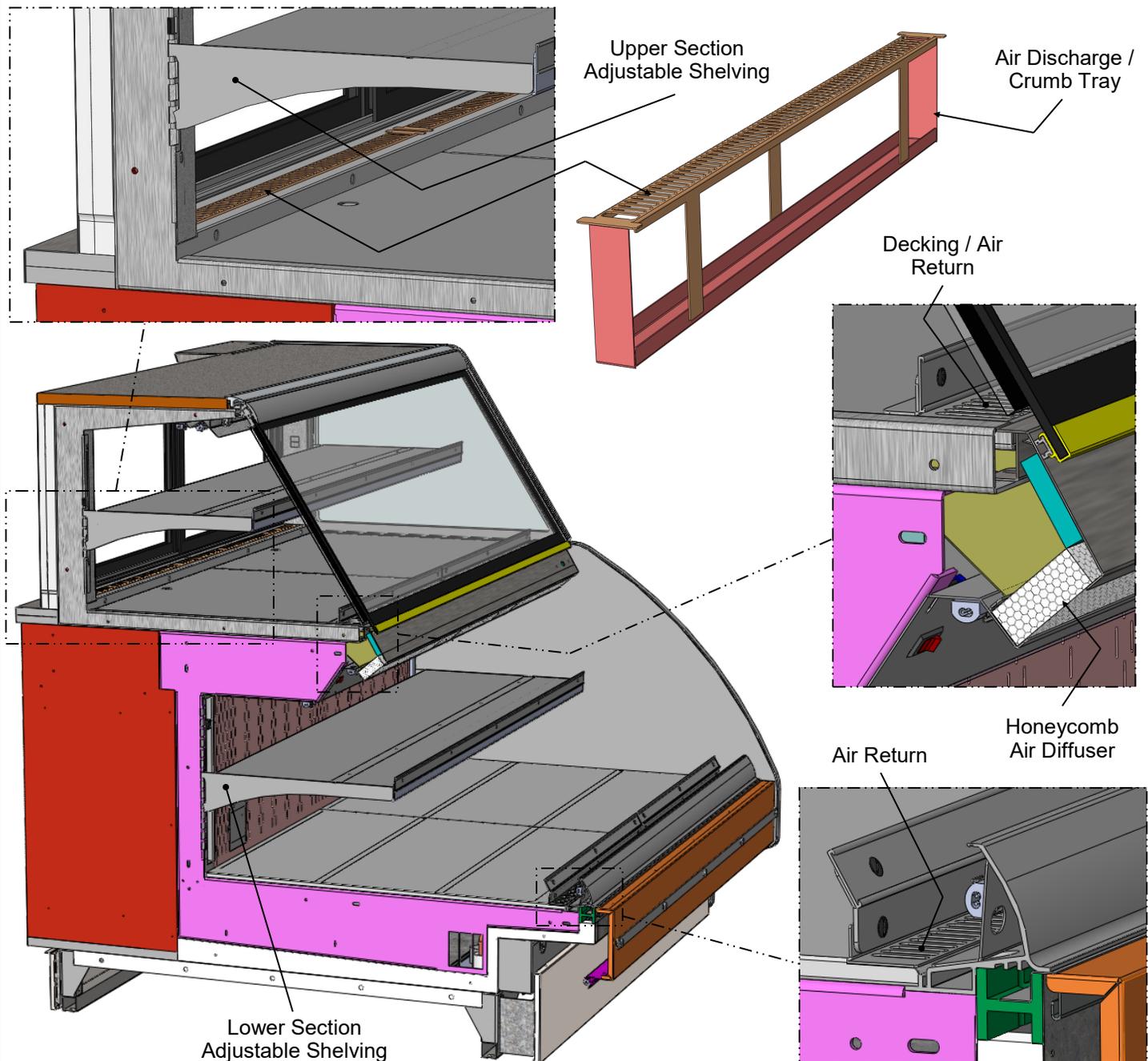
- Air discharge crumb tray can be lifted up and out to empty crumbs and residue.

**3. Decking/Air Return**

- Decking/Air return must remain free from product.
- Do not place product on this area as it will prevent proper airflow and prevent proper cooling of case.

**4. Honeycomb Air Diffuser**

- Honeycomb air diffuser can be removed for cleaning and/or replacement.
- See **MAINTENANCE FUNDAMENTALS - HONEYCOMB AIR DIFFUSERS (SERVICE TECHNICIANS ONLY)** section in this manual.



### 1. LED Lights

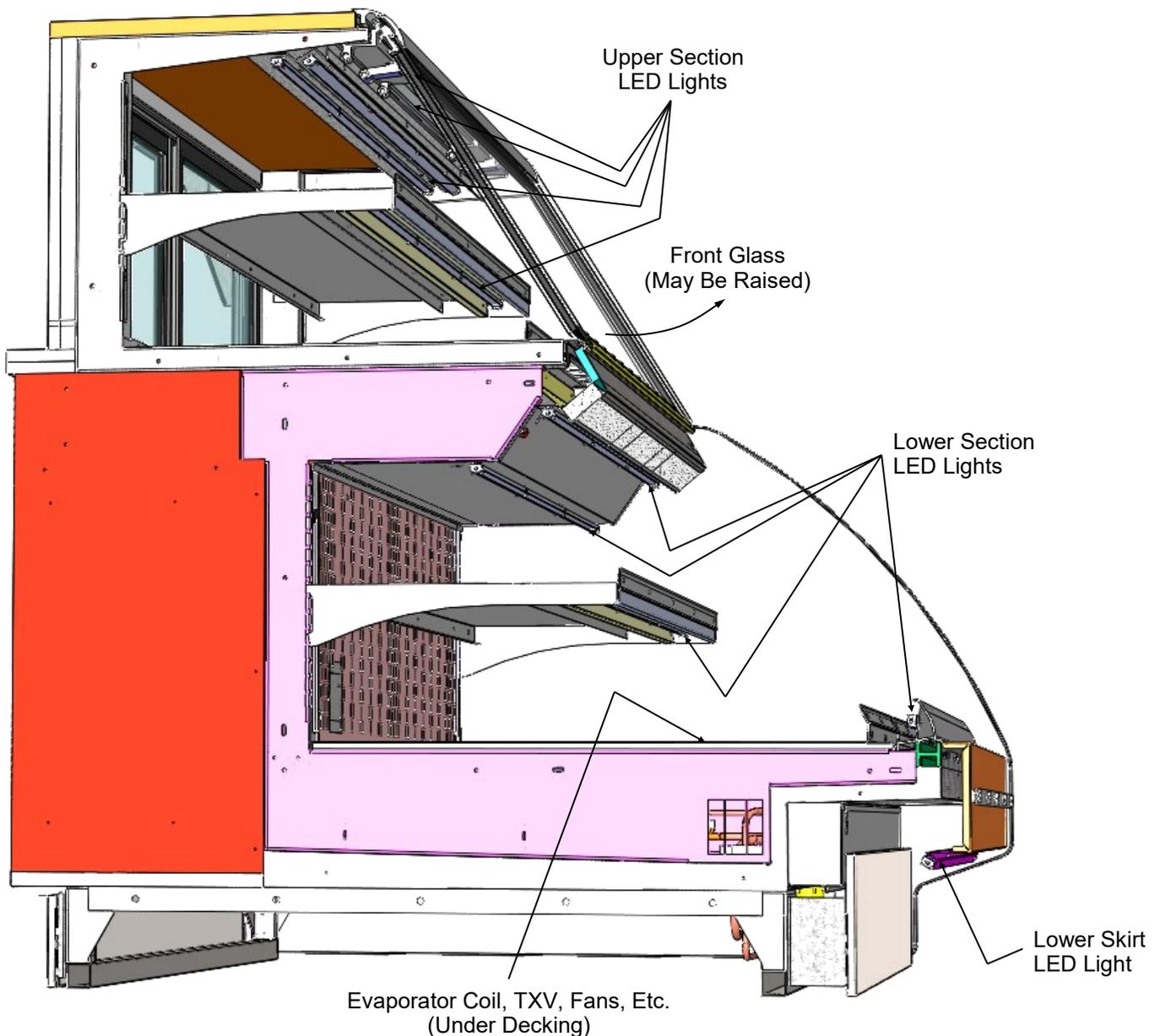
- Model GP540RRLB.5571B has LED lights only (no fluorescent lights).
- Lights may be removed for servicing and/or replacement.
- See **LED LIGHT REMOVAL/REPLACEMENT, PLUG/CORD POSITIONING, PROPER PLUG INSERTION** section in manual for specifics on care and maintenance.

### 2. Front Glass

- Caution! Only authorized service personnel are to access front glass!
- Front glass may be raised for cleaning or servicing.

### 3. Evaporator Coil, TXV (Thermostatic Expansion Valve), Fans, Etc.

- Caution! Only authorized service personnel are to access area under deck!
- Rotating fans can cause injury!

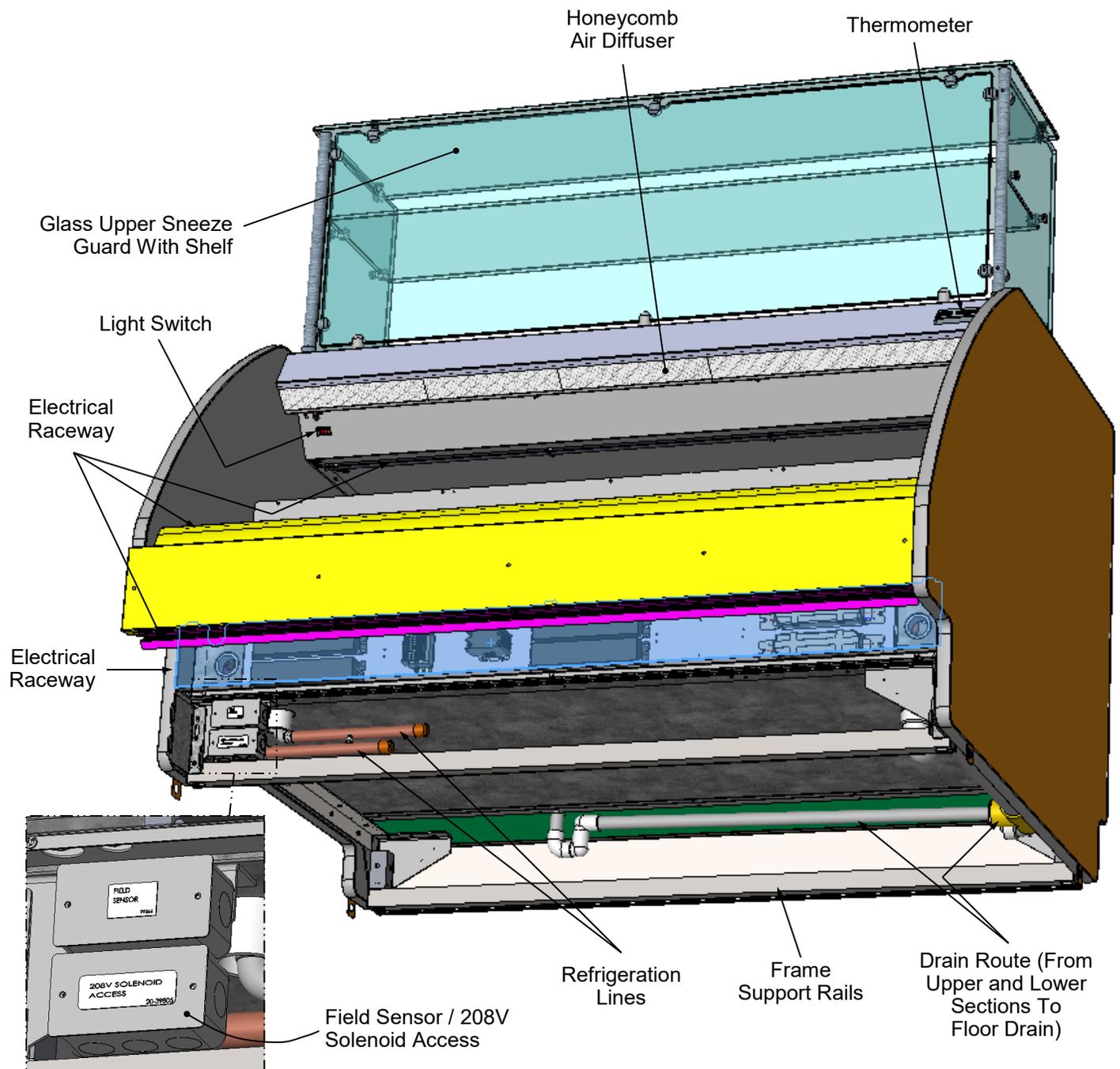


## MODEL GP540RRLB.5572C - OVERVIEW OF CASE

### Model GP540RRLB.5572C Overview of Case

View below shows general layout of:

- Glass upper sneeze guard (and its glass shelf)
- Thermometer for upper section. Note: Lower section thermometer is located on rear plenum.
- Probe (positioned behind protective plate on rear plenum).
- Light switch (located at front-left, just below honeycomb).
- Frame support rails.
- Field sensor box.
- 208V solenoid access box.
- Floor drain (from both upper and lower sections).
- Electrical raceway.
- Refrigeration lines.



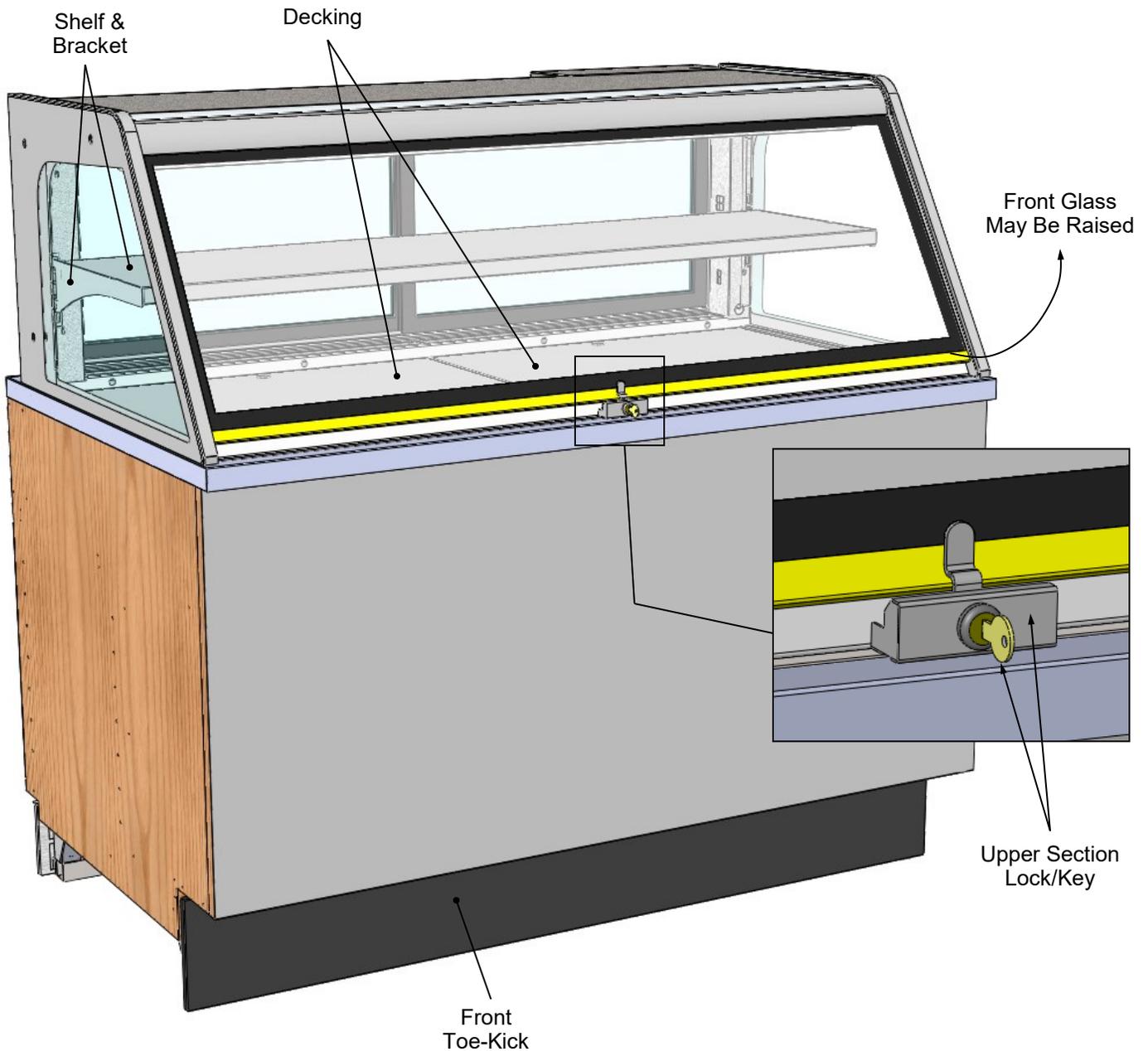
## MODEL CDR5745A (SERVICE CASE ONLY) - OVERVIEW OF CASE FRONT

### 1. Front Glass

- Front glass may be raised for cleaning or service.
- A lock and key prevent front glass from being raised. Store key in safe place.

### 2. Shelf and Bracket is Adjustable

- As illustrated below, brackets can be adjusted (up or down).



## MODEL CDR5745A (SERVICE CASE ONLY) - OVERVIEW OF CASE REAR

### **1. Scale Stand and Outlet**

- Scale stand and outlet provides support and electrical means for scale.
- Caution! Use only approved plug for outlet.

### **2. Rear Sliding Doors**

- Rear sliding doors are removable for cleaning and/or serving.
- Use care when removing from case to prevent glass breakage.

### **3. Rear Storage Area and Shelves**

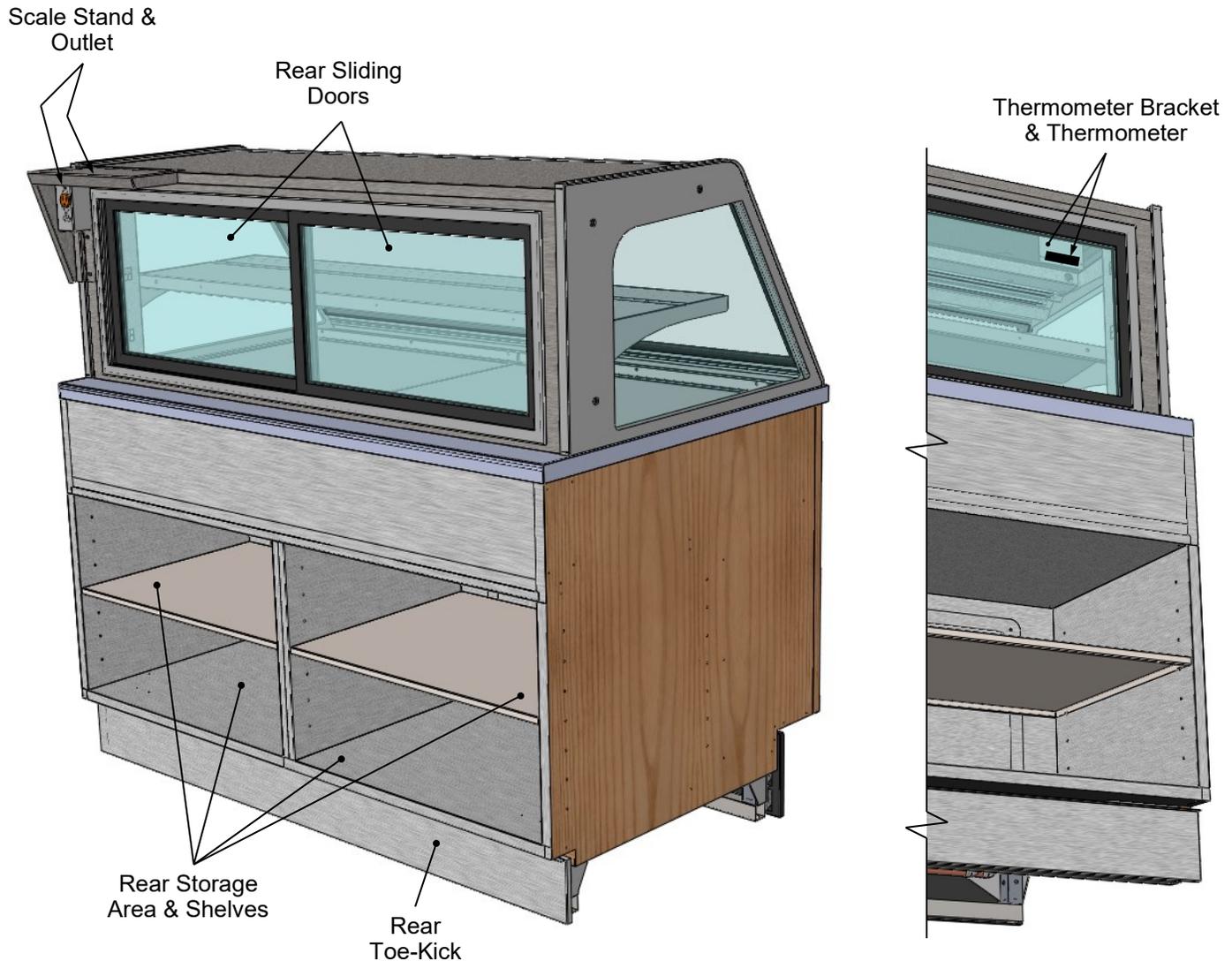
- Rear storage area and shelves may be used for storing store supplies.
- See cleaning section in manual.

### **4. Rear Toe-Kick**

- Rear toe-kick may be removed by lifting up and off.
- No screw removal is required.

### **5. Thermometer Bracket**

- Digital thermometer is attached to a suspended bracket toward rear of case.
- Rear door may be opened (by sliding right-to-left) to view thermometer's temperature.
- See illustration below-right.
- Note 1: Thermometers reflect warmest air temperature in merchandiser. They do not provide actual food temperature.
- Note 2: Use probe thermometers to determine actual product temperatures.



**1. LED Lights**

- Model CDR5745A has LED lights only).
- Lights may be removed for replacement.
- See **LED LIGHT REMOVAL/REPLACEMENT, PLUG/CORD POSITIONING, PROPER PLUG INSERTION** section in manual for specifics on care and maintenance.

**2. Front Glass**

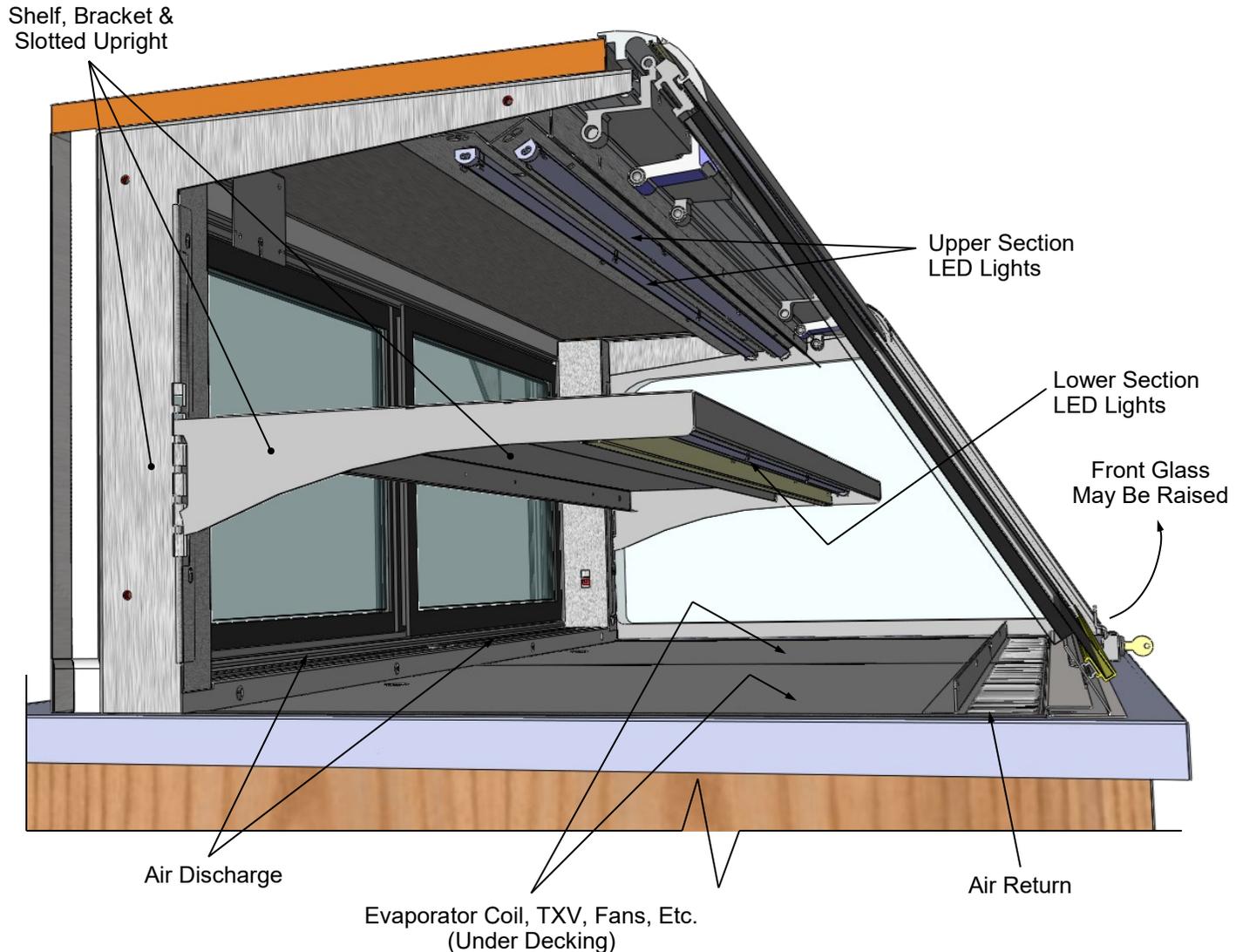
- Front glass may be raised for cleaning or servicing.

**3. Shelf and Bracket is Adjustable**

- As illustrated below, shelf can be adjusted (up or down).
- Slots in upright allow brackets to be raised or lowered.

**4. Air Discharge / Air Return**

- As shown below, air discharge is at case rear.
- Air return is at front of case.



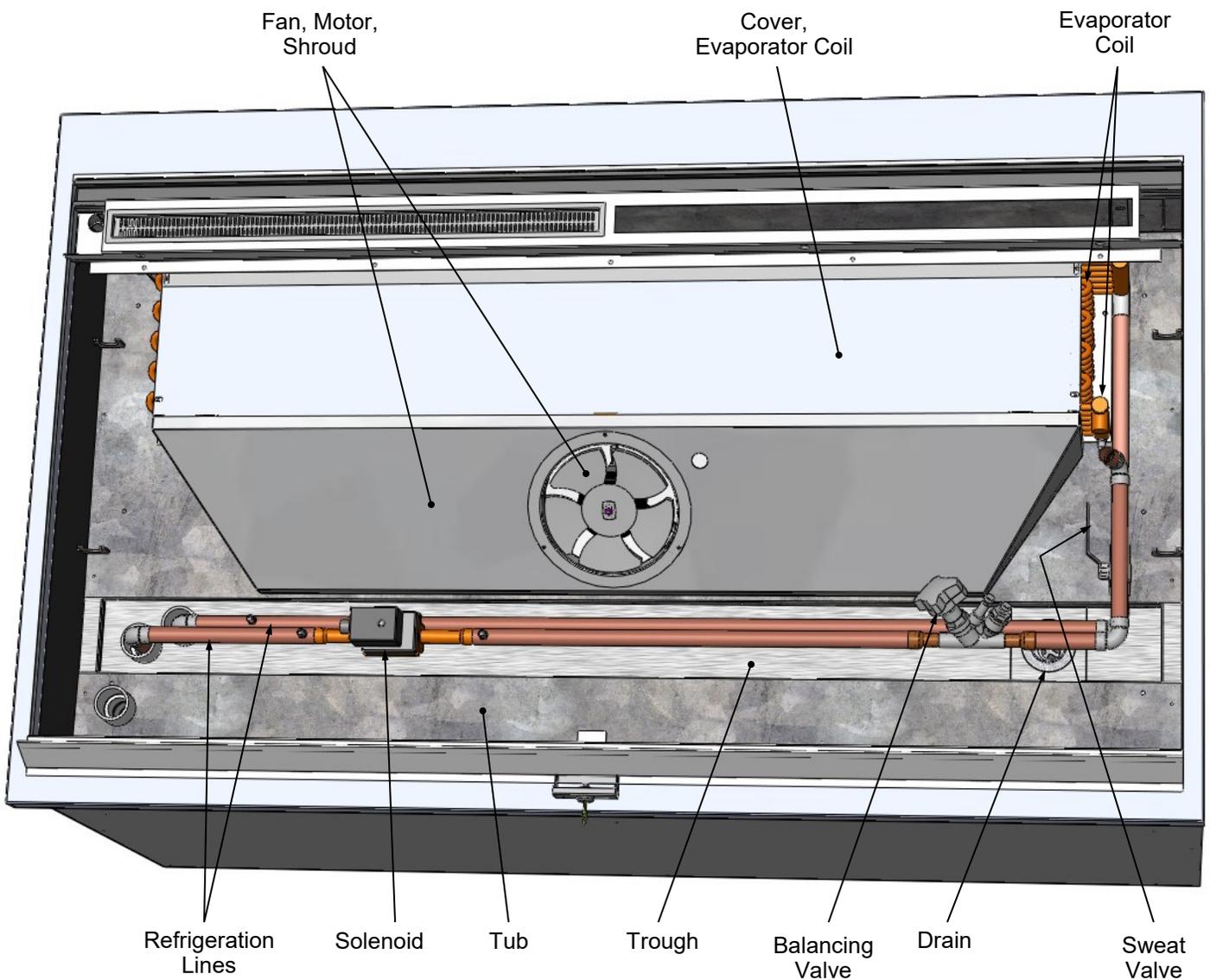
## MODEL CDR5745A (SERVICE CASE ONLY) - OVERVIEW OF EVAPORATOR COIL, FAN, DRAIN, ETC.

### 1. Tub Layout

- Illustration below reflects partially disassembled merchandiser.
- Decking has been removed to show various components.
- Fan, motor, trough, drain, valves, etc., are shown below.

### 2. Cleaning Schedule

- See **CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL** section in this operating manual for cleaning instructions.



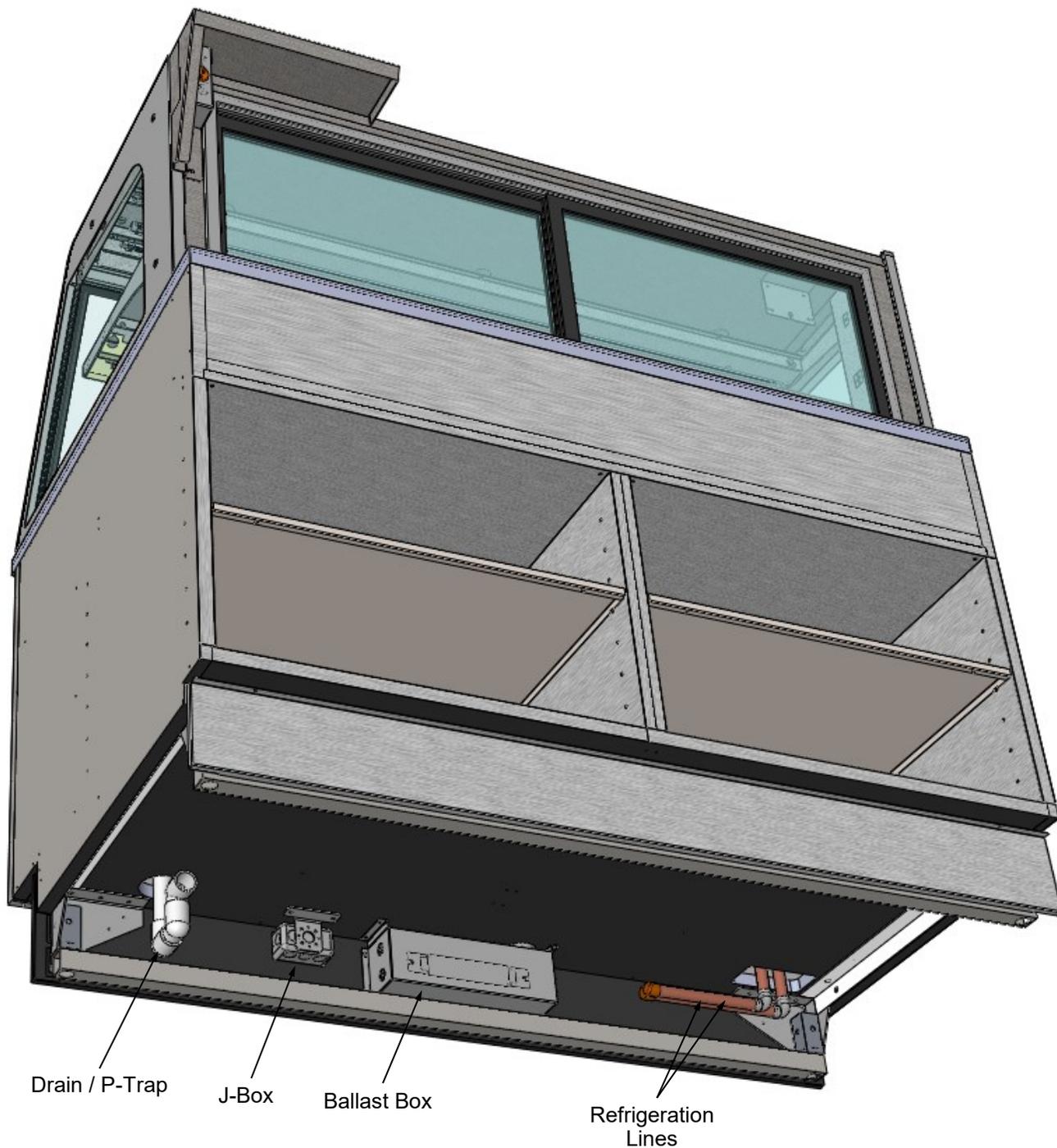
--- Front of Model CDR5745A ---

## MODEL CDR5745A (SERVICE CASE ONLY) - OVERVIEW OF UNDERSIDE OF UNIT

### Model CDR5745A Underside

- Illustration below reflects view of case underside.

- Drain/P-Trap must be properly connected to floor drain at installation.
- J-box must be field-wired.
- Ballast (as shown outlined below) is in main electrical box.



--- Underside of Model CDR5745A ---

**MODEL GP441RG.6122 ONLY**

**1. Energizing Case**

- Case will energize when properly field-wired.
- Upper display unit, has its own on/off switch.
- See wiring diagram that accompanies case.

**2. Front Grab-N-Go Section**

- Grab-N-Go section is at front of case.
- It consists of decking and shelving.
- See illustration below.

**3. Rear Refrigerated Section**

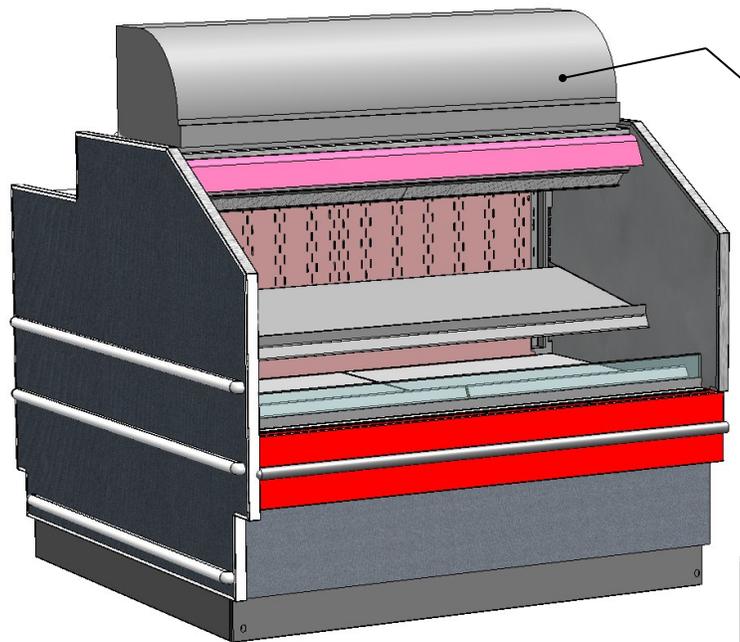
- Rear refrigerated section accessible via sliding doors.
- See illustration below.

**4. Upper Display Refrigeration Unit**

- Hoshizaki Model HNC-120BA-L-S upper display refrigerated unit is used for this merchandiser.
- Unit is self contained and rests on top of case (as shown in illustration below).
- Unit has its own on/off switch.
- Consult the Hoshizaki operating manual that accompanies upper display refrigeration unit for operational specifics.

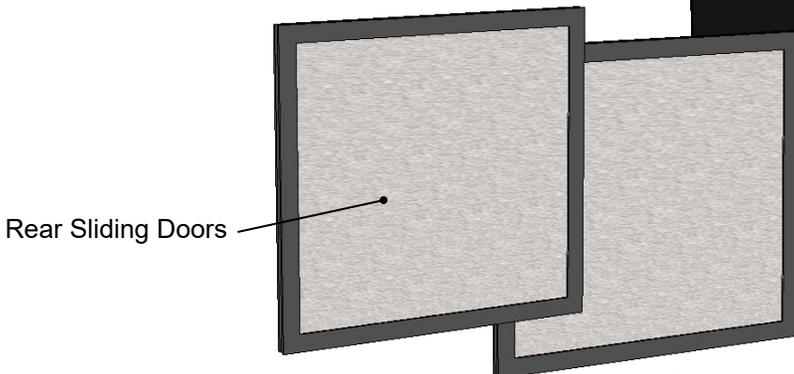
> See next page for Model GP441RG.6122 upper display refrigeration unit's power cord route / refrigeration line route.

*Note: Self-Contained Upper Display Refrigeration Unit To Sit Atop Merchandiser. For SCC Model GP441RG.6122, Hoshizaki Model HNC-120BA-L-S Is Used. Consult Its Installation and Operating Manual (or Access Information at [www.hoshizaki.com](http://www.hoshizaki.com)) For Specifics Regarding Its Design, Electrical Connections, Drain Connections, Startup, Warnings, Maintenance and Cleaning of Unit.*

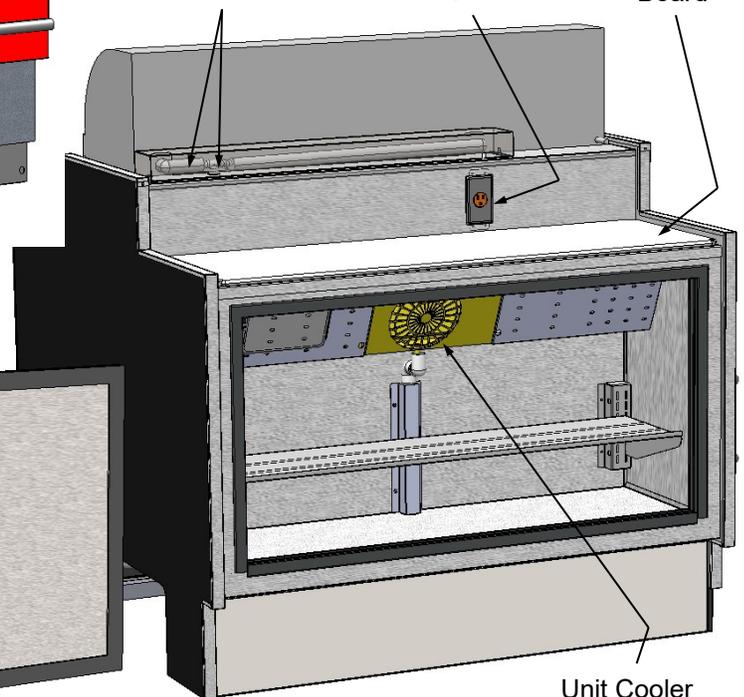


--- Case Front ---

Hoshizaki Upper Display Refrigeration Unit's Lines & Connections      Dedicated Outlet for Upper Display Refrigeration Unit      Sanalite Wrapping / Cutting Board



Rear Sliding Doors



--- Case Rear ---

Unit Cooler Fan Assembly

## MODEL GP441RG.6122 UPPER DISPLAY REFRIG. UNIT POWER CORD ROUTE / CONDENSATE LINE

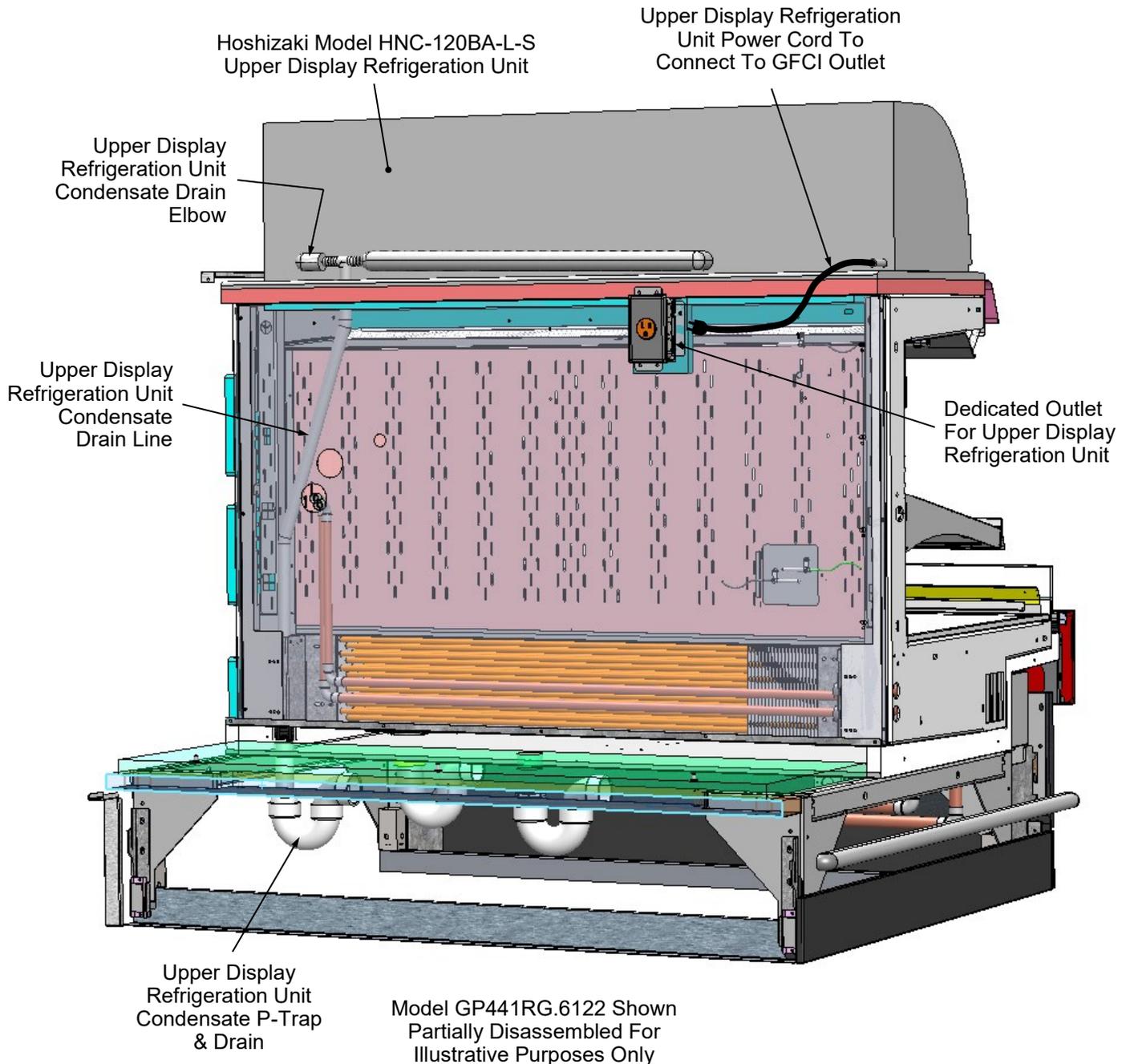
### MODEL GP441RG.6122 ONLY

#### 1. Power Cord Route

- Power cord is at rear of upper display refrigeration unit.
- Unit has its own on/off switch.
- Consult the Hoshizaki operating manual that accompanies upper display refrigeration unit for operational, cleaning and maintenance specifics.

#### 2. Condensate Drain Line Route

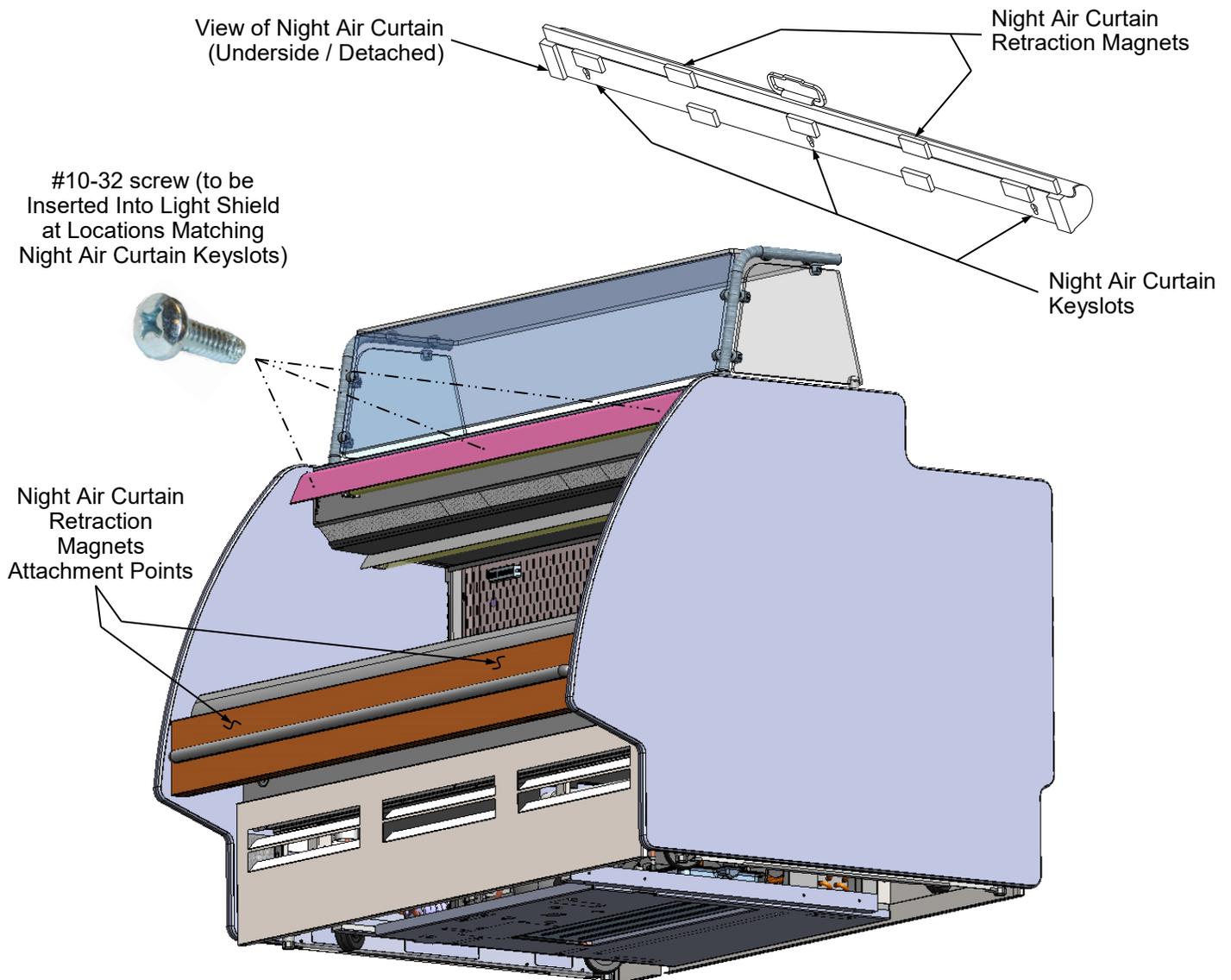
- Upper display refrigeration unit's condensate drain starts at rear of unit.
- It is then routed downward to floor drain.
- See illustration below.



### Night Air Curtain Installation & Operating Instructions

1. Use caution when handling Night Air Curtain.
2. Display case may come with Night Curtain already attached. If not, a retrofit kit will be provided.
3. If using SCC-supplied retrofit kit, place night curtain on top of case as shown. Mark "keyslot" locations using underside of night curtain as a template. Drill pilot holes in light shield and screw in #10-32 screws (leaving head exposed to allow "keyslots" to fit over them). Attach Night Air Curtain to unit by #10-32 screws.
4. After Night Air Curtain is firmly attached to case, grasp handle and pull downward to desired location (as shown below).
5. To return Night Air Curtain to its retracted position, grasp handle, lift up and away from its magnetic attachment and carefully wind Night Air Curtain back into roll.
6. **Caution!** Do not allow spring-loaded Night Air Curtain to freely snap back into roll. Doing so can eventually destroy Night Air Curtain's tension and retractability.
7. To entirely detach Night Air Curtain from case, retract curtain (to access keyslots), remove screws. Lift Night Air Curtain upward and away from case.

**NOTE: BELOW ILLUSTRATION MAY NOT EXACTLY REFLECT YOUR CASE'S FEATURES OR OPTIONS.**

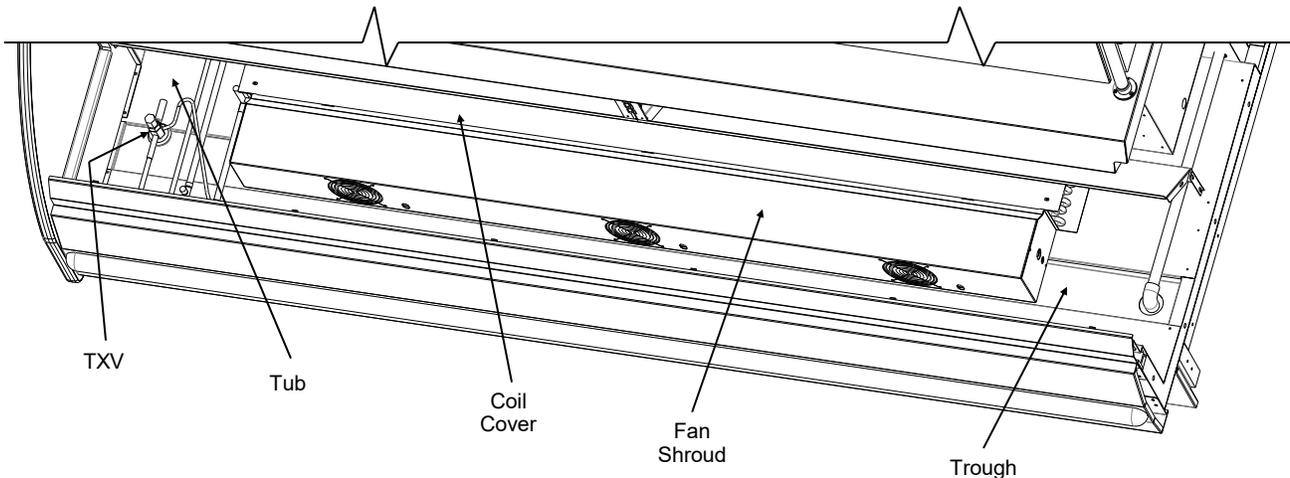


**CLEANING  
SCHEDULE /  
PREVENTIVE  
MAINTENANCE /  
TROUBLESHOOTING**

**CLEANING SCHEDULE - BY STORE PERSONNEL: CRUMB TRAY / GRAB-N-GO AREA**

AREA	FREQ.	INSTRUCTIONS
Air Discharge Crumb Tray (On Certain Models Only)	Daily / Weekly	<p><b>Daily</b></p> <ul style="list-style-type: none"> <li>• Air discharge crumb tray (MODEL GP540RRLB.5571B only).</li> <li>• Slide rear doors open. Lift air discharge crumb trays up and out.</li> <li>• Empty and return to case.</li> </ul> <p><b>Weekly</b></p> <ul style="list-style-type: none"> <li>• Perform above steps, but after emptying crumbs, submerge in warm, soapy water, clean with soft-bristled brush. Dry and return to case.</li> </ul>
Front Grab-N-Go Area	Daily / Weekly	<p><b>Daily</b></p> <ul style="list-style-type: none"> <li>• Wipe down deck pans (deck pans have been removed for illustrative purposes below) with warm, soapy water. Rinse with water-filled spray bottle and sponge or clean cloth. Dry.</li> <li>• For large spills or hardened residue, remove deck pans and submersed in warm soapy water, and clean with sponge or cloth.</li> <li>• Caution! Do not use Brillo® pad or similar abrasive cleaners as they may mar decking finish. Rinse. Dry. Return decking to case.</li> </ul> <p><b>Weekly</b></p> <ul style="list-style-type: none"> <li>• Remove deck pans (deck pans have been removed for illustrative purposes below). <i>Caution!</i> Due to functioning cooling fans, it is advisable to turn off power to unit at this step.</li> <li>• After pan covers, pans, dividers and pan supports are removed, clean entire area (sides, tub, drain, Coil Cover and TXV) with warm water, mild soap solution and soft cloth. Dry thoroughly.</li> <li>• Replace all items in reverse order in which they were removed.</li> </ul>

**Note:** Illustrations shown may not exactly reflect every feature or option of your particular case.



**CLEANING SCHEDULE - BY STORE PERSONNEL, CONT'D: SNEEZE GUARD GLASS, ACRYLIC, ETC.**

FREQ.	INSTRUCTIONS
Daily	<b><u>Sneeze Guard Glass/Supports/Glass Sliding Doors:</u></b> After removing pans, clean with a household or commercial glass cleaner and a soft cloth or paper towel. Wipe off all residue.
Daily	<b><u>Acrylic:</u></b> Acrylic sneeze guards and bins must be cleaned with a mild soap and water solution and a soft cloth. <b><i>Caution! Never use ammonia-based cleaners on acrylic. Incorrect cleaning agents or abrasive cleaning cloths cause surface to 'cloud' over time.</i></b>
Daily	<b><u>End Panels, Front Panel, Toe-Kick, Sliding Doors (Model GP841R.5184, Etc.), Storage Area, Condiment Covers, etc.:</u></b> Wipe with warm water & mild soap solution and non-abrasive cloth.
Daily	<b><u>Stainless Steel Surfaces:</u></b> See <b><i>CLEANING SCHEDULE - TO BE COMPLETED BY STORE PERSONNEL, CONT'D: STAINLESS STEEL</i></b> section in this manual for cleaning specifics.
Daily	<b><u>Storage Areas, Glove Box Holder, Sanalite Wrapping/Cutting Board:</u></b> Wipe out with warm water and mild anti-bacterial soap solution and non-abrasive cloth. See illustration below.
Daily	<b><u>Risers:</u></b> Wipe down with warm water and mild anti-bacterial soap solution & non-abrasive cloth. For more extensive cleaning (stubborn stain removal), remove from case, submerge in warm, soapy water and use non-abrasive cloth. <b><u>Note:</u></b> See <b><i>PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)</i></b> section in manual for sample view of risers.

## CLEANING SCHEDULE BY STORE PERSONNEL, CONT'D: ENGINEERED/SYNTHETIC QUARTZ

Engineered Quartz Overview	<p><u>Engineered (Synthetic) Quartz Overview:</u></p> <ul style="list-style-type: none"> <li>• Engineered (synthetic) quartz is a 'man-made' product. It is sometimes called "engineered stone." It is made from crushed quartz particles bonded with polyester, styrene, resin, pigments and tert-butyl peroxybenzoate.</li> <li>• It is non-porous, mold and mildew-resistant, and impervious to odor-causing bacteria.</li> <li>• Slabs are specifically sized. Engineered quartz contains a maximum of 94% mineral quartz (though percentages vary). Engineered quartz is extremely resistant to damaging chemicals.</li> <li>• There are many engineered (synthetic) quartz brands. These include Caesarstone, Cambria, Compac, Corian, Daltile ONE, Granite HanStone, Transformations, Kowalski, LG Hausys, LG Viatera, Lunastone, Marble.com, MSI Q, Okite, Pental, Polarstone, Pompeii, Samsung, Sensa, Silestone, Stone Italiana, Vadara, Vena &amp; Vicostone.</li> </ul>
Routine Care	<p><u>For Daily, Routine Care and Cleaning:</u> Engineered (synthetic) quartz require very little maintenance. Simply wipe the surface with neutral pH balanced household detergent and warm water solution with soft sponge or microfiber cloth to maintain its shine.</p> <ul style="list-style-type: none"> <li>• To prevent fading, keep from harsh, direct sunlight for long periods of time.</li> <li>• General cleaners: use neutral pH balanced household detergent and warm water (4 cups of water/1 teaspoon of detergent). Or isopropyl alcohol (aka rubbing alcohol). Or use any general, all-purpose cleaner, glass cleaner or Pine Sol. Or use Clorox Wet Wipes (as they contain no bleach or and are soft). After cleaning, thoroughly rinse with water and dry with clean cloth to prevent water spots from forming.</li> <li>• Specifically designed cleaners for manufactured quartz: Black Diamond Stoneworks Granite Counter Cleaner, Caldrea Countertop Spray, Clark's Natural Stone Spray Cleaner, Granite Gold, Simple Green, Park &amp; Bailey Granite &amp; Stone Cleaner, Seventh Generation Granite &amp; Stone Cleaner, Stone Care Quartz Clean &amp; Shine, Stone Pro Quartz Countertop Cleaner, Weiman Quartz Countertop Cleaner and Polish.</li> </ul>
Difficult Spills	<p><u>For Difficult Spills, Stains and Spots:</u></p> <ul style="list-style-type: none"> <li>• Thoroughly clean with warm water and neutral pH detergent (mixture detailed above) before pursuing next steps.</li> <li>• Clean up high staining liquids such as coffee, tea, fruit juice, lemon juice, vinegar, wine and tomato juice right away. Use warm water and neutral pH detergent to do so. After cleaning, thoroughly rinse with water and dry.</li> <li>• For residues that harden as they dry (food, gum, nail polish, and paint), place wet cloth or paper towel over residue for 10 minutes (to soften its properties); then gently scrape off residue by using a plastic putty knife or plastic scraper; avoid metal blades or scrapers if possible; then clean using warm water and soap. If you must use metal razor blade or scraper, remove gray marks with soap and water. Thoroughly rinse with water and dry to prevent water spots.</li> <li>• Difficult spots may need to be treated with solutions/chemicals BEYOND warm water and neutral pH detergents: A. Water/white vinegar mixture: 2 cups of water with 1 tablespoon of white vinegar in spray bottle; spray surface; allow solution to sit for 2 minutes; wipe off with soft cloth or sponge. B. Soft Scrub Liquid Gel: Apply gel to cloth or sponge (not directly to quartz surface); wipe the area in a circular motion; repeat until spot is removed. C. Goo Gone adhesive remover (for sticky residue). Thoroughly rinse the surface with water and wipe dry to prevent water spots.</li> <li>• Water stain removal: 1 part vinegar + 3 parts baking soda in warm water. Dip cloth in mixture and thoroughly soak stain. Leave for 5-10 minutes; then scrub area with soft brush. Rinse with water and dry with clean cloth.</li> </ul>
Extreme Heat Protection	<p><u>Extreme Heat Protection:</u></p> <ul style="list-style-type: none"> <li>• Engineered quartz is extremely resistant to heat, and can withstand moderately high temperatures for brief periods of time without being damaged.</li> <li>• Engineered quartz CAN BE damaged by sudden and extreme temperature changes; thus, use a trivet or a hot pad to protect its surface from hot pans, hot dishes or small appliances that may reach high temperatures.</li> </ul>
Chemicals To Avoid	<p><u>Chemicals To Avoid:</u></p> <ul style="list-style-type: none"> <li>• Nail polish remover (acetone), oil soaps, and furniture cleaners or paint strippers that contain trichloroethane or methylene chloride.</li> <li>• Chemicals with an alkaline level of pH &gt;10 (oven cleaners, chloring bleach, lacquer thinner, ammonia, tub and tile cleaner, borax, etc.)</li> <li>• Chlorinated solvents (trichloroethylene or methylene chloride)</li> <li>• Concentrated acids (hydrocyanic acid, hydrofluoric acid, hydrochloric acid, sulfuric acid, nitric acid or CLR)</li> </ul> <p>Caution must be used for the following products on engineered quartz surfaces:</p> <ul style="list-style-type: none"> <li>• Avoid using products containing oils or powders as may leave a residue.</li> <li>• Avoid abrasive scrubs/cleaners (such as Ajax, Comet, Scotch-Brite or oven cleaner) as it dull or discolor the finish.</li> </ul> <p>Common stains like coffee, food, makeup, permanent markers, etc.:</p> <ul style="list-style-type: none"> <li>• Apply the appropriate cleaner with a paper towel and wipe. If necessary, soak with paper towels from 3-10 minutes.</li> <li>• Scrub the area with a non-abrasive cloth or sponge. Rinse and dry thoroughly.</li> </ul>
Preventing Scratches	<p><u>Scratch Deterrence:</u> Engineered quartz surfaces are scratch RESISTANT. However, they CAN be scratched or marred by certain utensils or cleaning materials.</p> <ul style="list-style-type: none"> <li>• Use a cutting board to avoid damaging the quartz surface and knives.</li> <li>• Never use abrasive scouring pads, steel wool soap pads, Brillo® pads or "Magic Erasers."</li> </ul>

## CLEANING SCHEDULE - BY STORE PERSONNEL, CONT'D: STAINLESS STEEL

### General Stainless Steel Surface Cleaning (To Be Performed As Often As Needed):

- Certain grades of stainless steel, and some are more prone to corrosion than others.
- Stainless steel can become exposed to a wide variety of contaminants, which if left untreated can cause stains and rust.
- Stainless steel requires a specific cleaning procedure to maintain its sheen and remain rust-free.
- Wash with a solution of liquid dishwashing detergent and hot water.
- Rinse with pure hot water from spray bottle. Wipe with clean sponge. This will remove soap residue that can lodge in stainless steel's microscopic grooves, causing rust.
- Dry with clean, soft cloth or paper towel.
- **Caution!** *To prevent rust, you MUST rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.*
- **Caution!** *Never clean with scouring powder or steel wool as they can mar, scratch and/or erode the surface of stainless steel. When the surface properties of stainless steel have been compromised, rust can form.*

### Brightening:

- **Method 1:** Brighten by polishing with a soft cloth or sponge with a solution of one part vinegar to 2 parts water in a spray bottle.
- **Method 2:** Sprinkle baking soda on sponge and rub gently with soft cloth or sponge.
- **Caution!** *To prevent rust, you MUST rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.*
- Dry with clean, soft cloth or paper towel.

### Removing Streaks or Stains:

- **Method 1:** Place two teaspoons of rubbing alcohol on a microfiber cloth or pad. Rub the cloth along the grain of the appliance until the entire area has been wiped. The rubbing alcohol will air dry itself.
- **Method 2:** Dip soft cloth or sponge in club soda and rub gently over area of concern.
- **Caution!** *To prevent rust, you MUST rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.*
- Dry with clean, soft cloth or paper towel.

### Polishing:

- Place a dab of olive oil onto clean soft cloth. Spread over area until a light sheen is observed. Use pressure to "work the oil" into the small grooves in the surface. Apply firm, steady pressure using small circular motions.
  - > **Dry buff:** Remove excess oil with clean cloth or paper towel using small circular motions.
  - > **Wet buff:** Use an ounce or white vinegar with clean cloth or paper towel using small circular motions.
  - > Continue wiping until oily finish has been removed.
- **Caution!** *To prevent rust, you MUST rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.*
- Dry with clean, soft cloth or paper towel.

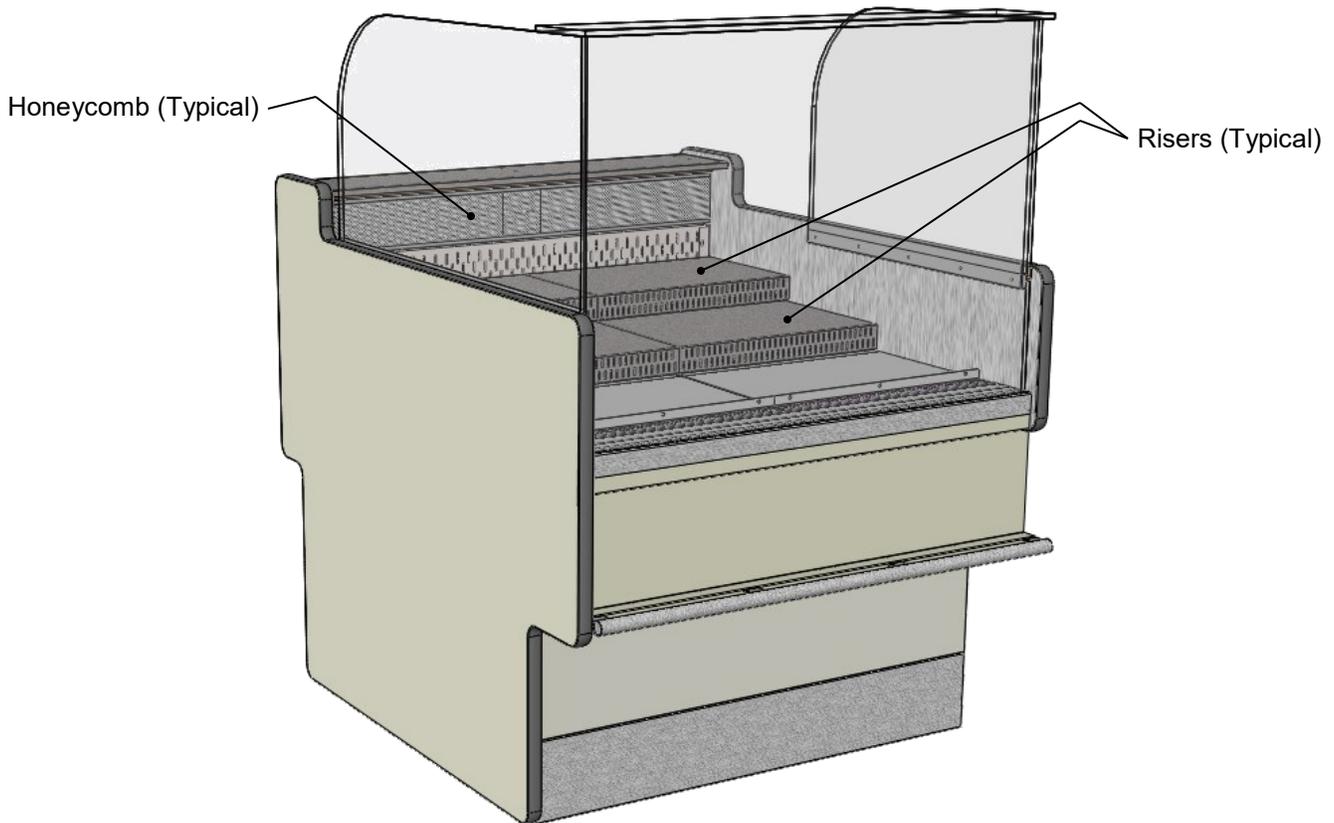
### Removing Rust:

- If rust has begun to form, there are a variety of products that can treat it.
- Among these are CLR® (calcium, lime and rust remover) and Chemetall Oakite 33 (rust, oxides and scale remover).
- **Caution!** *To prevent food contamination, personal injury or further corrosion, carefully observe and follow the rust removing product's precautions and instructions.*

**PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS)**

**WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!**

PREVENTIVE MAINTENANCE	FREQ.	INSTRUCTIONS
Case Interior	Quarterly	<p><b><u>Tub Area (Evaporator Coil, Drain, Fans, Brackets):</u></b></p> <p><b><i>Caution! Disconnect power from the case before cleaning tub, coil, fan, motor and drain area!</i></b></p> <ul style="list-style-type: none"> <li>• Use vacuum to clean entire area.</li> <li>• After vacuuming, clean area with warm water, clean cloth, and mild soap solution.</li> <li>• Remove any debris that may clog drain.</li> <li>• Wipe down fan blades, motors and brackets with moist cloth.</li> </ul>
	Quarterly	<p><b><u>Honeycomb:</u></b> Check honeycomb air diffuser to determine if it is dirty. If it is dirty, remove from case. See <b><i>MAINTENANCE FUNDAMENTALS - HONEYCOMB AIR DIFFUSERS (SERVICE TECHNICIANS ONLY)</i></b> section of this manual (next page) for cleaning specifics.</p>



Model GP340DRLB.5580

**PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER), CONT'D.**

**1. Honeycomb Air Diffuser Removal**

See **PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)** section in this manual for cleaning frequency.

A. Wedge a non-metallic device of suitable strength (such as a ballpoint pen) between the honeycomb and the end panel.

**Caution!** Use care not to dislodge the heating wire (that prevents condensation on the lamp assembly).

B. Apply pressure to collapse the honeycomb to allow it to be pulled out of honeycomb retainer.

C. Carefully pry downward and away from the honeycomb retainer.

Clean honeycomb with warm water and soap solution. Submerge if necessary. Use brush to dislodge stubborn or sticky residue. Dry by using vacuum's blow mode (vs. suction mode).

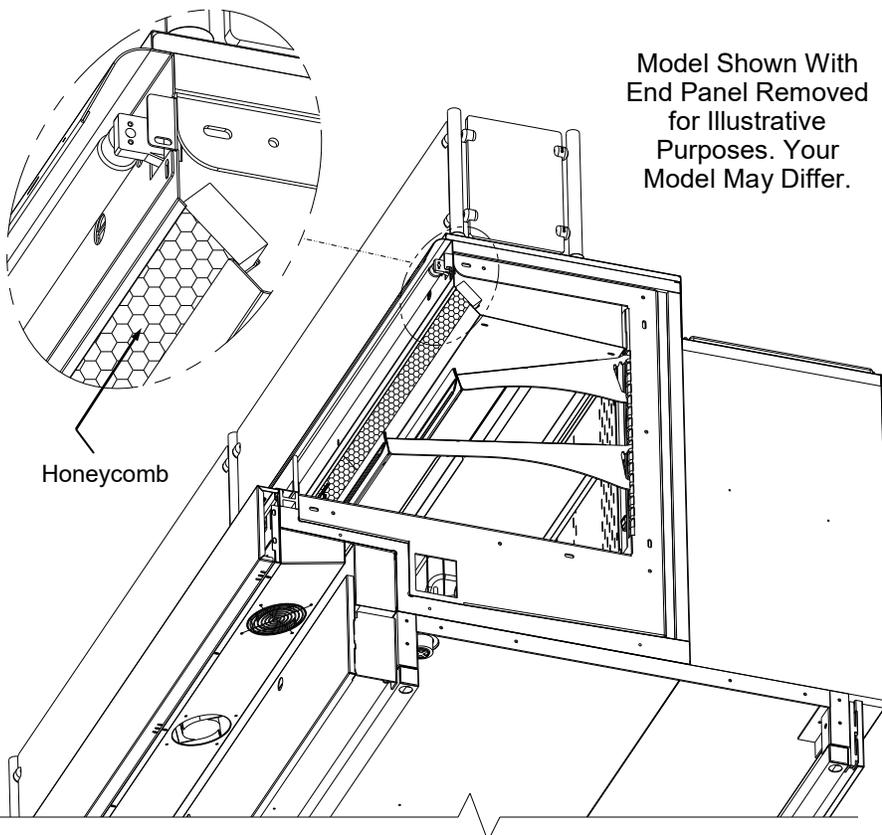
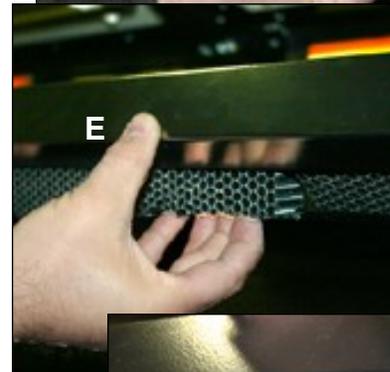
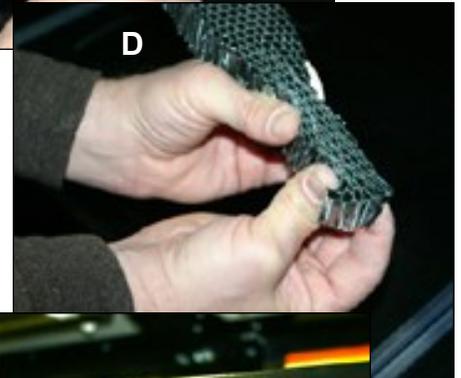
**2. Honeycomb Air Diffuser Installation**

D. Squeeze honeycomb to allow it to fit into the honeycomb retainer.

E. Carefully slide honeycomb into place.

F. Adjust honeycomb so that it fits flat against retainer. It must not be wavy or out of position.

**Note:** For honeycomb air diffusers in other locations, these same general instructions apply.



## TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)

CONDITION	TROUBLESHOOTING
<b>Case Is Not Level</b>	See <b>INSTALLATION</b> section in this manual for additional information.
<b>Case Not Lining Up</b>	See <b>INSTALLATION</b> section in this manual for instructions on properly aligning case (alongside other cases) and adjusting levelers (or rails).
<b>Water Is On The Floor</b>	Call service provider.
<b>Fan Emits Excessive Noise</b>	Call service provider.
<b>Case Lights Are Not Working</b>	Check that light switch is in the <i>on</i> position.
	Turn light switch off and check bulb for proper connection. <ul style="list-style-type: none"> <li>• Check that the light cord is plugged in properly.</li> <li>• <u>Note:</u> LED light and plug must be connected in a specific manner or they will not work.</li> <li>• Make certain flat edge of plug connects to flat edge of LED light.</li> <li>• See <b>LED LIGHT REMOVAL/REPLACEMENT, PLUG/CORD POSITIONING, PROPER PLUG INSERTION</b> section in this manual for illustrations.</li> </ul>
	Fluorescent lights: Check bulbs for proper installation and connection. Also, check that bulb connections are free from dust and dirt.
	Fluorescent lights: Check for burned out bulbs.
	If case lights still do not come on, call service provider.
<b>Case is Not Holding Proper Temperature</b>	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Product must be pre-chilled before placing in case.
	Check that the case is not in the sun or near a heat or air-conditioning vent.
	If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature.
	Check air return grilles (area at front of decking) for obstructions. <b>DO NOT</b> set product on air grilles as this will prevent proper airflow!
	If case still is not holding proper temperature, call service provider.

**TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS)**

CONDITION	TROUBLESHOOTING
<b>Water Is On The Floor</b>	Check that drain trap is free of debris.
	Check that the drain hose is correctly positioned over floor drain.
	Check store conditions. <ul style="list-style-type: none"> <li>• To prevent condensation in NSF/ANSI Type I environments, maximum conditions are to be 55% relative humidity / 75° Fahrenheit.</li> <li>• For NSF/ANSI Type II environments, maximum conditions are to be 55% relative humidity / 80° Fahrenheit.</li> <li>• If you are unsure if your unit is classified as NSF/ANSI Type I or Type II, see tag next to serial label on your case.</li> </ul>
<b>Fan Emits Excessive Noise</b>	Check that the case is aligned, level and plumb.
	Check evaporator fans for cleanliness.
	Unplug/power off fan motors. Check to determine whether faulty.
	Check that fan motors are securely mounted in brackets.
	Check that the fan shroud is properly secured.
<b>Fans Are Not Working</b>	Check that fans are plugged in at the fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shrouds
	Check that power is going to fans (certified electricians only).
	Check that fan wiring is connected on terminal blocks (certified electricians only).
<b>System Is Not Operating</b>	Check that the utility power is on.
	Check the circuit breaker box for tripped circuits.

**TECHNICAL  
INFORMATION  
(THERMOSTAT /  
SERIAL LABEL /  
WARRANTY /  
TECHNICAL SERVICE  
INFO., ETC.)**

**Serial Label Location & Information Listed / Technical Information & Service**

- Serial labels are affixed at a wide range of places (on the header, near thermostat, at case rear, behind panels/toe-kicks, on electrical boxes, etc.).
- Serial labels contain electrical, temperature and refrigeration information, as well as regulatory standards to which the case conforms.

- Sample serial label shown below.
- 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

# Fusion

MODEL NRS3648RXV-SAMPLE  
SERIAL NO. 12345X30DZ098765



Intertek



Intertek

3048256  
Conforms to UL Std. 471  
Conforms to NSF/ANSI Stds. 2 & 7  
CERTIFIED TO CAN/CSA  
STD C22.2 NO 120

Super Heat Temp  
Defrost

6-8 °F  
6 defrosts per day, 45 °F

ELECTRICAL RATING  
REFRIGERANT  
DESIGN PRESSURE  
MINIMUM CIRCUIT AMPACITY  
MAXIMUM OVERCURRENT

120/1/60 16 A  
R513A AMOUNT 50 OZ  
HIGH 186 LOW 88  
20A  
20A

FOR PARTS AND SERVICE  
CALL 1-800-433-9490

SCAN FOR PRODUCT LITERATURE



Sample QR Code

--- Sample Serial Label For Refrigerated Cases ---

38



**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**



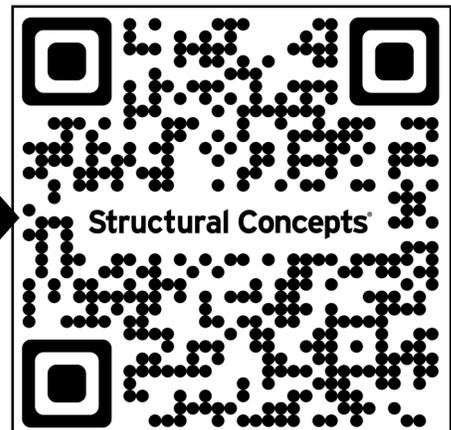
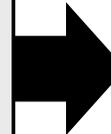
**Carel® iJF Platform**



**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 P.M. to 8:00 P.M. 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.

