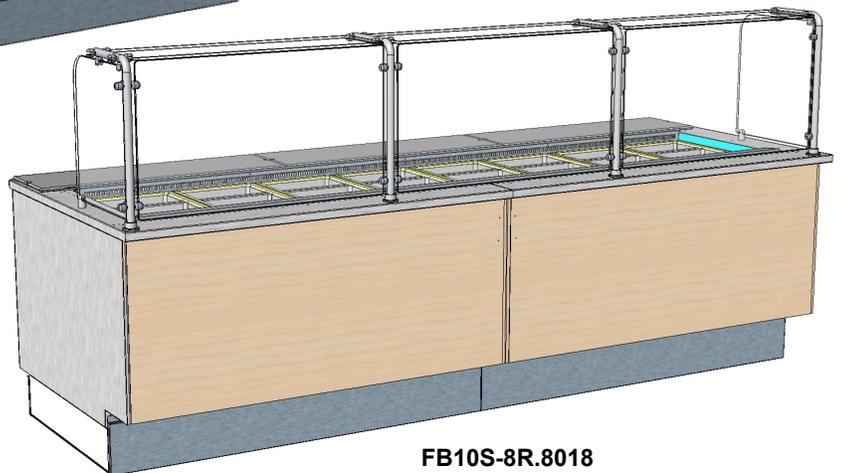
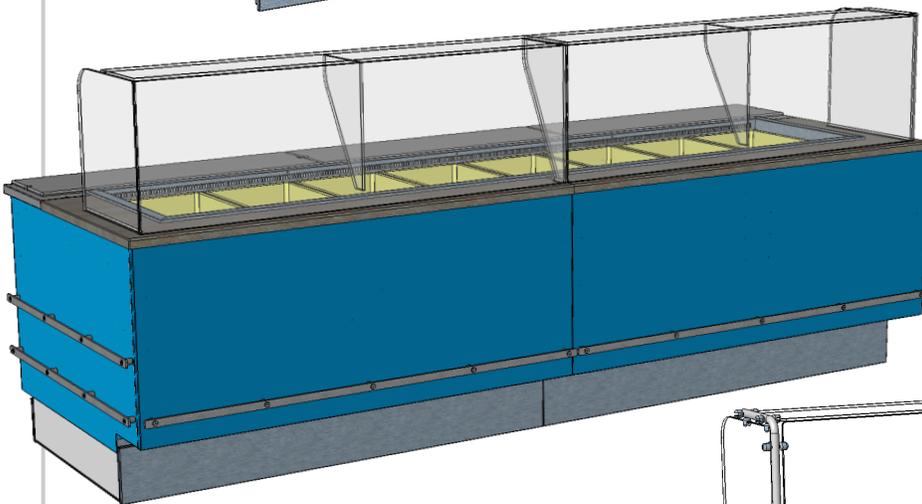
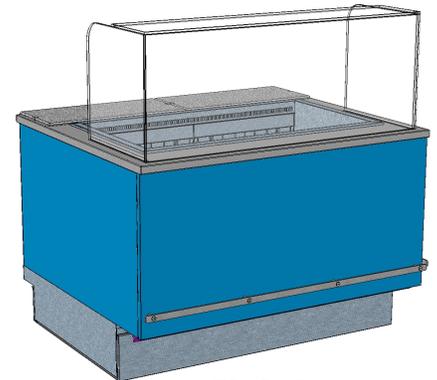
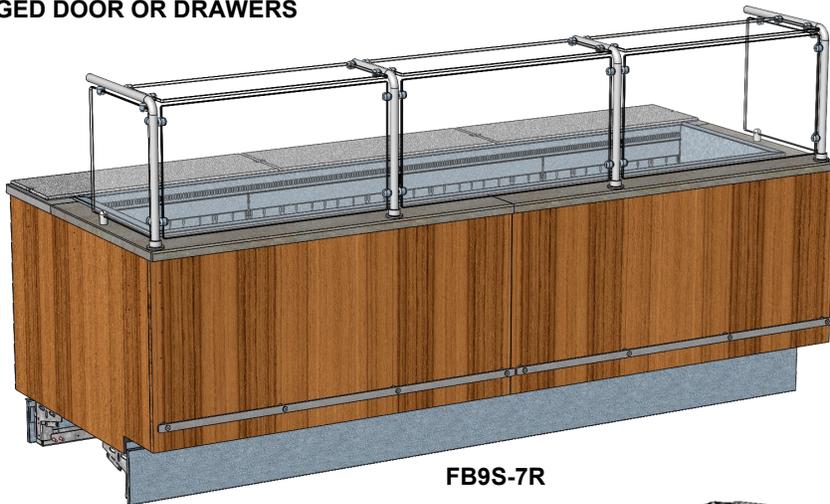


# GROCERANT USER MANUAL

SCC P/N  
20-89548

**GROCERANT™ REMOTE SERVICE INLINE COLD WELL FOOD MERCHANDISERS WITH DROP-IN PANS**  
**NOTE: UNITS MAY INCLUDE CERTAIN FEATURES OR OPTIONS LISTED BELOW:**

- > UV-BONDED GLASS UPPER (WITH OPTIONAL DESIGN FOR ADJOINED CASES)
- > CLEAR GLASS SNEEZE GUARDS WITH STAINLESS STEEL POSTS
- > REFRIGERATED INSULATED WELLS
- > REFRIGERATED WELLS WITH “SHARED AIR” PLENUMS (SEE “SHARED AIR” SECTION IN USER MANUAL FOR SPECIFICS)
- > REAR REFRIGERATED STORAGE VIA SLIDING DOORS, HINGED DOOR OR DRAWERS
- > OPEN/AMBIENT REAR STORAGE
- > ADJUSTABLE SIDE SPLASH BRACKETS
- > REMOVABLE FRONT PANEL (FOR ADJOINMENT PURPOSES)
- > GUSSETS AND TABS (FOR ADJOINMENT PURPOSES)
- > REMOVABLE REAR PLATE (FOR ADJOINMENT PURPOSES)



**Structural Concepts®**

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**OVERVIEW**

- These Structural Concepts Grocerant™ refrigerated service cases are designed to merchandise product at 40 °F (4.5 °C) or less.
- Product must be pre-chilled to 40 °F (4.5 °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.

**TYPE 1 vs. TYPE 2 CONDITIONS**

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

- Type 1 conditions: ambient conditions are to be 55% max. humidity and 75 °F (24 °C) max. temperature.
- Type 2 conditions: ambient conditions are to be 55% max. humidity and 80 °F (27 °C) max. temperature.

- If unsure if unit is Type 1 or 2, see tag next to serial label. See **SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE** section in this manual for sample serial labels).

**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.**



**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.



**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).

**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**

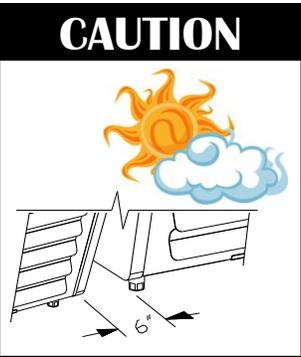
- This equipment is prohibited from use in California with any refrigerants on the “List of Prohibited Substances” for that specific end-use, in accordance with California Code of Regulations, title 17, section 95374.
- This disclosure statement has been reviewed and approved by Structural Concepts and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

**WEIGHT LOADS ON GLASS / PREVENTING SAGGING**

- Caution! To prevent sagging, do not exceed 5 LB (2.3 KG) weight load per top glass section between stainless steel posts (or supports).



**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!**  
 To prevent sagging, do not exceed 5 LBS (2.3 KG) weight load per top glass section (between posts and/or supports).

**Remove Case From Skid**

**1. Fork Lift**

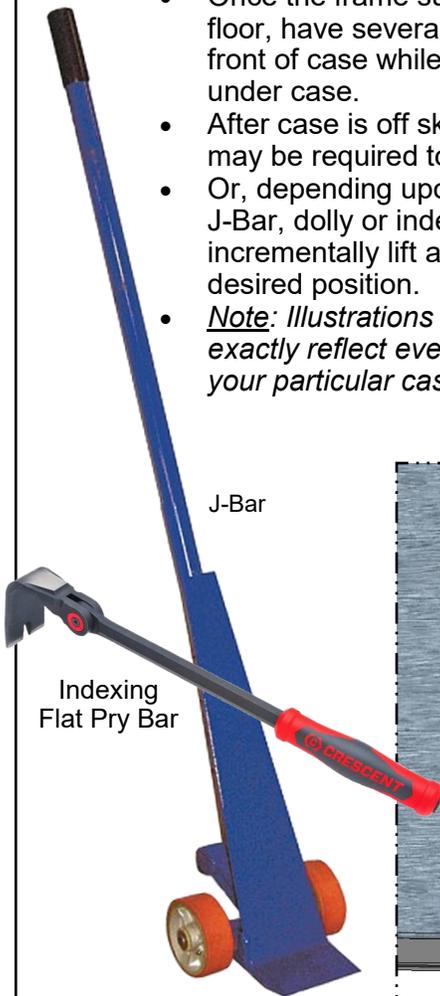
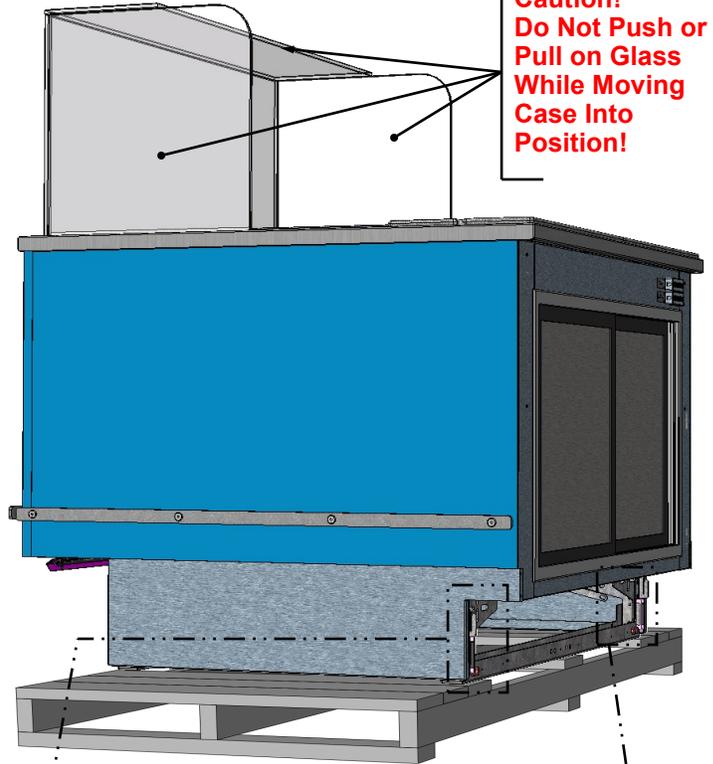
- To lift case up for lift-truck forks to slide into position, place J-bar, indexing flat pry bar or dolly under J-Bar lift tabs (location shown below).
- *Note: REAR lift tabs are extended beyond base frame bolts (to allow greater access).*
- Raise case up to allow forks to slide under rails.
- Insert forks under rails.
- Make certain case is well-supported on forks. Move case to desired location. Lower in place.
- *Note: Illustration shown may not reflect every feature or option of your particular model.*

**2. J-Bar, Indexing Flat Pry Bar or Dolly Only**

- **Caution! Do not push or pull on glass while moving case into position!**
- With several people in position, carefully slide frame support rail to edge of skid.
  - Slide case off skid and lower frame support to floor.
  - Once the frame support rail rests on the floor, have several people supporting front of case while skid is slid out from under case.
  - After case is off skid, several people may be required to slide into position.
  - Or, depending upon case weight, use J-Bar, dolly or indexing flat pry bar to incrementally lift and rotate case into desired position.
  - *Note: Illustrations shown may not exactly reflect every feature or option of your particular case.*

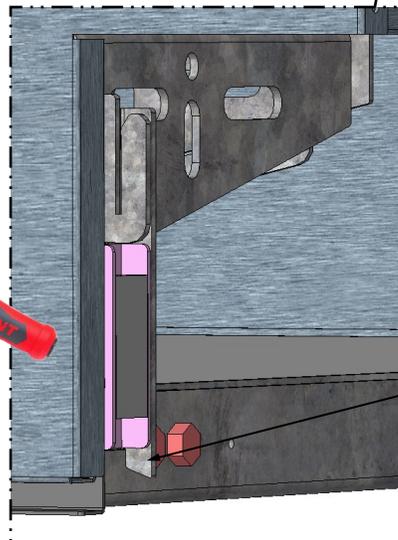
Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.

**Caution!  
Do Not Push or Pull on Glass While Moving Case Into Position!**

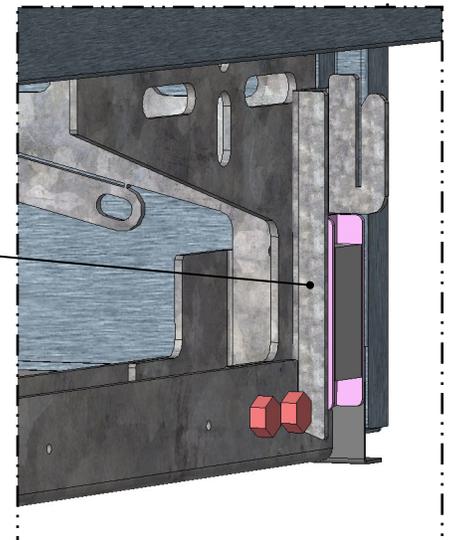


J-Bar

Indexing Flat Pry Bar



J-Bar/Pry Bar Lift Tabs



## ADJOINMENT GUIDE: LOWERING FRONT PANEL FOR END PANEL ADJOINMENT

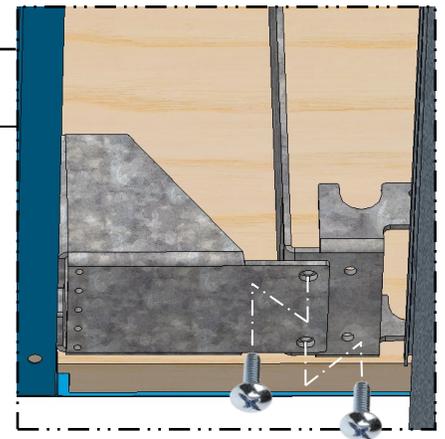
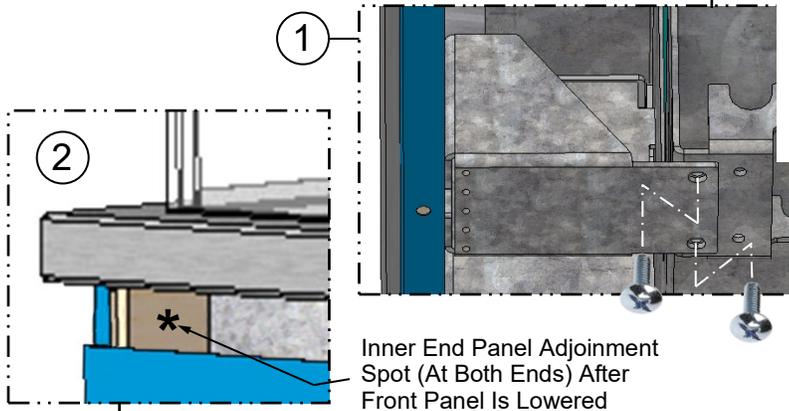
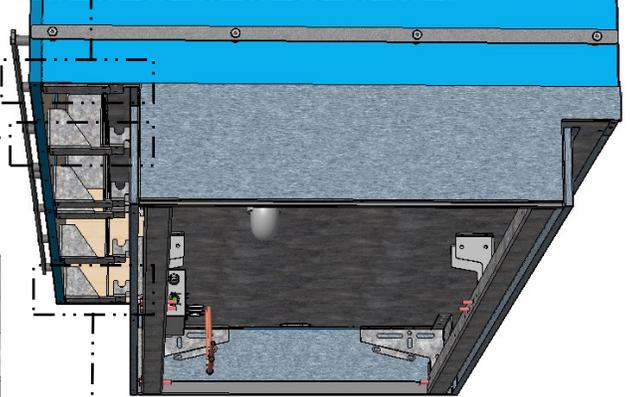
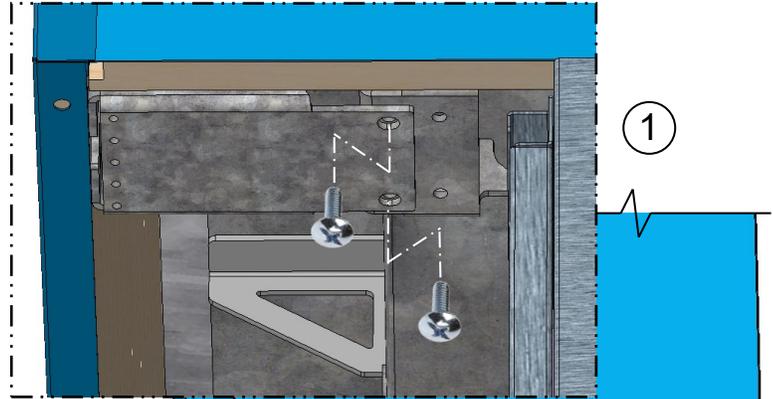
### Adjoinment Guide

#### 1. Lowering Front Panel

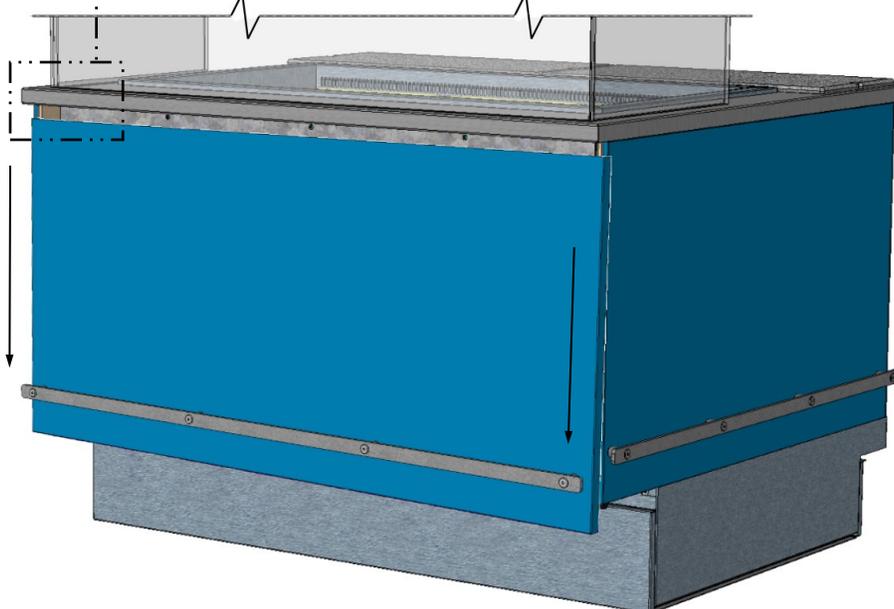
- Lowering front panel allows screws to be inserted through inner end panels and into adjacent cases.
- To do so, you must first remove two (2) screws from brackets located at front underside of case.
- Number of brackets vary depending upon case length.

#### 2. Adjoining End Panels

- Use wood screw to attach to adjacent case.
- After adjoinment screw has been attached, raise front panel back up and reattach (2) screws in each bracket.
- Drill bits and screws are provided in lineup kit.
- Number of brackets vary depending upon case length.



Screw Locations  
(Remove To Lower The Front Panel)

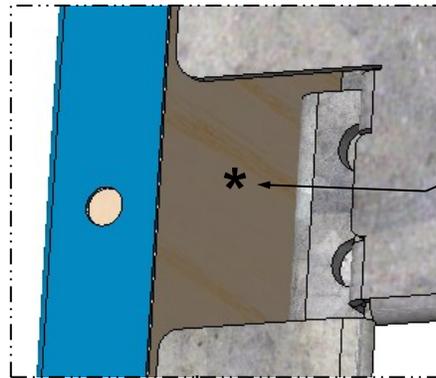


Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.

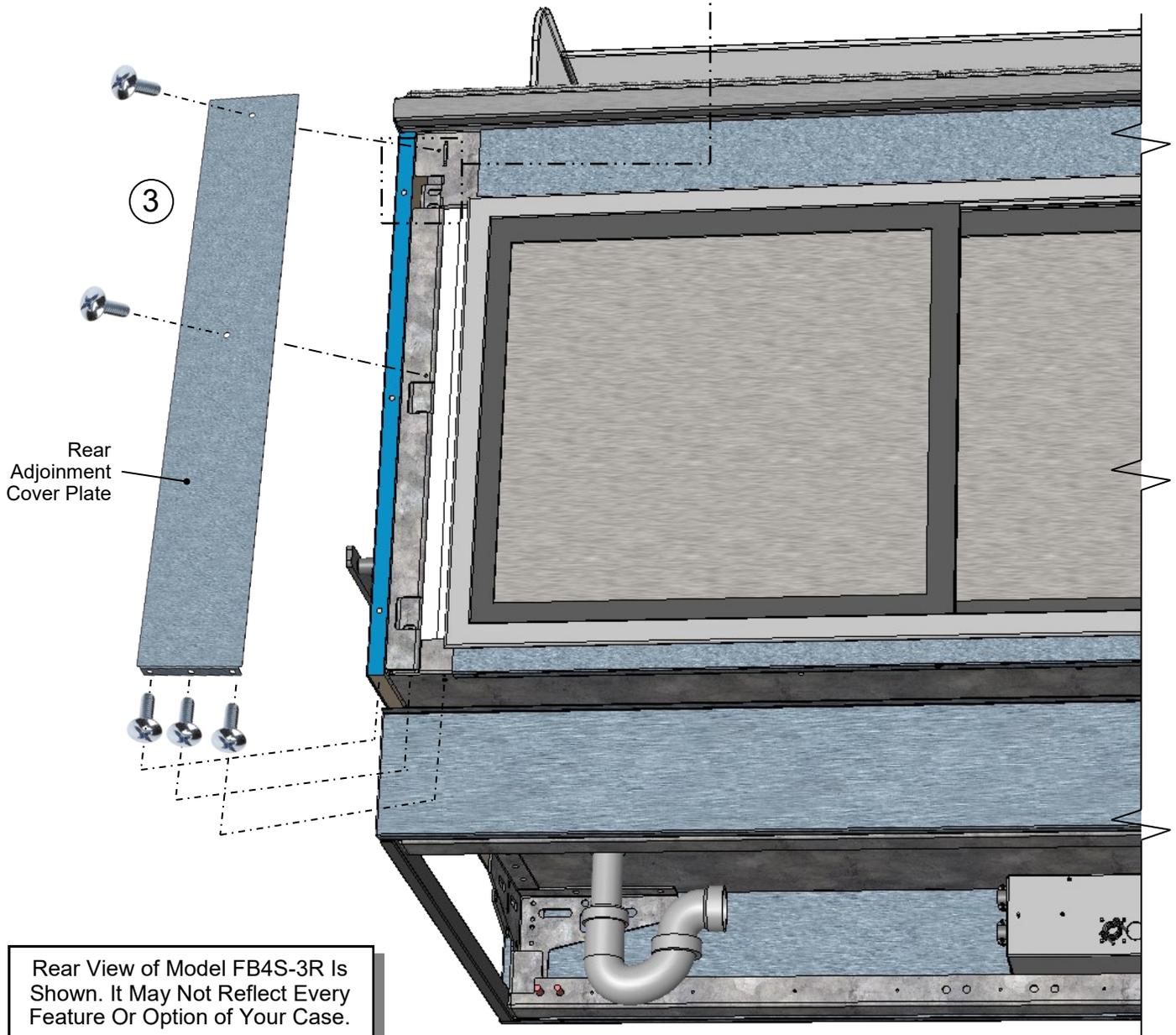
**Adjoinment Guide, Continued**

**3. Rear Adjoinment Cover Plate**

- Removal of rear adjoinment cover plate allows access to inner end panels (at both ends of case).
- Attach through end panel to adjacent case end panel with wood screws.
- **Note:** Drill bits for pilot holes and wood screws are included in adjoinment kit.
- Return rear adjoinment cover plate to case in reverse order it was removed.



Apply Wood Screw Through Inner End Panel After Rear Adjoinment Cover Plate Has Been Removed



Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.

--- Rear View of Model FB4S-3R Is Shown Above ---

**Adjoinment Guide, Continued**

**4. Base Frame Adjoinment**

- Base frames (at both ends of case) have many holes and obrounds to adjoin to adjacent case base frames.
- Use 5/16"Ø bolt to adjoin base frames.

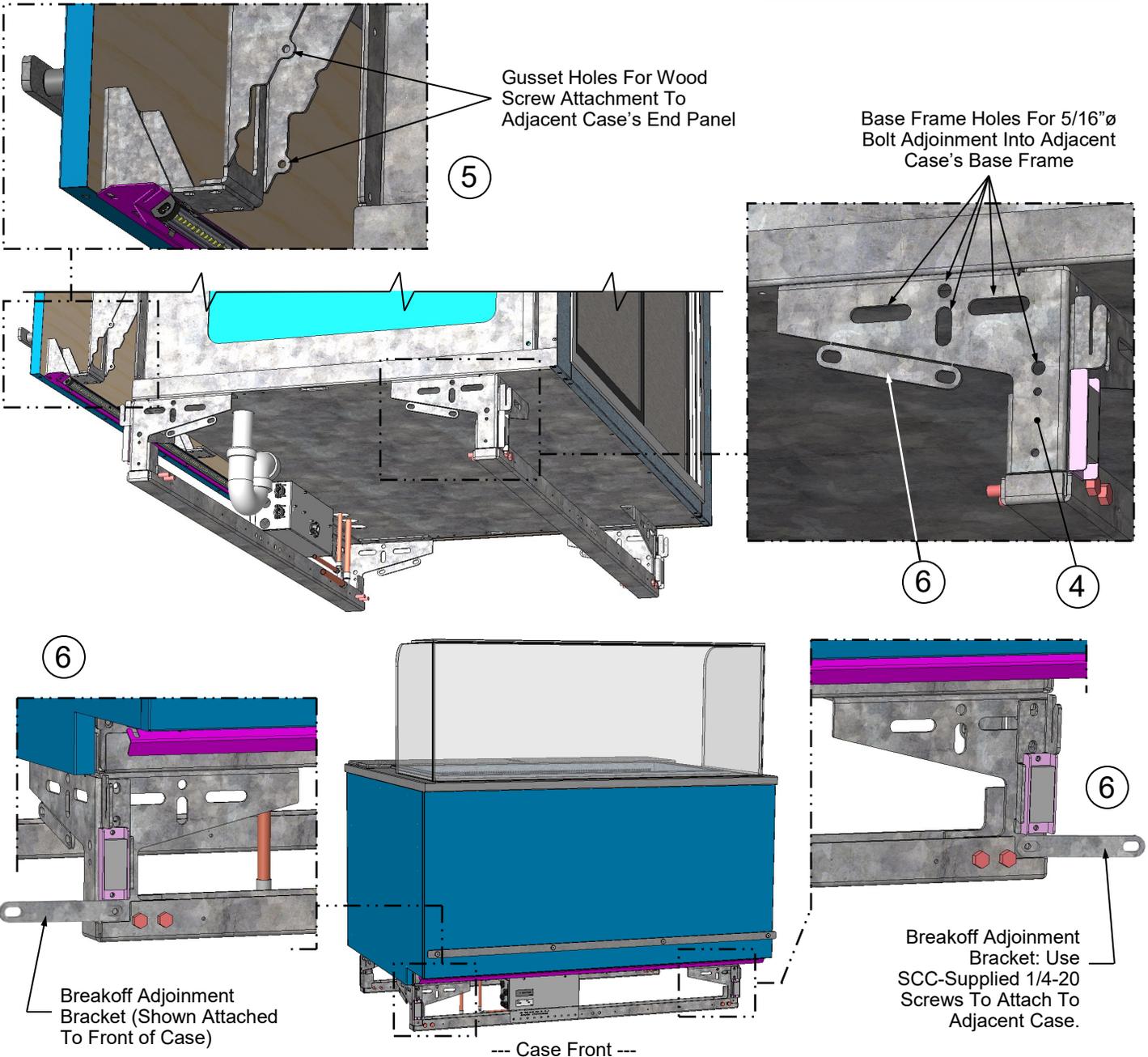
**5. Gusset Adjoinment**

- Gussets (at both ends) have holes for wood screws to attach to adjacent case's end panel.
- See illustration at top-left.

**6. Breakoff Adjoinment Bracket (Optional)**

- An adjoinment bracket comes from the factory attached to base frame.
- As an option, it may be broken off and attached to the front base frames of adjoining cases.
- See illustrations below.

Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.



# UV-BONDED GLASS ENCLOSURE DESIGN OPTIONS

## UV-Bonded Glass Enclosure Options

### 1. Standard UV-Bonded Glass Enclosure Design

- Standard glass enclosures have a 1 1/2" space between glass and work surface edge.

### 2. Continuous UV-Bonded Glass Enclosure Design

- Extended UV-bonded glass enclosures are flush to work surface edge.
- This feature may be either at BOTH ends of case.

### 3. UV-Bonded Glass Installation Sheets/Guides

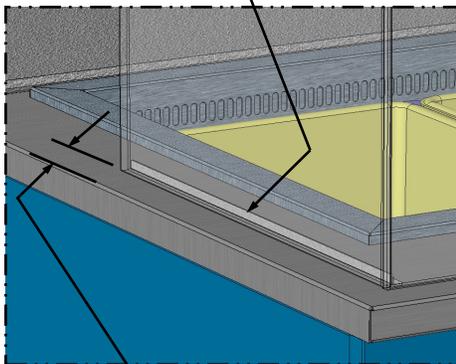
See documents included with shipment:

- A. P/N 20-60789 UV-Bonded Glass Crate Removal Sheet
- B. P/N 20-76828 UV-Bonded Glass Alignment/Placement Sheet
- C. P/N 20-71700 UV-Bonded Glass Installation Guide
- D. P/N 20-76539 UV-Bonded Glass Installation Guide (Spanish Version)

Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.

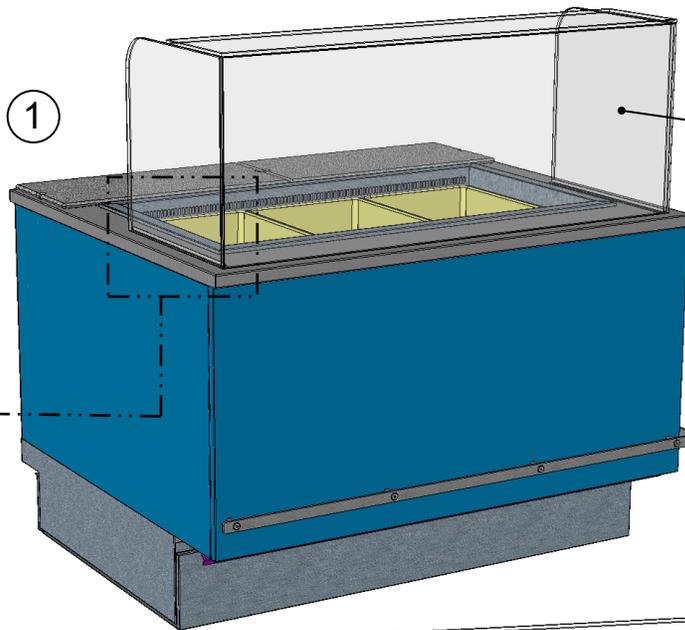
Support Bracket (Glued To Inner UV-Bonded Glass At Factory)

Attach To Work Surface With Tape (From Factory)



1 1/2" Space Between Glass And Work Surface Edge (At Both Ends)

1



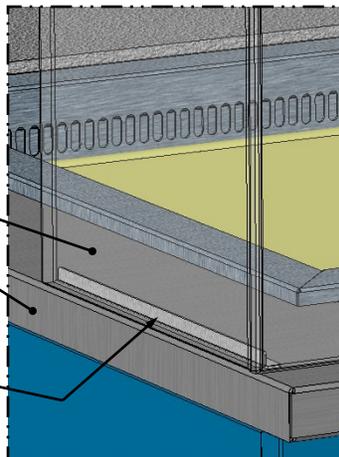
Standard UV-Bonded Glass Enclosure Design

2

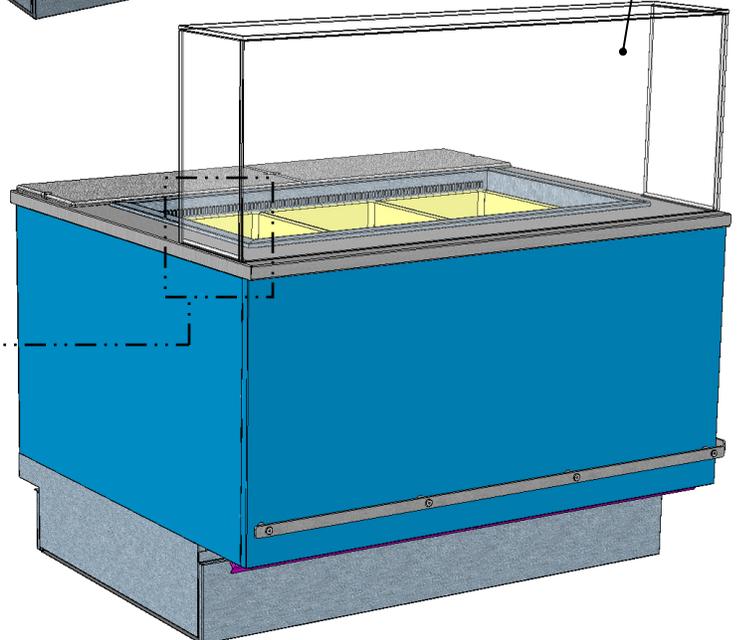
Glass Is Flush To Work Surface Edge (At One or Both Ends)

Support Bracket (Glued To Inner UV-Bonded Glass At Factory)

Attach To Work Surface With Tape (From Factory)



Continuous UV-Bonded Glass Enclosure Design



## SPLASH GUARD BRACKETS: INSERTION AT CASE FRONT / ADJUSTABILITY / SEALING TO FLOOR

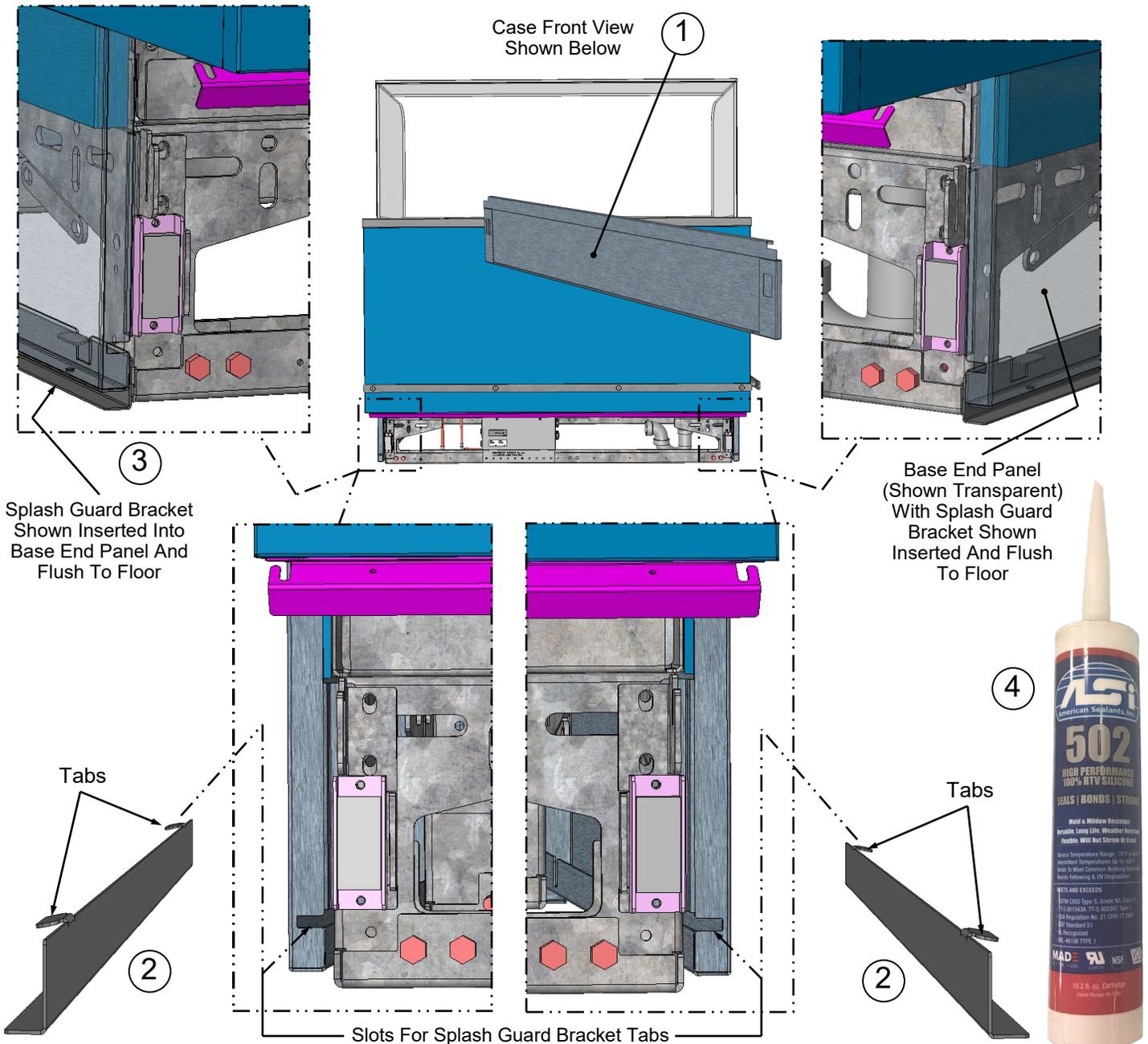
### Splash Guard Brackets

- The separately shipped splash guard brackets are designed to prevent entry or leakage of liquid or moisture to underside of case.
- Case must be properly positioned and frame support rails shimmed before bracket placement.
- Follow these instructions for proper splash guard placement.

1. Remove front toe-kick (slot/hook/magnet method).
2. Insert the separately shipped splash guard brackets into the base end panel slots.

3. Slide splash guard brackets into base end panels until tabs drop into panel slots. Splash guard brackets will now self-adjust flush to floor.
4. Raise splash guards upward and apply a bead of industrial grade silicone sealant to underside. Press splash guards bracket firmly to floor.  
>> Replace front toe-kick.

Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.



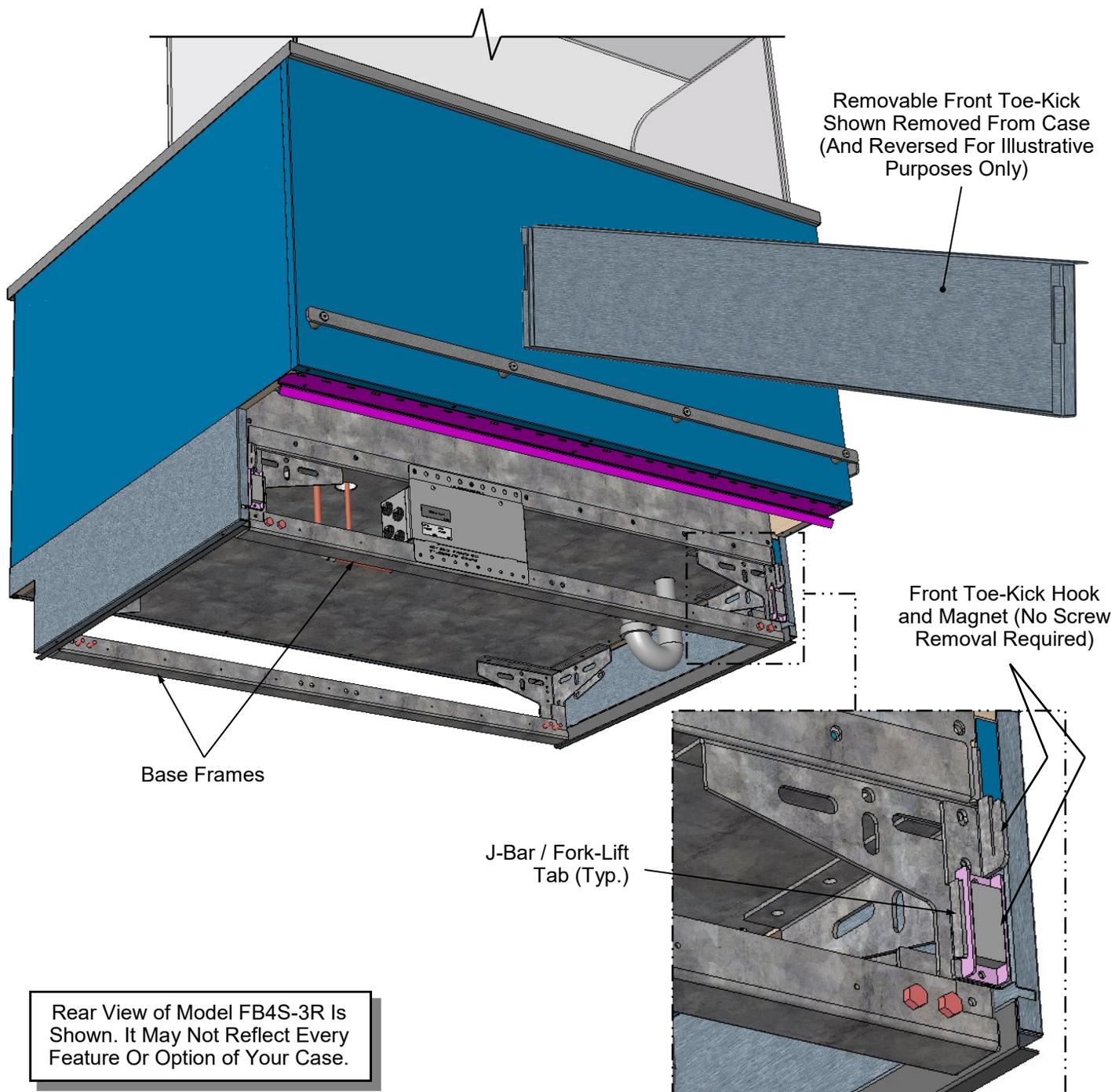
## BASE FRAMES / REMOVABLE FRONT AND REAR TOE-KICKS

### 1. Base Frames

- Illustration below shows random case with base frames at underside.
- Base frames must be shimmed.
- Shims will be provided with all cases.
- **Note: After case is in position, it must be sealed to floor to prevent entry or leakage of liquid or moisture.**

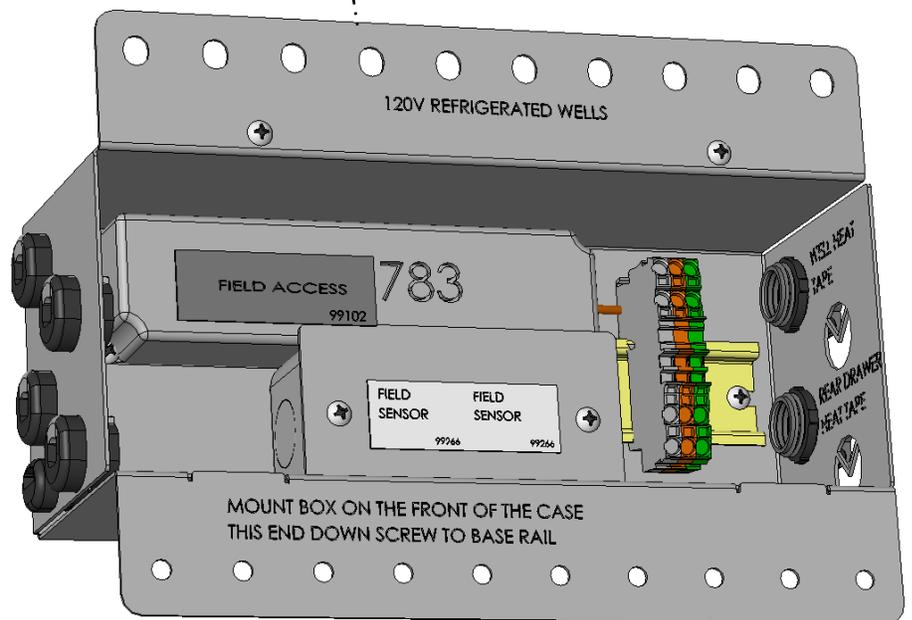
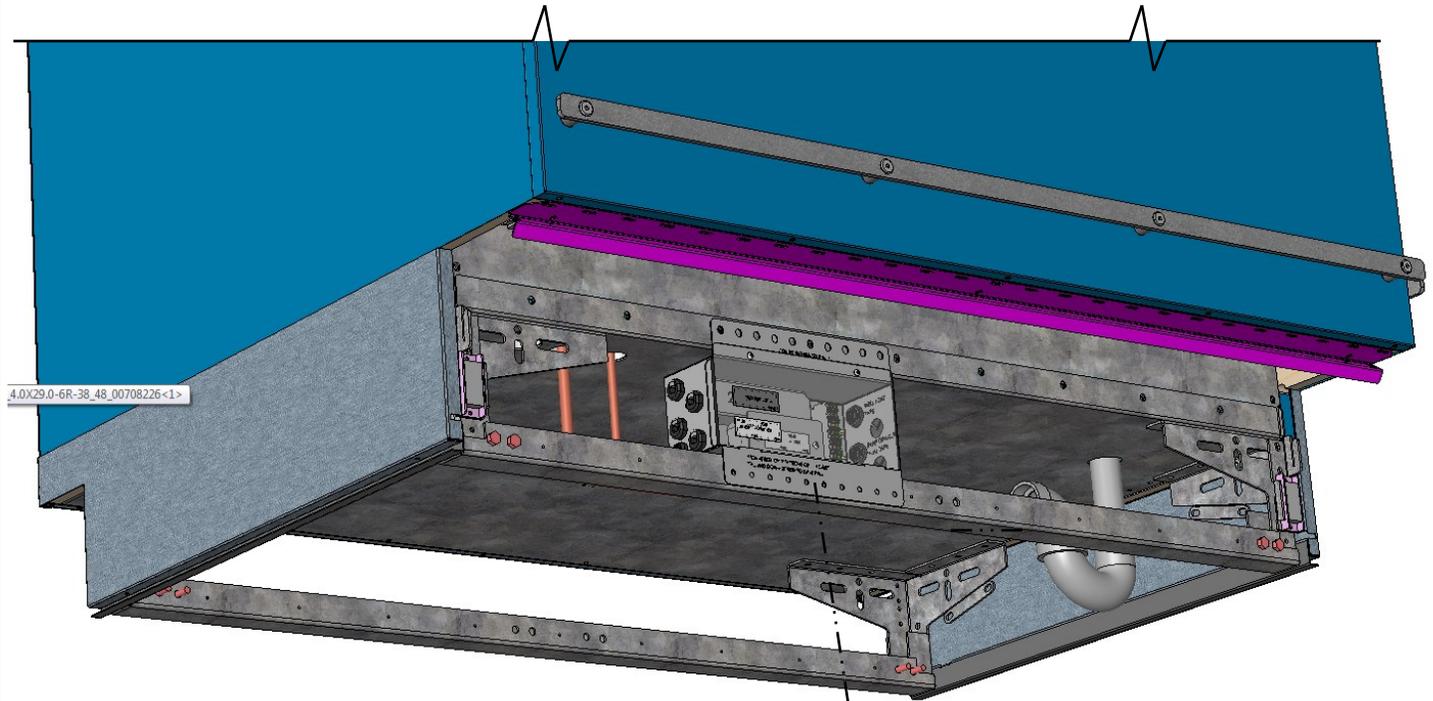
### 2. Removable Front and Rear Toe-Kicks

- Front and rear toe-kicks consist of slots that may be lifted up and off case hooks (no screw removal) and separated from magnets.
- Illustration below shows front toe-kicks being removed.
- Return to case after accessing for cleaning or service.



**1. Electrical Overview: Field Access Box / Drivers / Field Sensor Box / Terminal Strip**

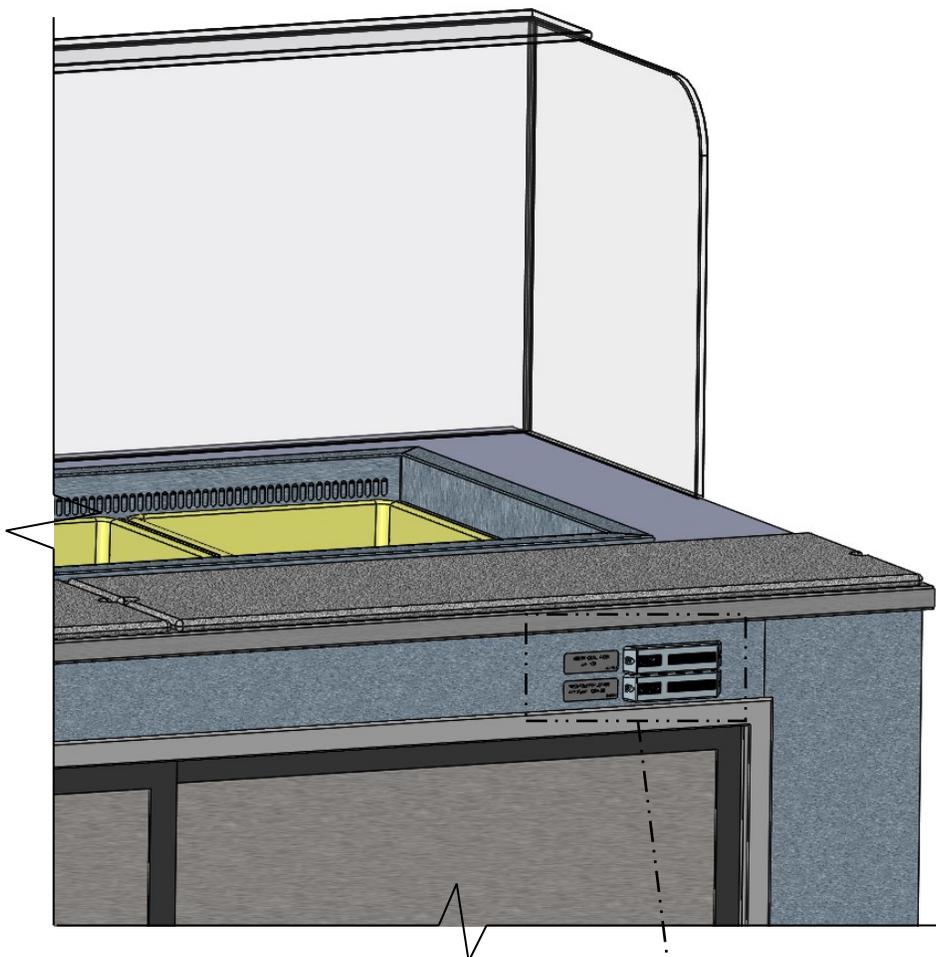
- **Caution!** Only certified electricians are to perform electrical connectivity duties.
- Remove front panels (via hook/magnet method) to access field access box (see previous page).
- Remove screws at front of field access boxes allows access to drivers and other electrical components.



Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.

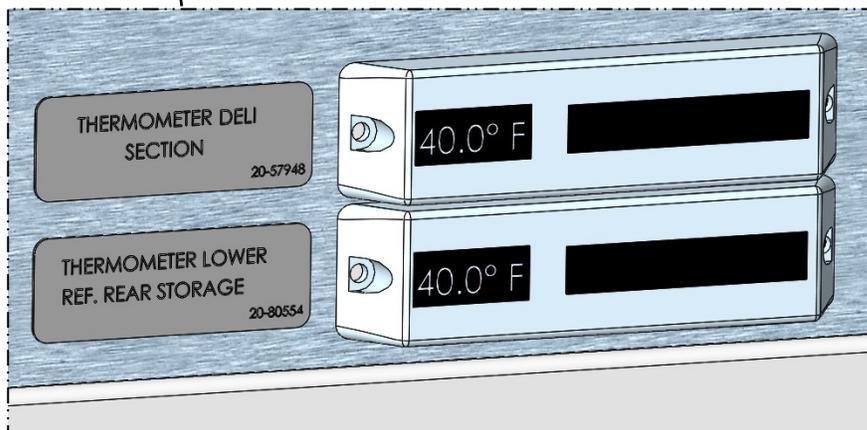
**2. Thermometers**

- Upper digital thermometer displays temperatures of the refrigerated upper section (with pans & dividers).
- Lower digital thermometer displays temperatures of lower refrigerated rear storage.
- Thermometer directly above refrigerated storage compartment measures case's internal temperature.
- Thermometers are for monitoring internal air temperature only (not actual food temperature).
- Use probe thermometers to determine actual product temperatures.



Upper Thermometer  
For Refrigerated  
Wells (Deli) Section

Lower Thermometer  
For Rear Refrigerated  
Storage Section



## START-UP & OPERATION - REFRIGERATED UPPER SECTION

**Note:** Exact location of fans, refrigeration lines, coil, shroud, valves and thermometer may vary depending upon your case.

### Merchandise Start-Up and Operation

#### 1. Powering Up Refrigerated Section

- Refrigeration upper section energize when field-wired.
- Listen for fans to verify that unit is energized.

#### 2. Axial Fans

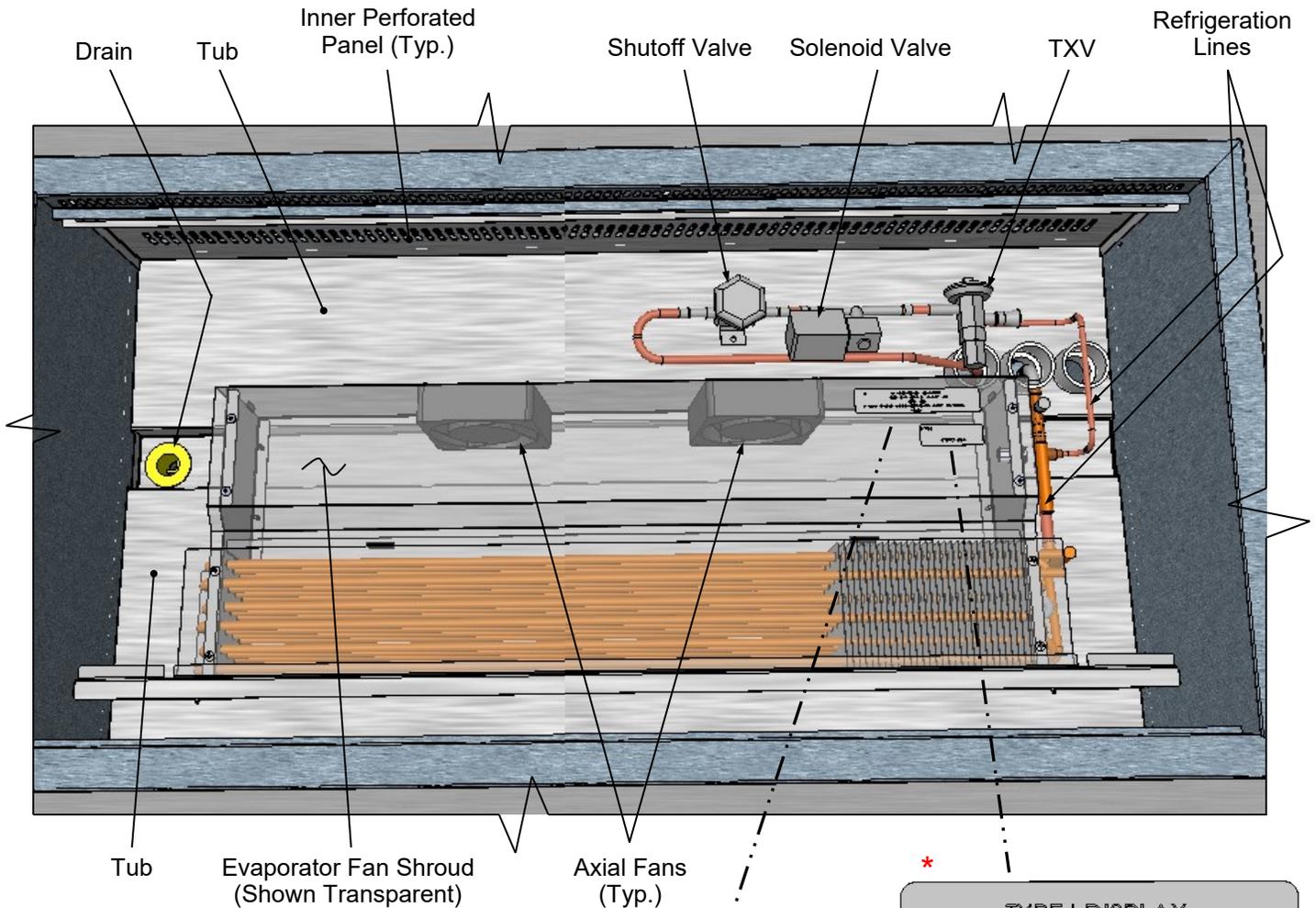
- After removal of pans, axial fans are accessible.
- See transparent illustration below.

#### 3. Refrigeration Lines, Solenoid Valve, TXV, Shutoff Valve, Etc.

- See illustration below for locations.

#### 4. Cleaning Refrigeration Area

- Refrigeration area must be cleaned regularly.
- See cleaning schedule in this manual for specifics.



\*\*

CAUTION  
HAZARDOUS MOVING PARTS, DO NOT OPERATE UNIT WITH COVERS REMOVED  
ADVERTISSEMENT:  
DANGER DE PIÈCES EN MOUVEMENT N'OPÉRER  
QU'AVAC LES COUVERCLES EN PLACE

99210

\*

TYPE I DISPLAY

99279

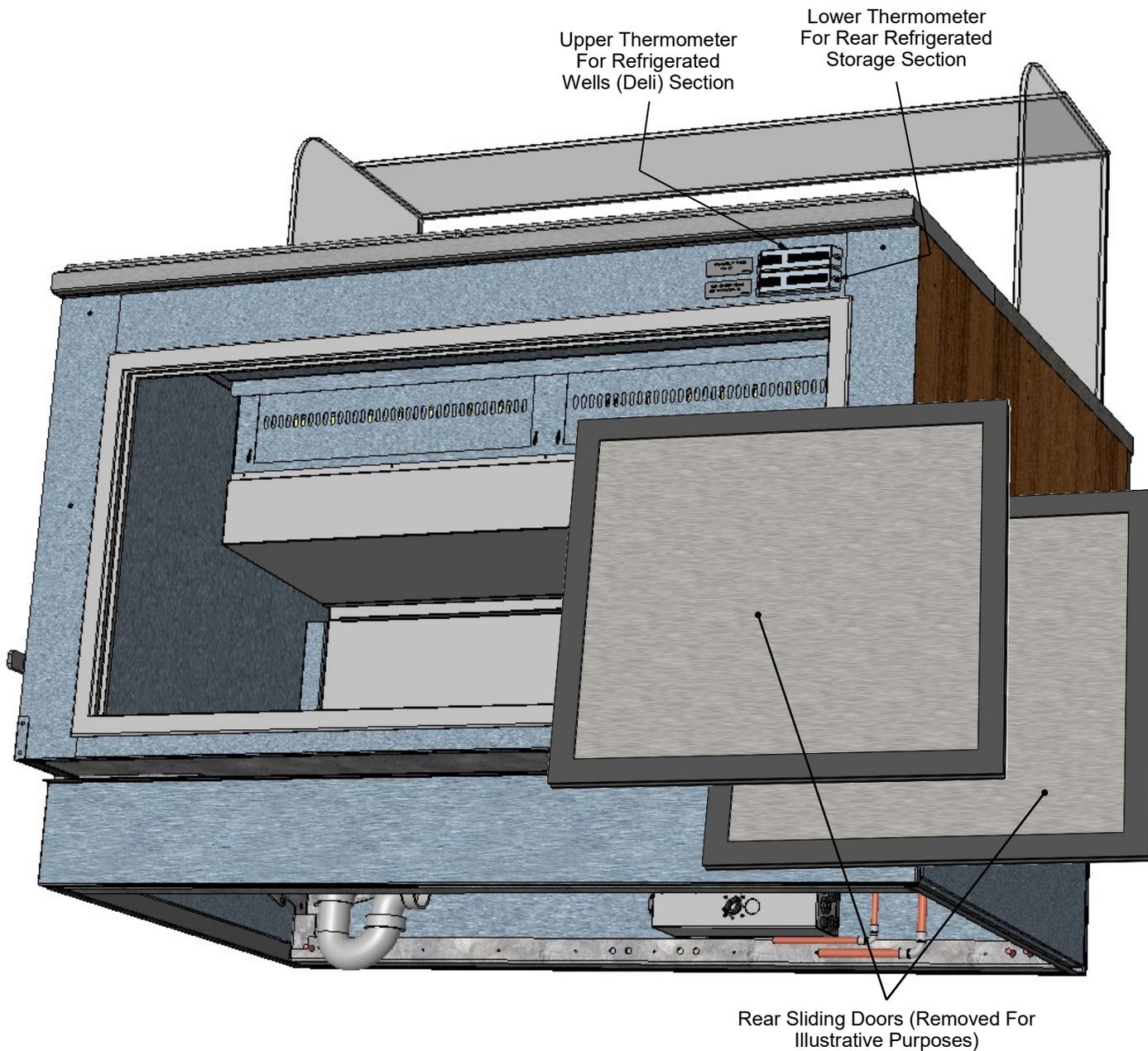
Note: Illustration Shown May Not Reflect Every Feature Or Option of Your Particular Case.

## REFRIGERATED REAR SECTION WITH SLIDING DOORS

### Rear Refrigeration Section With Removable Sliding Doors

- Sliding doors are removable for cleaning or service.
- See illustration below.

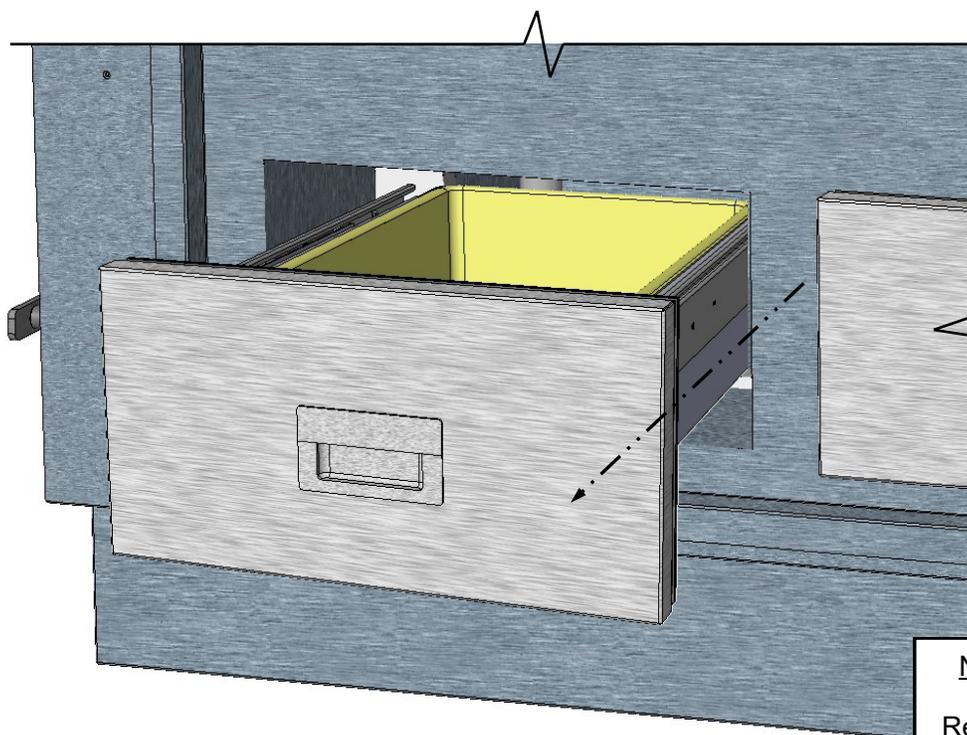
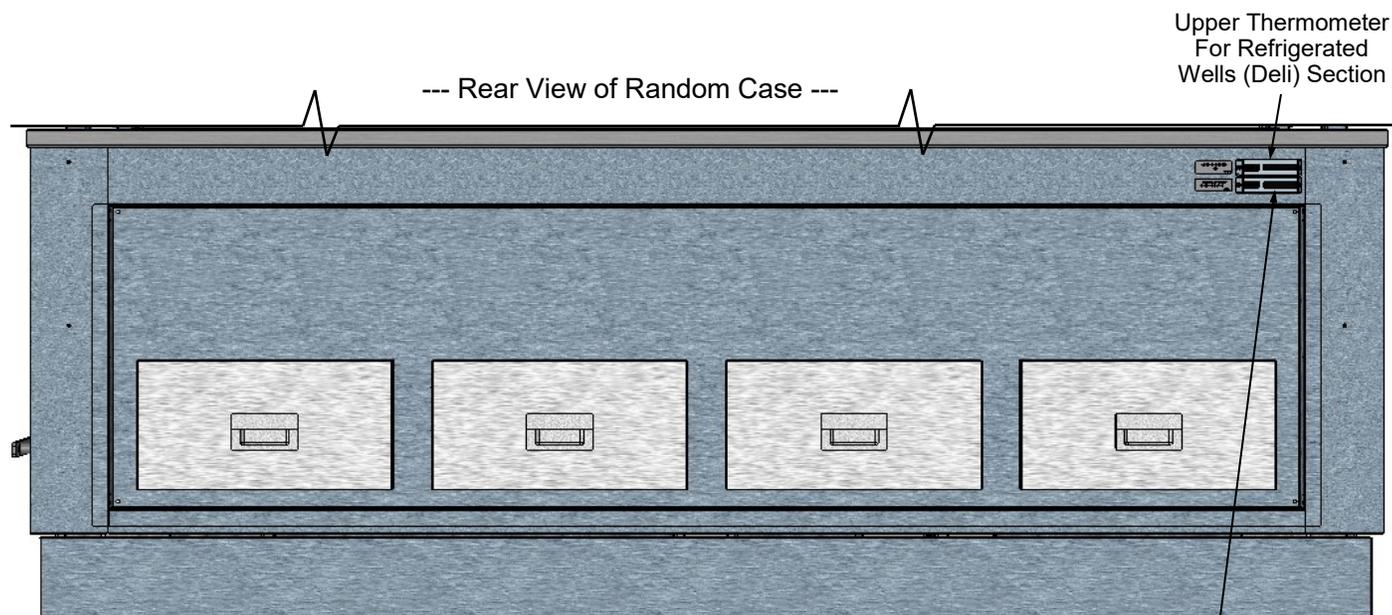
Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.



## REFRIGERATED REAR SECTION WITH DRAWERS

### Refrigerated Rear Section With Drawers

- Rear drawers are able to be slid out and/or removed for cleaning.
- See **GENERAL CLEANING SCHEDULE: DAILY "D" / WEEKLY "W"** for cleaning instructions.



--- Rear Left View of Random Case ---

**Note:** Random Model Shown. Illustration Shown May Not Reflect Every Feature Or Option Of Your Particular Case.

## REFRIGERATED REAR SECTION WITH HINGED DOOR

### 1. General Layout

- Refrigerated wells, compartment and drawer, sneeze guard, Sanalite® rear ledge, drain valve, thermometers, etc., are shown below.

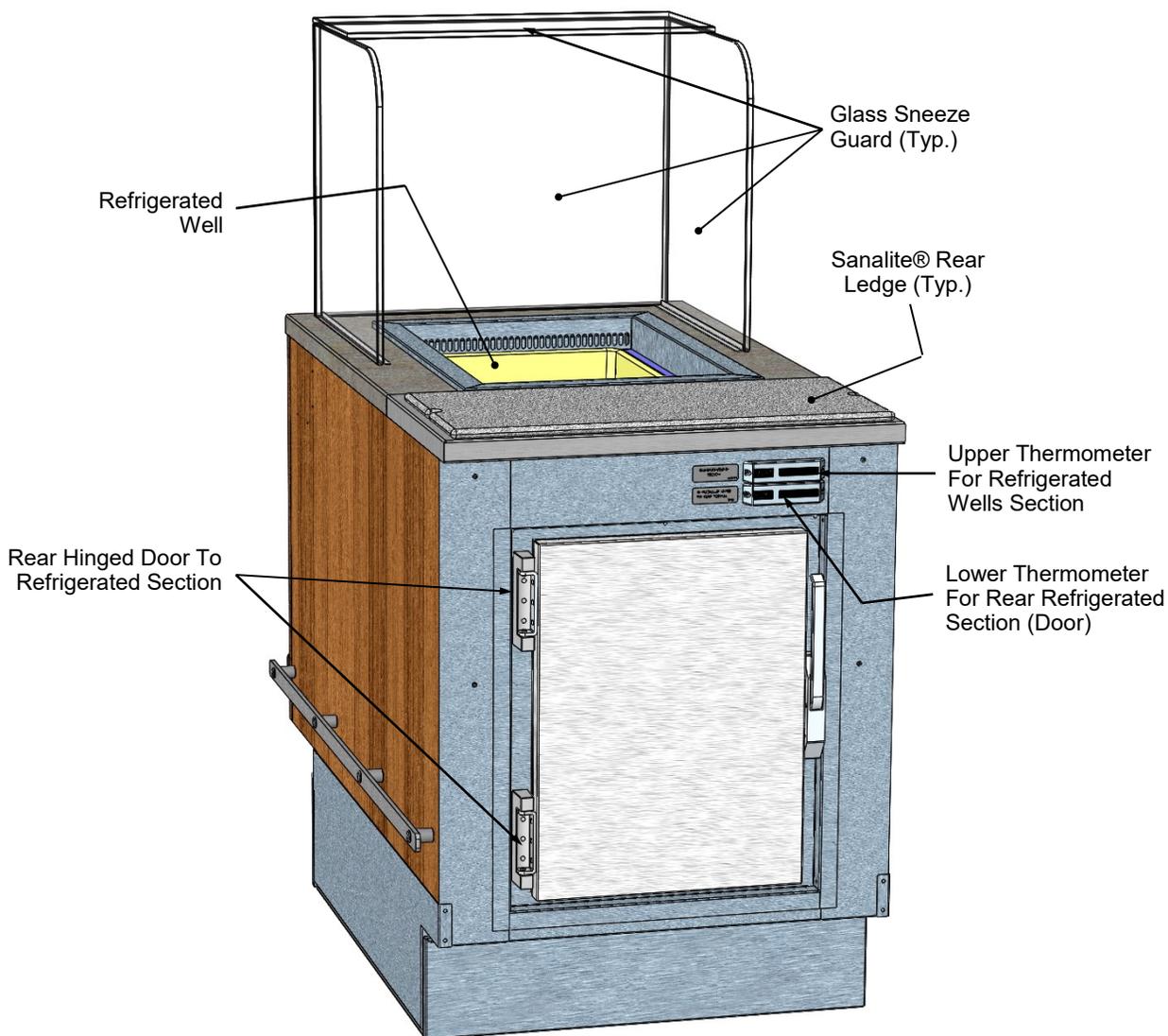
### 2. Cleaning Refrigeration Area

- Refrigeration area must be cleaned regularly.
- See cleaning schedule in manual for specifics.

### 3. Thermometers

- Upper digital thermometer displays temperatures of the refrigerated upper section (with pans and dividers).
- Lower digital thermometer displays temperatures of the rear refrigerated section (either behind sliding doors or hinged door).
- Thermometers are for monitoring internal air temperature only (not actual food temperature).
- Use probe thermometers to determine actual product temperatures.
- See illustration below for general locations.

Model FB2S-1R Is Shown In This Illustration. It May Not Reflect Every Feature Or Option of Your Particular Case.



--- Model FB2S-1R Shown Above ---

## REAR REFRIGERATED “SHARED AIR” SECTION / SLIDING DOORS / THERMOMETERS

### 1. Rear Refrigerated Section - With Shared Air

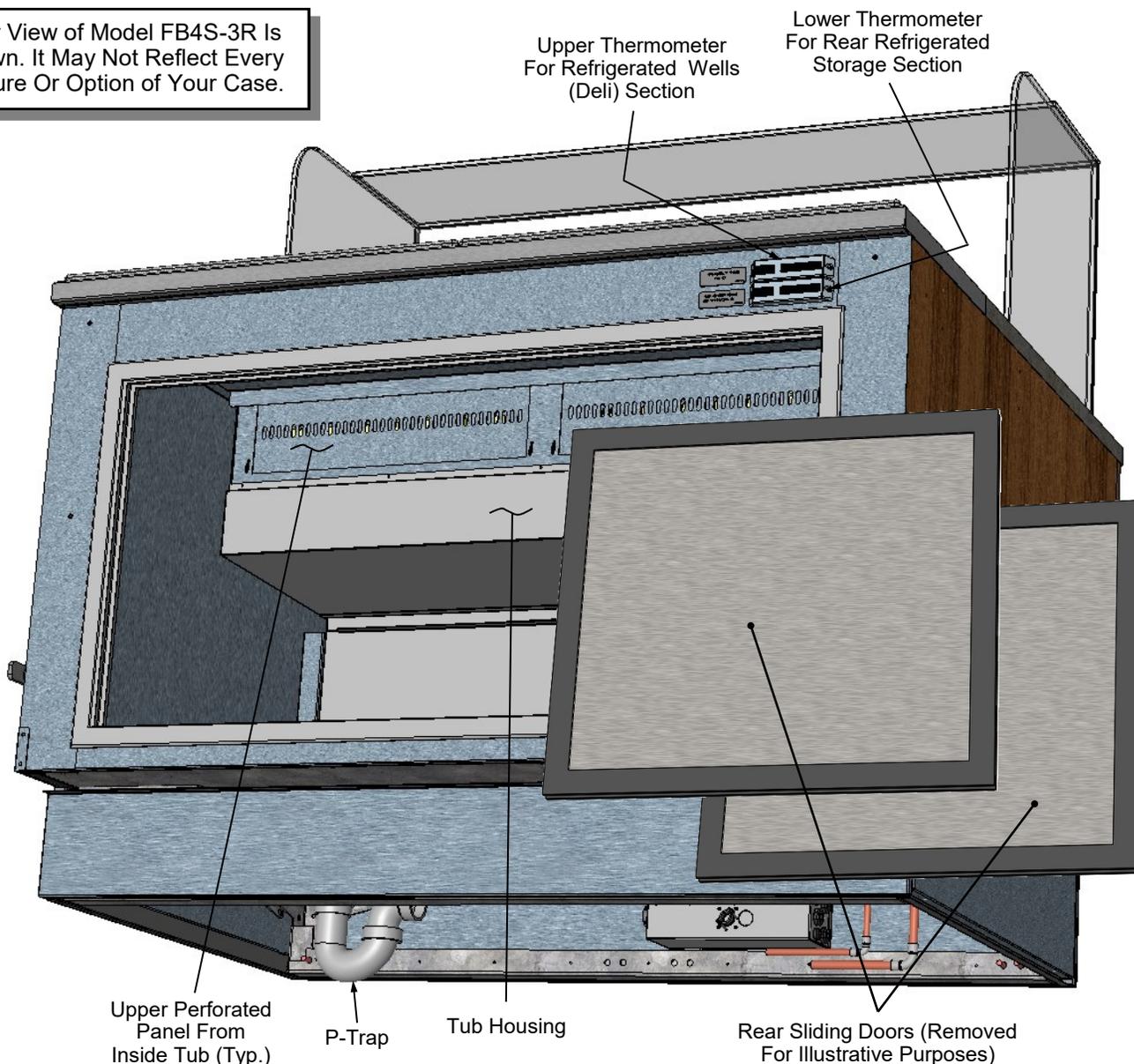
- Certain units have rear refrigerated section that “shares air” with upper tub area.
- Refrigerated air flows through upper perforated panel into lower/rear storage refrigerated section.
- See illustrations below.

### 2. Thermometers

- Upper thermometer reflects temperature of upper refrigerated section.
- Lower thermometer reflects temperature of lower refrigerated rear storage area.
- Thermometer reflects air temperature only.
- **Caution:** Do not rely on thermometer for actual product (food) temperatures.

- Thermometers & thermostats reflect air temperatures ONLY.
- For ACTUAL product (food) temperatures, place probe directly in food product. Do not solely rely on air temperature on thermometer for accurate product temperature
- **Note:** Should food temperatures significantly vary from acceptable range, contact SCC Technical Service. See *SCC TECHNICAL SERVICE CONTACT INFORMATION* section of this manual for specifics.
- See illustration below.

Rear View of Model FB4S-3R Is Shown. It May Not Reflect Every Feature Or Option of Your Case.



## CLEAR GLASS WITH STAINLESS STEEL POSTS

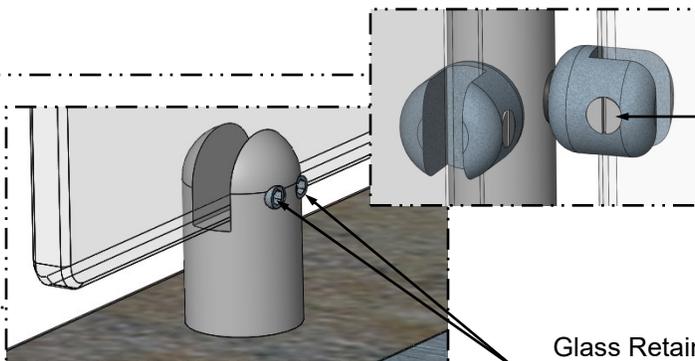
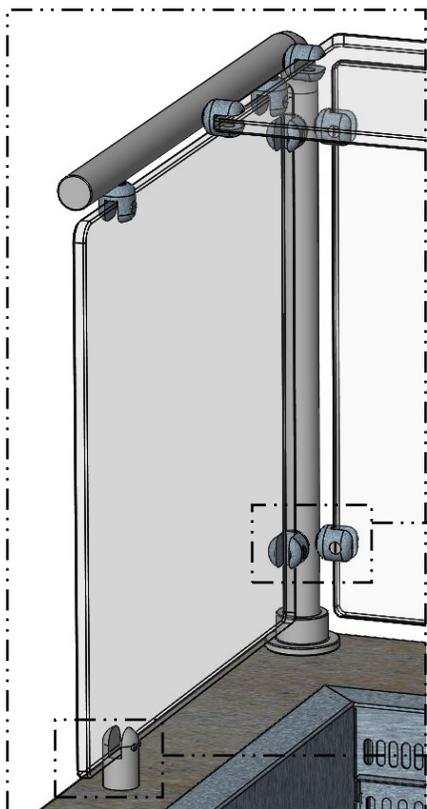
### 1. General Design and Care

- Certain models will have stainless steel posts with clear glass rather than UV-bonded glass.
- **Caution! Do not push or pull on stainless steel posts while moving case into position!**

### 2. Glass Retaining Clips

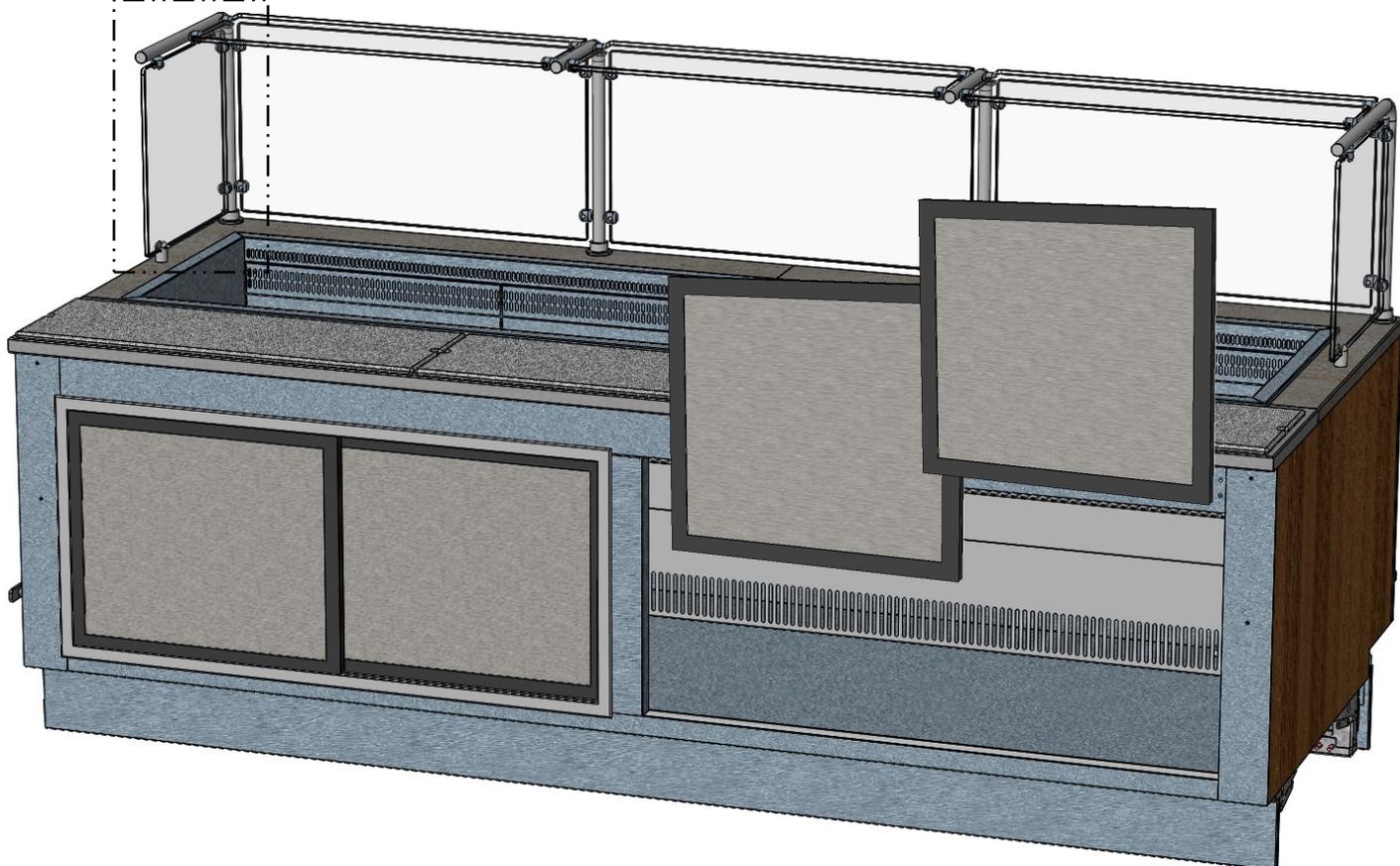
- Glass retaining clips use either Allen® screws or flat head screws to hold glass in place.
- See illustration below.

Model FB9S-7R Is Shown In This Illustration. It May Not Reflect Every Feature Or Option of Your Particular Case.



Glass Retaining Clip From Posts With Flat Head Screws

Glass Retaining Clip From Countertop With Allen® Screws



**CLEANING SCHEDULE: DAILY “D” / WEEKLY “W”**

| Area          | D | W | Task  |
|---------------|---|---|---|
| Case Exterior | X |   | <b>Wood / Laminate/ Painted Surfaces, etc.:</b> Clean with a warm soap and water solution and soft cloth. Never use wire cloth or abrasive cleaners on case.  |
|               | X |   | <b>Sanalite® Cutting Board:</b> Sanalite® cutting boards require very little maintenance. Use a clean cloth to thoroughly wipe entire Sanalite® surface with hot water and soap solution on a regular basis. Rinse with a spray bottle of clean water. Pat dry with clean cloth or paper towel. |
|               | X |   | <b>Glass Sneeze Guard (Front/Sides/Top):</b> Clean with a household or commercial glass cleaner.  |
|               | X |   | <b>Stainless Steel Surfaces:</b> See <b>CLEANING SCHEDULE: STAINLESS STEEL - TO BE PERFORMED BY STORE PERSONNEL</b> section in this manual for cleaning and care instructions.  |
|               | X |   | <b>Quartz Work Surfaces:</b> See <ul style="list-style-type: none"> <li>• <b>ENGINEERED (SYNTHETIC) QUARTZ CARE AND MAINTENANCE</b> in this User Manual.</li> </ul>   |
| Case Interior | X |   | <b>Refrigerated Prep Area (Pan, Pan Covers and Pan Dividers, Decking, etc.):</b> See <b>CLEANING SCHEDULE: DAILY / WEEKLY: DECK PANS / DIVIDERS / PRODUCT PANS / TUB</b> section in this operating manual for cleaning specifics.   |
|               |   | X | <b>Refrigerated Rear Drawers or Doors:</b> Wipe down with a warm soap and water solution and soft cloth. Dry with soft cloth or paper towel.  |
|               |   | X | <b>Rear Section (Accessible via Sliding or Hinged Doors or Drawers):</b> Wipe down with a warm soap and water solution and soft cloth. Dry with soft cloth or paper towel.  |
|               |   | X | <b>Under Case Cleaning:</b> Remove front (or rear) lower panels. Use vacuum or broom to clean flooring under case. Do not allow broom to create dust in store!  |
|               |   | X | <b>Refrigeration Prep Area (Tub, Trough, Drain, Components, Perforated Plenums, etc.):</b> <ul style="list-style-type: none"> <li>• See <b>CLEANING SCHEDULE - DAILY / WEEKLY: PANS / DIVIDERS / DECK / PERFORATED PLENUMS / TUB</b> section in this manual for cleaning specifics.</li> </ul>  |

## ENGINEERED (SYNTHETIC) QUARTZ CARE AND MAINTENANCE

|                            |   |
|----------------------------|---|
| 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><br/>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>  |

## Stainless Steel Surface Care & Maintenance

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

- Certain grades of stainless steel are more prone to corrosion than others.
- Stainless steel can be exposed to many 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 mar, scratch and/or erode the surface of stainless steel. When surface properties of stainless steel have been compromised, rust may 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:

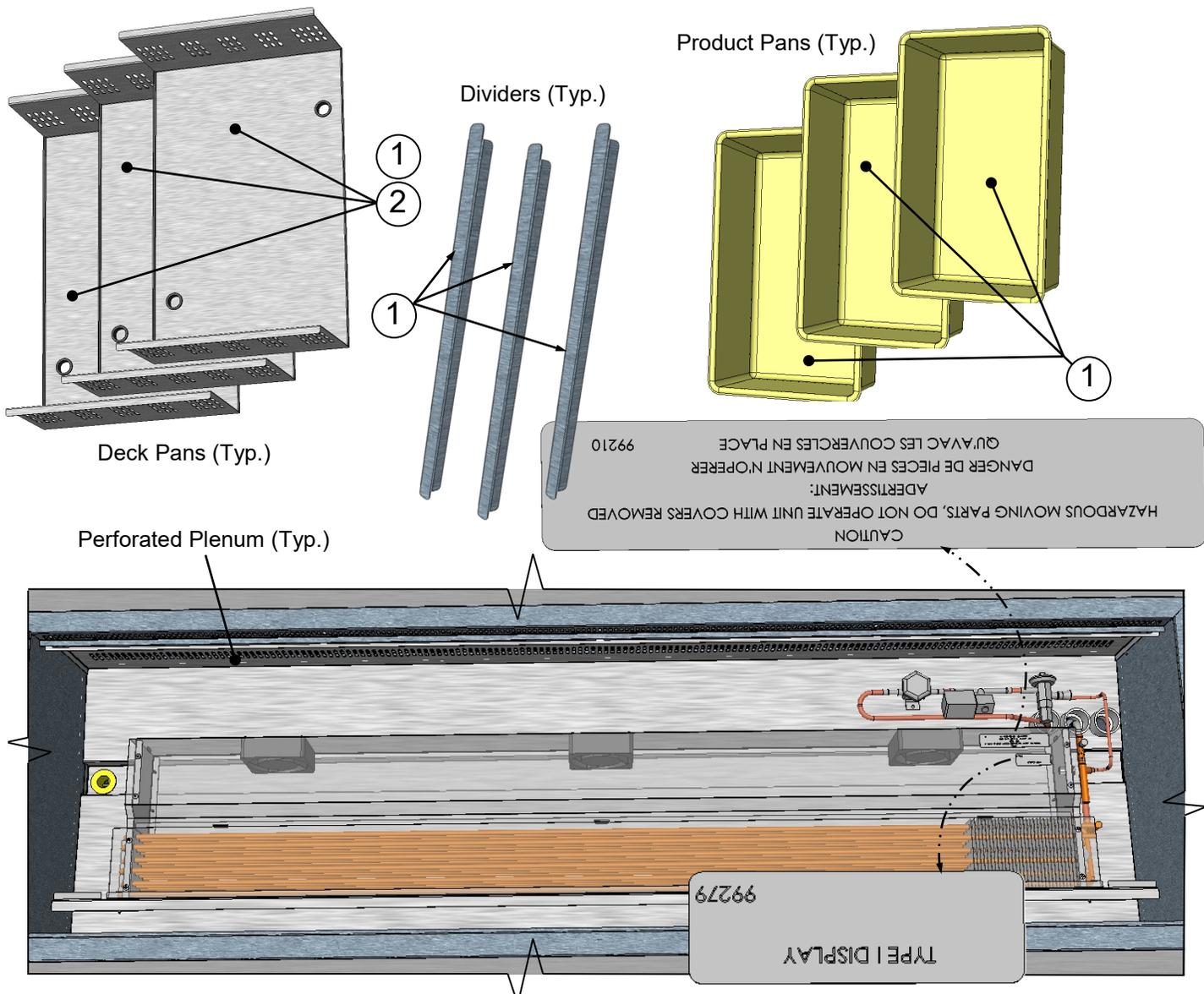
- Place a dab of olive oil onto clean soft cloth. Spread over area until a light sheen is observed. Use pressure to "work the oil" into the small grooves in the surface. Apply firm, steady pressure using small circular motions.
  - > Dry buff: Remove excess oil with clean cloth or paper towel using small circular motions.
  - > Wet buff: Use an ounce of 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.*

**CLEANING SCHEDULE: DAILY / WEEKLY: DECK PANS / DIVIDERS / PRODUCT PANS / TUB**

| AREA                       | INSTRUCTIONS  |
|----------------------------|---|
| <b>Deck Pan / Tub Area</b> | <p><b>Follow These Steps To Clean Product Pans, Dividers, Perforated Plenums, Deck Pans, Etc.</b></p> <ol style="list-style-type: none"> <li><b>Daily:</b> Remove product pans and dividers and submerge them in warm, soapy water. Rinse. Wipe down deck pans with warm, soapy water and cloth; rinse with spray bottle containing clean water; dry. Wipe down deck pans (including perforated deck pan sides) with warm, soapy water solution and clean cloth; rinse; dry. Return dividers and product pans to case.</li> <li><b>Weekly: <span style="color: red;">Trained Service Personnel Only - Disconnect Power To Case!</span></b> After removing product pans &amp; dividers, remove deck pans (finger holes provided for easy removal). Submerge all components in warm water, and clean with mild soap solution and soft cloth. Use soft-bristled brush on hardened residue. Dry thoroughly. While components are removed from case, wipe down tub, sides, components, trough and drain with warm, soapy water solution and cloth. Rinse with spray bottle of clean water. <b>Caution!</b> Do not spray water into axial fans! Dry with clean cloth or paper towel. Return all components to case in reverse order they were removed.</li> </ol> |



**TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)**

| CONDITION                              | TROUBLESHOOTING   |
|--|---|
| Case Is Not Level                      | See <b>FRAME SUPPORT RAILS / REMOVABLE FRONT AND REAR TOE-KICKS</b> section in this manual for illustrations and instructions.  |
| Water Is On The Floor                  | Call service provider.  |
| Fan Emits Excessive Noise              | Call service provider.  |
| Case is Not Holding Proper Temperature | 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. See <b>OVERVIEW / TECHNICAL INFORMATION / WARNINGS</b> section in this manual for specifics. |
|  | If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature.   |
| LED Lights (Optional) Are Not Working  | Check that light switch (if any) is in the <i>on</i> position.  |
|  | Check that the plug cord is inserted ALL THE WAY into opening of LED light orifice.   |
|  | If case lights still do not come on, call service provider.   |

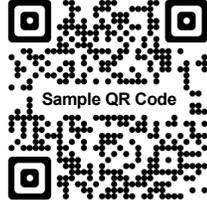
## TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS)

| CONDITION                              | TROUBLESHOOTING  |
|--|--|
| <b>Water On Floor</b>                  | Check that the drain trap is free of debris.   |
|  | Check store conditions. <ul style="list-style-type: none"> <li>• For Type 1 Conditions (most cases): ambient conditions are to be at 55% maximum humidity / 75 °F.</li> <li>• For Type 2 Conditions: ambient conditions are to be at 55% maximum humidity / 80 °F.</li> </ul>  |
| <b>Fan Emits Excessive Noise</b>       | Check that the case is aligned, level and plumb.   |
|  | Check axial fans (and/or wire bracket covers) for cleanliness.   |
|  | Check that nothing is preventing blade rotation.   |
|  | Check that the fan shroud is properly secured.   |
| <b>Fans Are Not Working</b>            | <u>Note:</u> Fan locations vary, depending upon your particular model. For location of fans in tub area, see <b>START-UP &amp; OPERATION - REFRIGERATED UPPER SECTION</b> in this manual.  |
|  | Check that fans are properly connected.  |
|  | Check for foreign material obstructing fan performance.  |
|  | Check that fan blades freely rotate within fan shrouds   |
|  | Check that power is going to fans  |
|  | Check that fan wiring is connected on terminal blocks.   |
| <b>System Is Not Operating</b>         | Check that the utility power is on.  |
|  | Check the circuit breaker box for tripped circuits.  |
| <b>Case Is Not Holding Temperature</b> | Axial fan blades may need to be cleaned. <ul style="list-style-type: none"> <li>• Disconnect power to case before proceeding.</li> <li>• For location of fans in tub area, see <b>START-UP &amp; OPERATION - REFRIGERATED UPPER SECTION</b> in manual.</li> <li>• For location of fans in side bracketry, see next page in manual.</li> <li>• To clean wire fan guards, remove screws holding fan guards in place. Submerge in warm, soapy water. Rinse. Dry with clean cloth or paper towel.</li> <li>• To clean axial fan blades, remove fan guards. Wipe down fan blades with soft cloth dipped in warm, soapy water. Wipe off residue with clean cloth or paper towel.</li> <li>• Return wire fan guards to case. Tighten screws securely. Reconnect power to case.</li> </ul> |
|  | Determine if temperature controller settings are properly set. See <i>your case's serial label for your model's specified settings. See SERIAL LABEL LOCATION &amp; INFORMATION LISTED / TECH INFO &amp; SERVICE section in manual</i> for label location.   |

**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.

|  |   |   |
|--|---|---|
| <p><b>Structural Concepts<sup>®</sup></b><br/>888 E. Porter Rd - Muskegon, MI 49441</p>  | <p><b>Grocerant</b></p>   | <p>MODEL NRS3648RXV-SAMPLE<br/>SERIAL NO. 12345X30DZ098765</p>                  |
| <br>Intertek  | <br>Intertek                   |   |
| <p>3048256<br/>Conforms to UL Std. 471<br/>Conforms to NSF/ANSI Stds. 2 &amp; 7<br/>CERTIFIED TO CAN/CSA<br/>STD C22.2 NO 120</p>  | <p>ELECTRICAL RATING<br/>REFRIGERANT<br/>DESIGN PRESSURE<br/>MINIMUM CIRCUIT AMPACITY<br/>MAXIMUM OVERCURRENT</p> | <p>120/1/60 16 A<br/>R513A AMOUNT 50 OZ<br/>HIGH 186 LOW 88<br/>20A<br/>20A</p> |
| <p>Super Heat Temp<br/>Defrost</p>   | <p>6-8 °F<br/>6 defrosts per day, 45 °F</p>   | <p>FOR PARTS AND SERVICE<br/>CALL 1-800-433-9490</p>                            |
|  <p>Sample QR Code</p>  | <p>SCAN FOR PRODUCT LITERATURE</p>  |   |
| <p>TYPE II DISPLAY REFRIGERATOR: THIS EQUIPMENT IS INTENDED FOR USE IN AN AREA WHERE THE ENVIRONMENTAL CONDITIONS ARE CONTROLLED AND MAINTAINED SUCH THAT THE AMBIENT TEMPERATURE DOES NOT EXCEED 80 °F (27 °C).</p> |   |   |

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

**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 a.m. TO 5:00 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.**

