

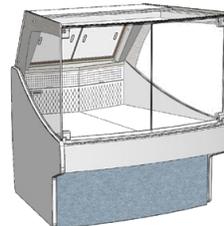
FUSION USER MANUAL

SCC P/N
5-8060

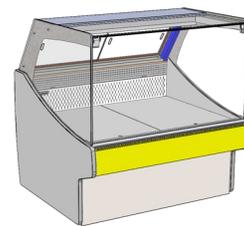
FUSION SERVICE SINGLE DECK REFRIGERATED MERCHANDISERS

Please Note:

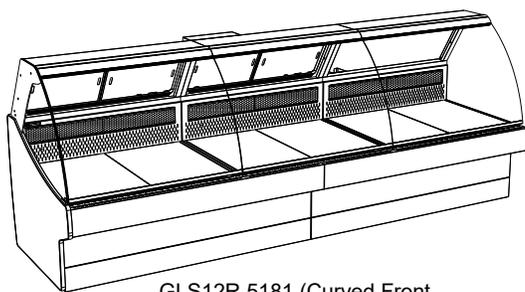
1. Your specific model number is located on serial label (usually at case rear). However, label locations may vary depending on model.
2. See **SERIAL LABEL LOCATION & INFORMATION** section in this manual for sample label.
3. Cases shown in this manual may reflect full or open end panels, straight or angled bases. Your unit may slightly differ.
4. Models shown on this cover sheet do not represent all models covered by this manual.



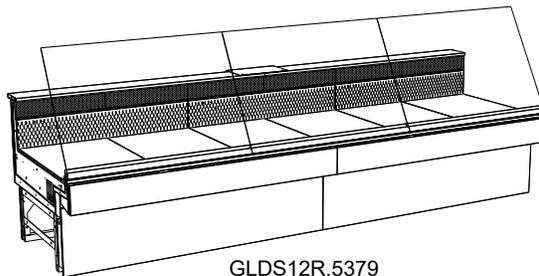
GLDSVX2R (22.5° Wedge / Vertical Hinged Service Glass)



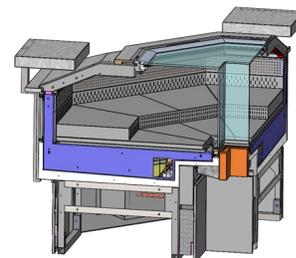
GLDSV4R (Vertical Front Service Glass)



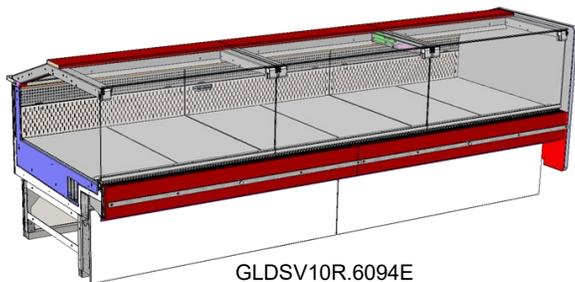
GLS12R.5181 (Curved Front Service Glass / Sliding Rear Doors)



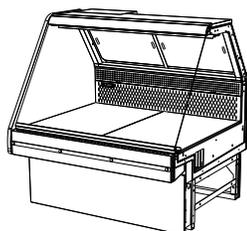
GLDS12R.5379 (Angled Front Glass)



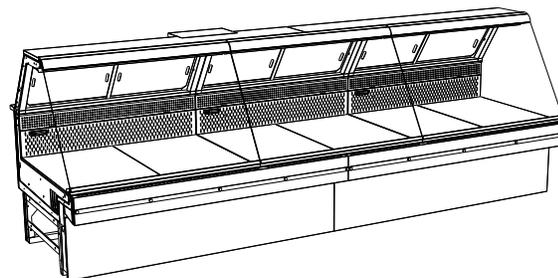
GLDSVN942R.7042L (With Scale Stands & Door Retainer Bracket For Removable Doors)



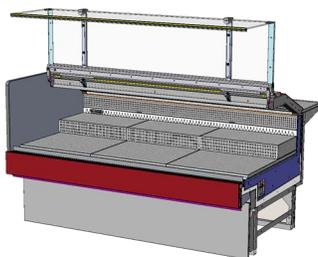
GLDSV10R.6094E (Horizontal Glass / Vertical Front Service Glass / Rear Sliding Doors)



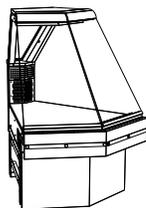
GLDS4R.5065 (Angled Front Service Glass / Rear Sliding Doors)



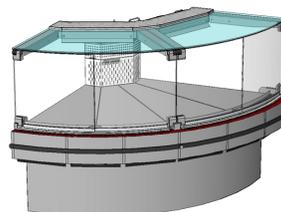
GLDS12R.5067 (Angled Front Service Glass / Rear Sliding Doors)



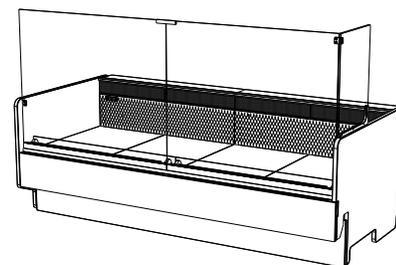
GLDSV6R.6670C (Vertical Front Service Glass Shown Raised / Angled Rear Sliding Angled Doors)



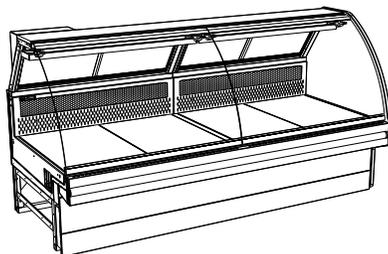
GLDSXA4R.5066 (Rear Door / Angled Front Glass)



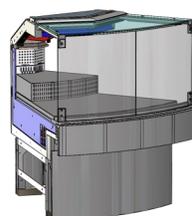
GLDSVX9R.6094J (Horizontal Glass / Vertical Front Service Glass / Rear Folding Doors)



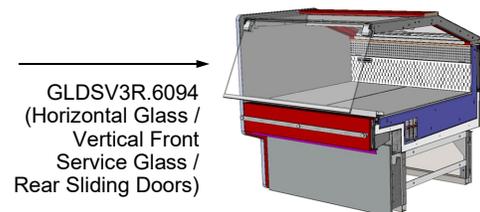
GLDSAF8RG.5718 (Vertical Front Glass)



GLS8R.4937 (Curved Front Glass)



GLDSVX442R.6670E (Vertical Front Glass / 45° Exterior Wedge / Internal Led Lights)



GLDSV3R.6094 (Horizontal Glass / Vertical Front Service Glass / Rear Sliding Doors)

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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.



**ATTENTION
INSTALLER**

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

WARNING

**ELECTRICAL
HAZARD**



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

WARNING

**KEEP
HANDS
CLEAR**



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.

WARNING

**HOT
SURFACE**



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

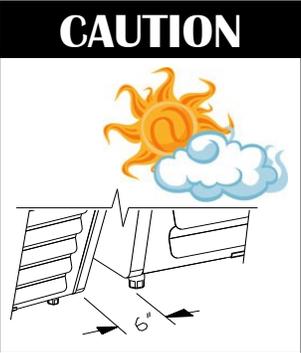
- Each case has its own wiring diagram folded and in its own packet. It may be placed near ballast box, field wiring box, raceway cover, or other related location.

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.

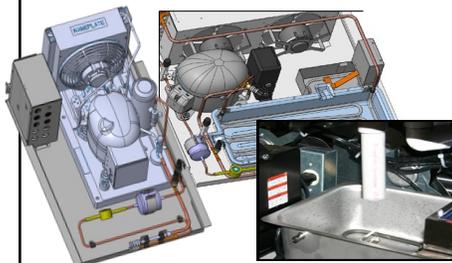


CAUTION! POWER CORD AND PLUG MAINTENANCE
 Risk of electric shock. If cord or plug becomes damaged, replace only with cord and plug of same type.



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!

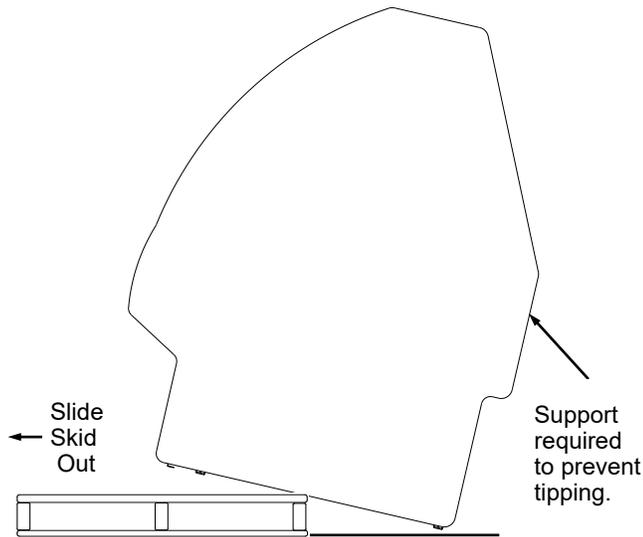
- Before powering up case, check that condensate pan is positioned directly under case’s condensate drain.
- Before powering up case, check that condensate pan’s electrical plug is **SECURELY** connected to condensate system’s receptacle.
- If wicking material is used in condensate pan, check that it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

INSTALLATION: SKID REMOVAL / POSITIONING UNITS / ADJUSTING LEVELERS

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

1. Remove Unit From Skid

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

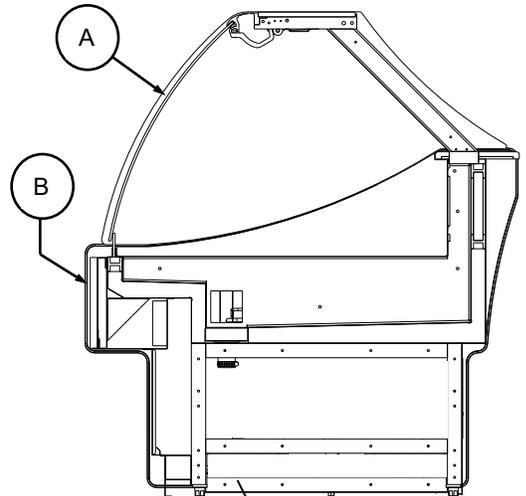


2. Position & Align Case Alongside Other Cases

- Before adjusting levelers (or shimming frame support rails), check that case is properly positioned and, if required, aligned with adjoining cases.
- This may require the repositioning of the case you

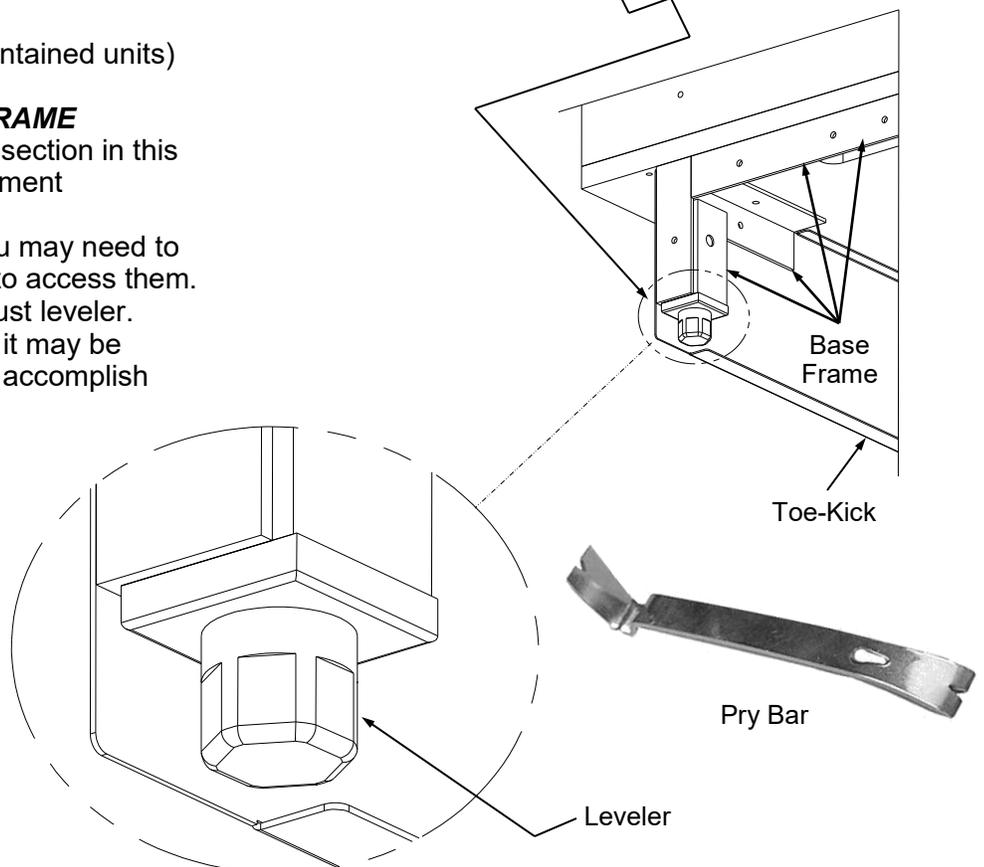
are installing or the already positioned case.

- Align multiple units carefully in areas A and B (as shown at right).



3. Adjust Levelers

- Certain cases (usually self-contained units) use levelers instead of rails.
- If your case uses rails, see **FRAME SUPPORT RAIL SHIMMING** section in this manual (next page) for adjustment instructions.
- If your case uses levelers, you may need to remove front or rear toe-kick to access them.
- Use adjustable wrench to adjust leveler.
- Depending upon case weight it may be necessary to use a pry bar to accomplish this task.
- Do not use pry bar on toe-kick as it may buckle.
- Do not use pry bar on end panel as it may chip.
- Use pry bar **ONLY** on base frame to avoid damaging case.
- See illustration and photos at right.

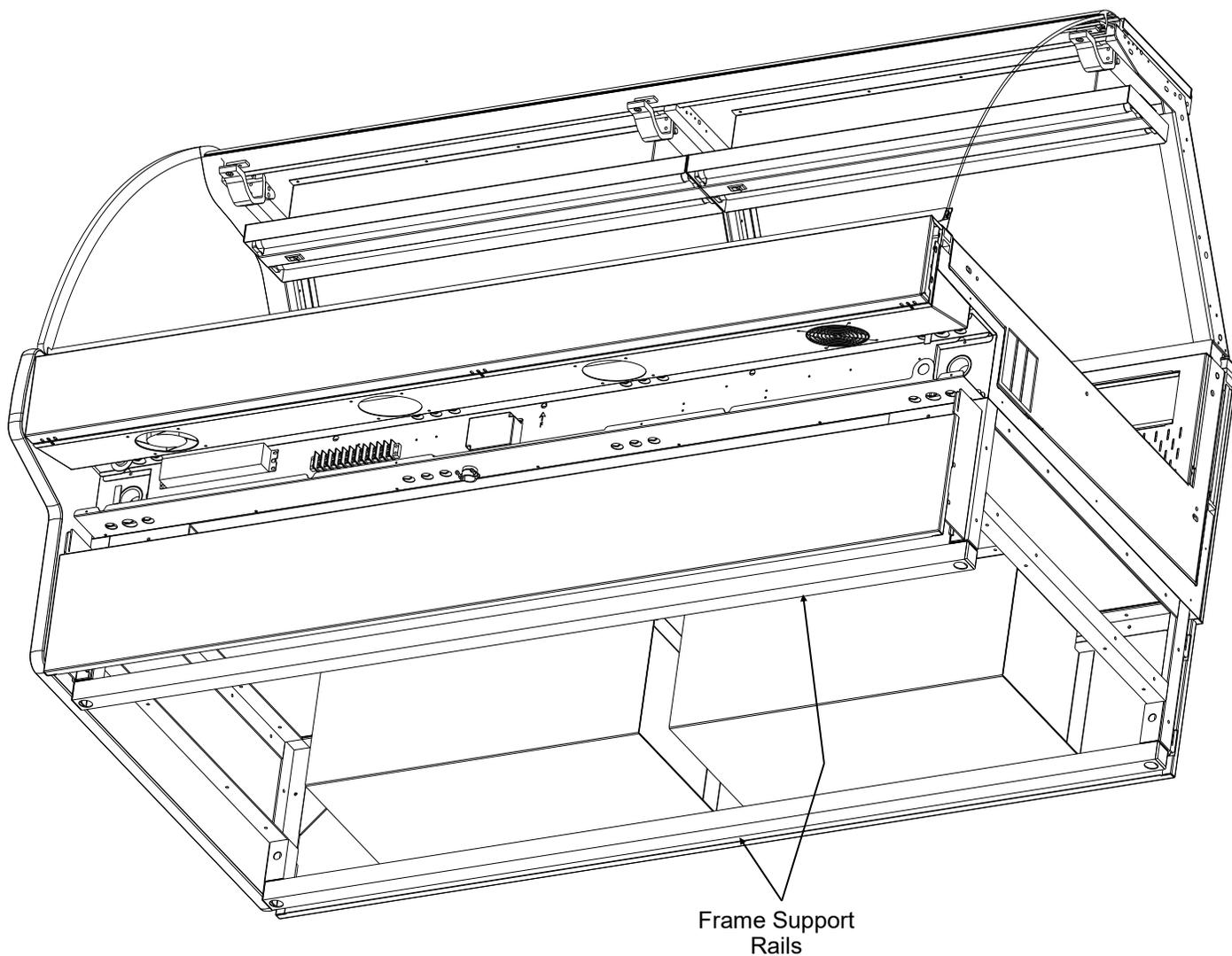


FRAME SUPPORT RAIL SHIMMING

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

Frame Support Rails Must Be Shimmed

- Illustration below shows case with frame support rails.
- 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.*



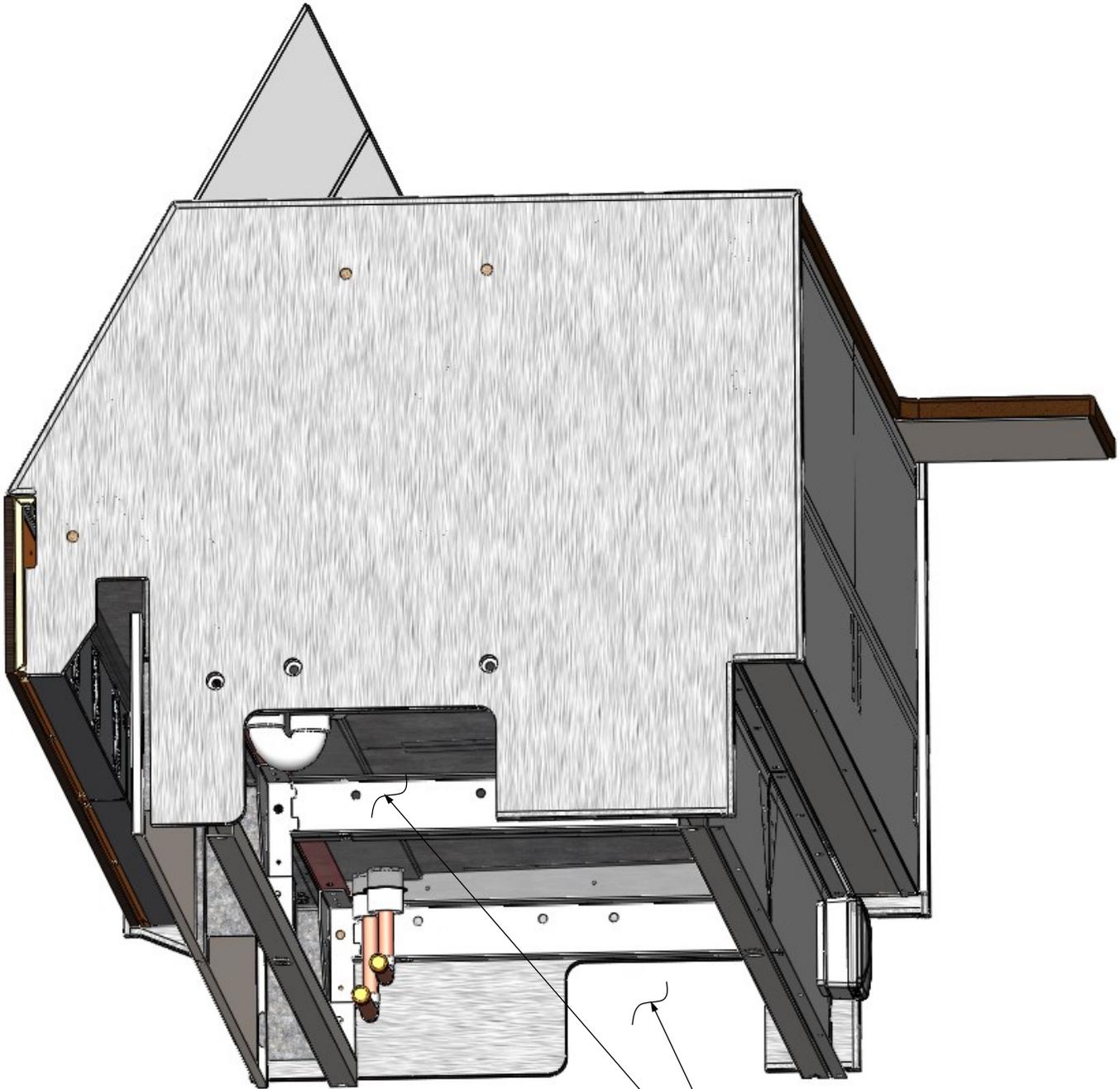
Case Is Partially Disassembled For Illustrative Purposes Only

CASE-TO-CASE ROUTE FOR REFRIGERATION / ELECTRICAL LINES (NOT ON ALL CASES)

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

Openings In End Panels For Refrigeration/Electrical Lines To Run Case-To-Case

- Illustration below shows random model. Note the openings in end panels for refrigeration lines and electrical lines to be routed from case to case.
- This feature is not on all cases.



Random Model Shown Above
(Your Case May Vary)

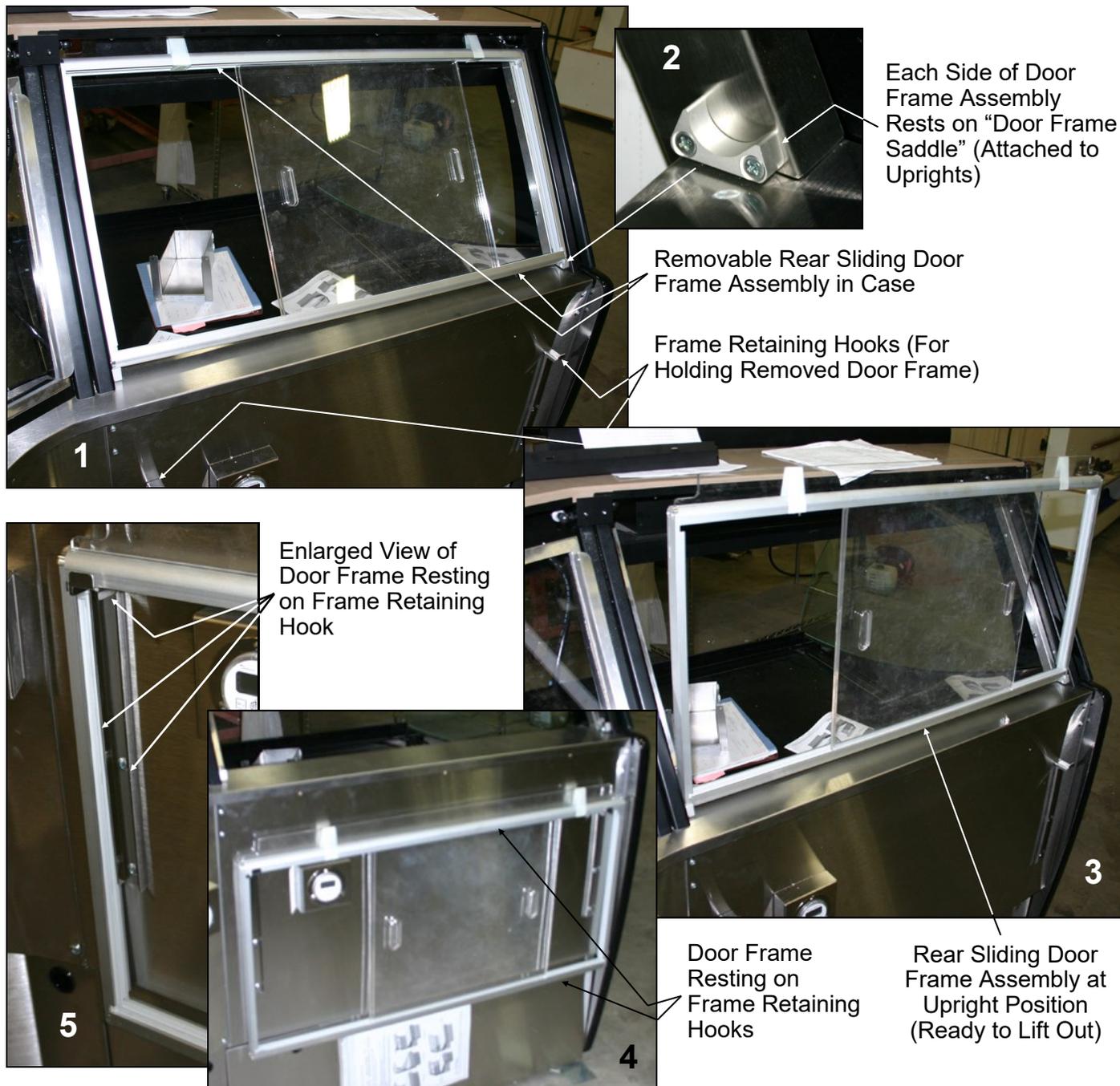
Openings in End Panels For
Refrigeration Lines and Electrical
Lines Route Through

REMOVABLE REAR SLIDING DOOR FRAME ASSEMBLY / FRAME RETAINING HOOKS

Removable Rear Sliding Door Frame Assembly

1. View of removable rear sliding doors intact.
 2. View of door frame assembly "saddle". Each side of door frame assembly rests on the "door frame saddle" (attached to uprights) while in case.
 3. View of entire rear sliding door frame assembly being rotated to vertical position (ready to lift out).
 4. View of rear sliding door frame assembly resting on frame retaining hooks.
 5. Enlarged view of door frame resting on frame retaining hook.
- Note: Acrylic sliding doors can be entirely removed from frame for cleaning.

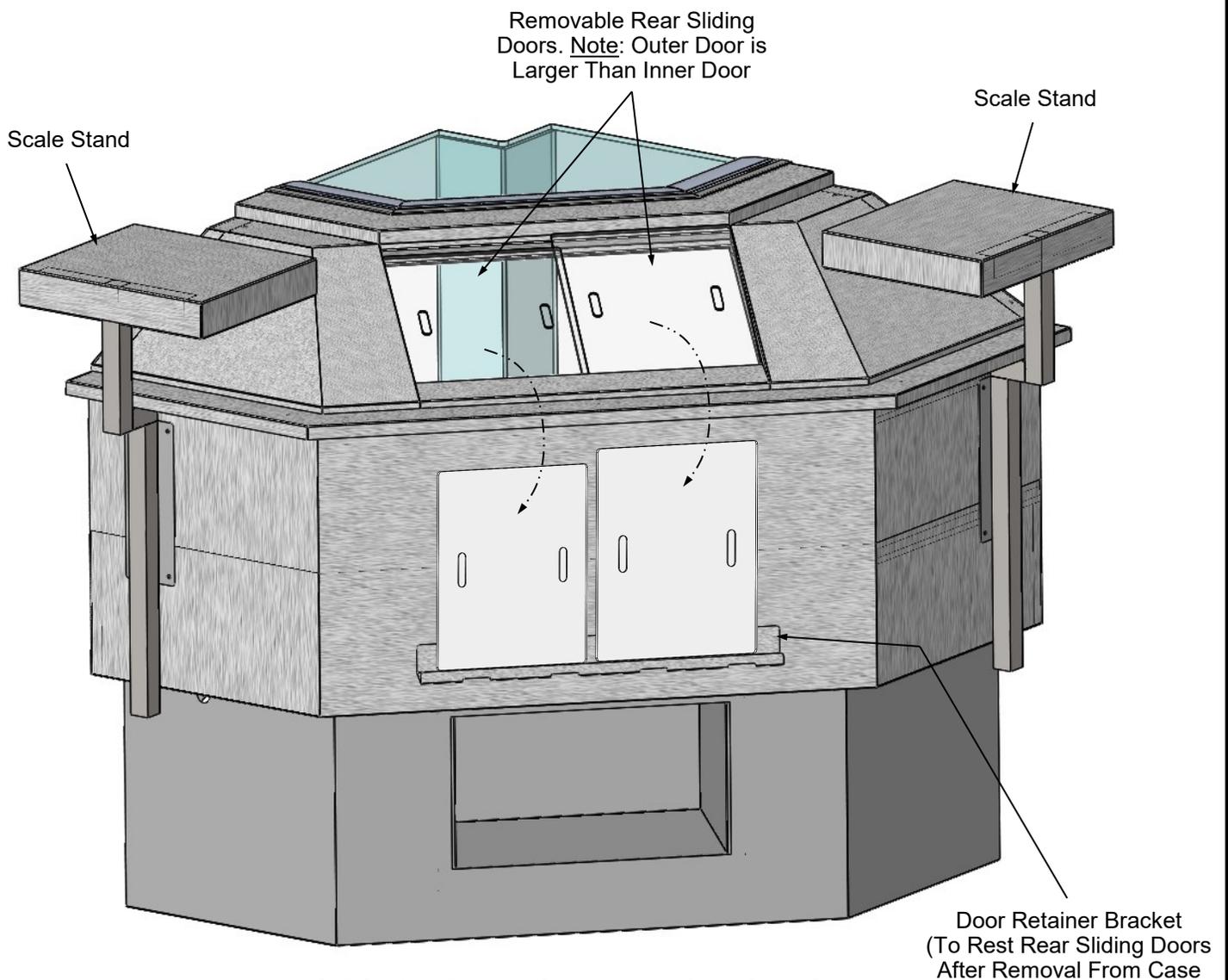
Caution! If removing rear sliding door frame from case (for cleaning or maintenance) place frame in a low-traffic, safe area to avoid damage to unit.



REMOVABLE REAR SLIDING DOORS / DOOR RETAINER BRACKET FOR REMOVED DOORS

Removable Acrylic Rear Sliding Doors / Door Retainer Bracket For Removed Doors

- Removable rear sliding doors may be simply lifted up and out. There is no door track.
- Door retainer bracket is at case rear. Rear sliding doors are to rest on bracket.
- Outer rear sliding door is LARGER than inner door.
- See view of removable acrylic rear sliding doors (and retainer bracket) below.
- Scale stands are on both left and right sides of case rear.



GLDSVN924R.7042L Shown Above (With Scale Stands & Removable Door Retainer) Your Model May Differ.

CASE ADJOINMENT: DISSASSEMBLY / SEALING UNITS TOGETHER

1. Rear Sliding Door / Wire Cover Removal

- You must remove rear sliding doors to access areas in uprights to adjoin cases.
- You must **also** remove wiring cover to access areas in uprights to adjoin cases.
- Photo at right shows wiring cover to remove.

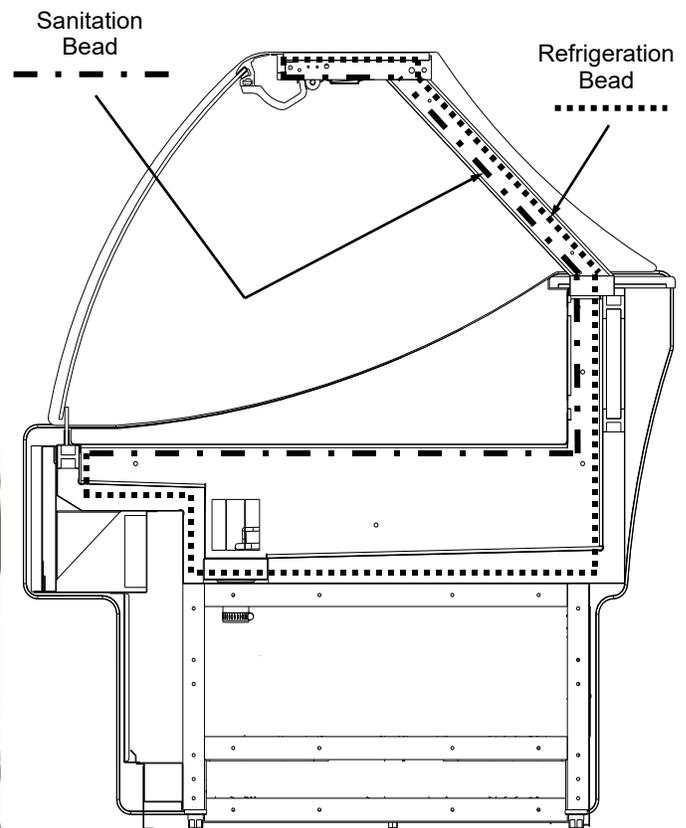
2. Sealing Units Together

- Follow these steps to assure a secure, lineup.
- Line up adjoining case (same model) bolt-hole to bolt-hole to this case.
- Level units from highest point of floor.
- Either adjust levelers or shim the frame support rails (depending upon construction of case).
- Front of cases **MUST** be flush with each other. After case is level, they are to be same height.
- After the 'first' case is level, apply industrial grade butyl caulk on **non-visible areas**. You may use industrial grade silicone sealant on **visible areas**.
- Form Two (2) Caulk/Sealant Lines: (Sanitation and Refrigeration). See illustration below-right for outline of caulk/sealant lines.
- If supplied both butyl and silicone, use butyl on non-visible areas and silicone on visible areas. Otherwise, urethane is acceptable for all areas.
- See next page for instructions on screw placement, wiring cover reattachment and rear door replacement.



Wire Cover

Retaining Screws



Note: If supplied, butyl is to be used on non-visible areas.

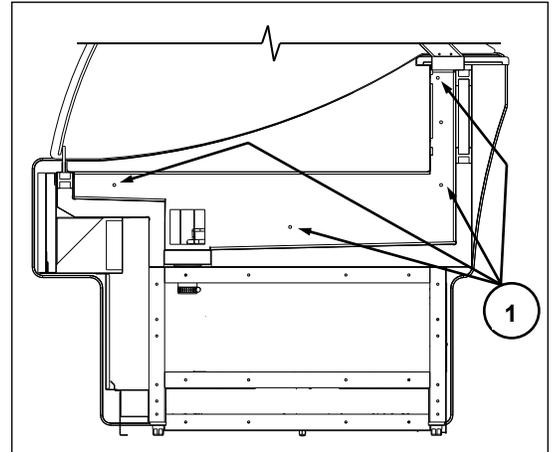
Silicone is to be used on all visible areas.

Urethane is acceptable for all areas.



1. Case Adjoinment: Screw Placement

- A. Note: Illustration at right and photo below is partially disassembled for illustrative purposes only.
- B. Screws to adjoin units are SCC-supplied.
- C. After cases are properly leveled (or shimmed) and sealant applied, units are to be adjoined with screws at the five (5) locations shown in illustration (at right) and photo (below).
- D. Using SCC-supplied nuts & bolts, **lightly tighten** each of the bolts in a cross-wise pattern. Work your way around the pattern, tightening more firmly at each pass. **Do not** completely tighten one bolt and then start on next!
- E. As cases are being bolted together, check that case is still level. Adjust levelers (or shim) accordingly. Repeat this process for each adjoining case.



2. Wiring Cover and Rear Door Replacement

- Reattach wiring cover and replace rear doors when done.

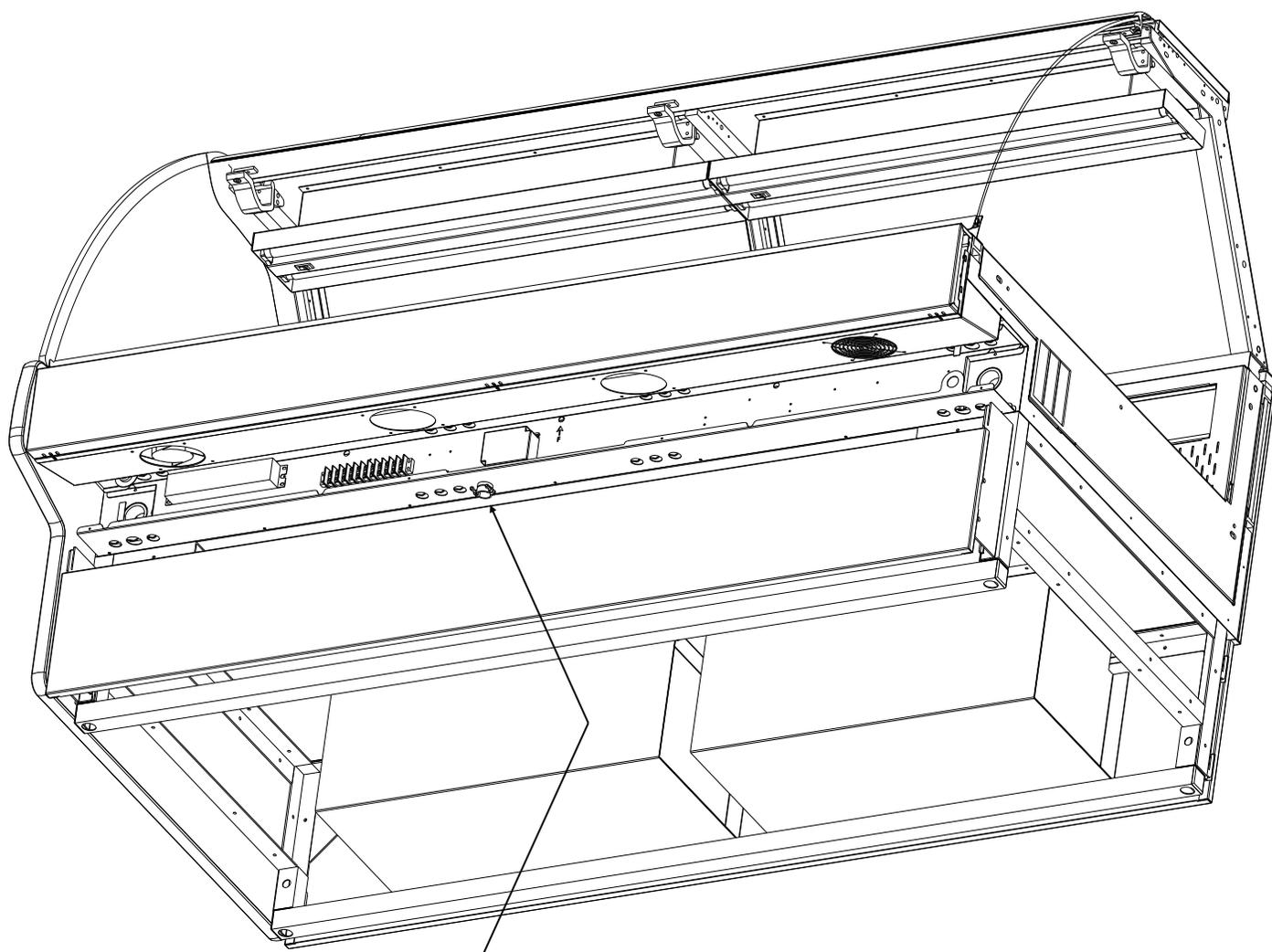


FIELD WIRING

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

Electrical Connections

- Field wiring hook-up / electrical access locations are shown in illustrations below (may not exactly reflect your particular unit).
- Single phase leads are provided.



Field Wiring
Hookup (for
Remote Cases)

START-UP AND OPERATION: START-UP / LOWER FRONT PANEL & TOE-KICK REMOVAL

1. Merchandiser Start-Up

- Remote Units: Case is hard-wired. When power is supplied, case will power-up.

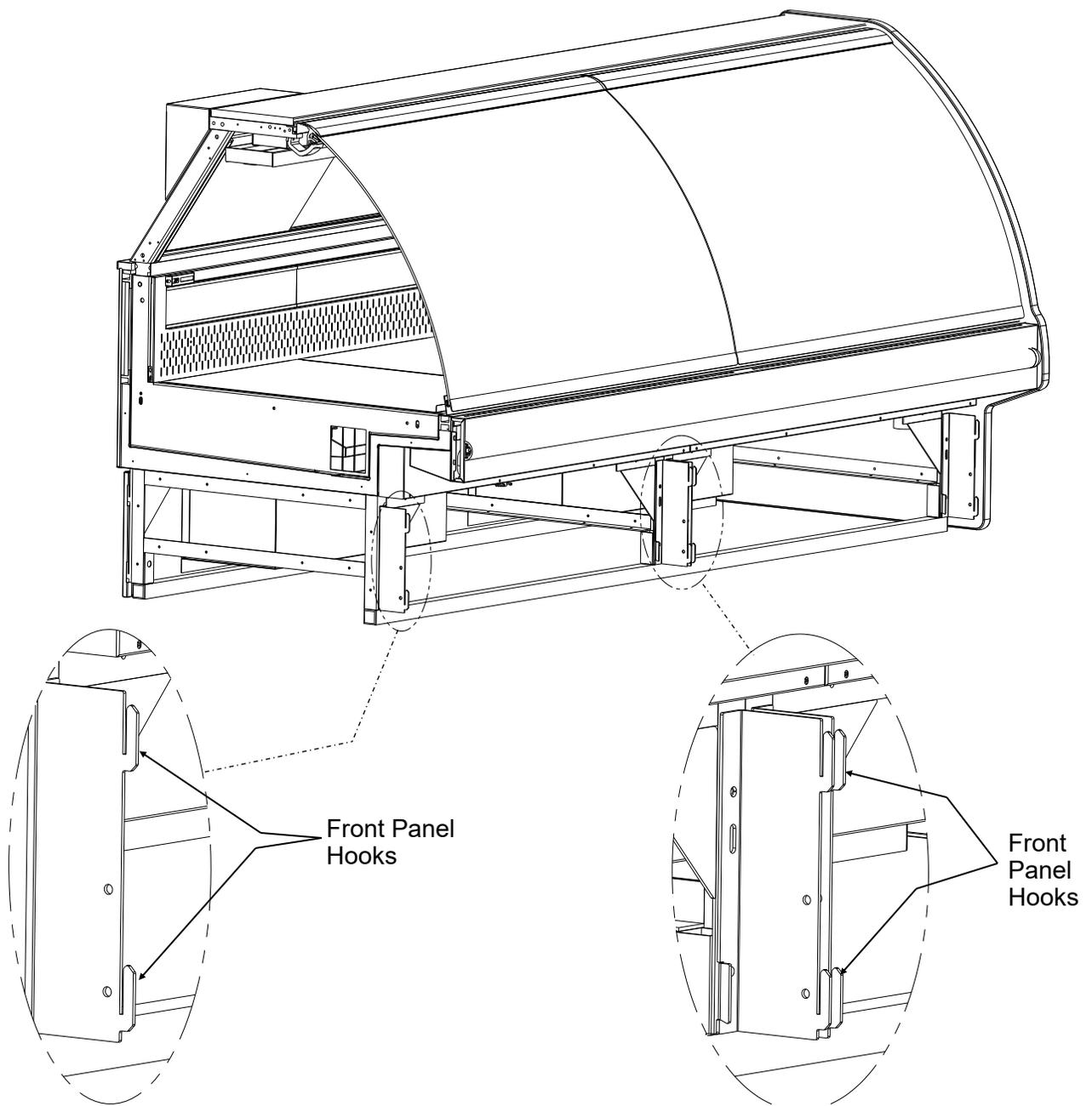
Note 1: Illustrations shown is with end panel (and lower front panel/toe-kicks) removed for illustrative purposes only.

Note 2: Illustrations shown may not exactly reflect your particular model, features or options.

Note 3: See next page for instructions on lights and optional rear door removal.

2. Lower Front Panel/Toe-Kick Removal

- Lower front panel/toe-kick may be removed by simply lifting upward and away from case.
- No tools are needed to do so.
- See illustrations below.
- Rear panels are removable in same manner.



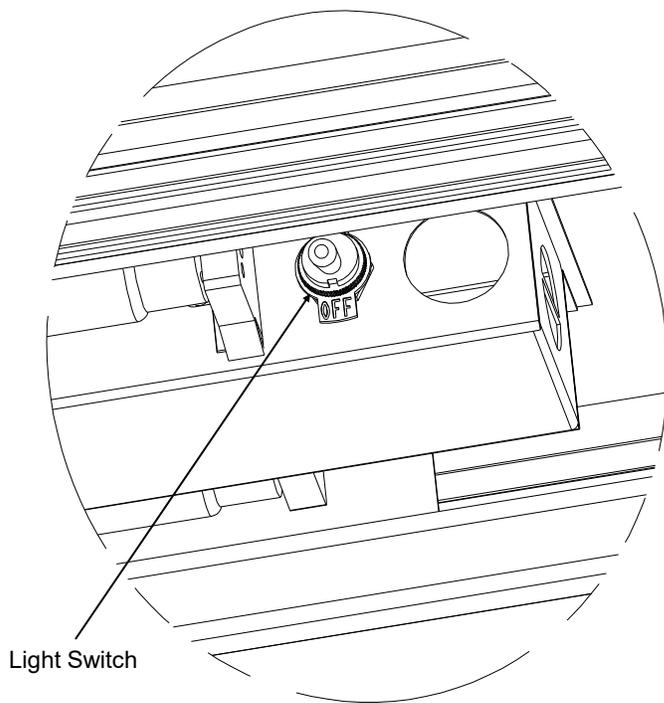
3. Lights and Doors

- Turn on the lights. Whether remote or self-contained, light switch is located on inside of case at top right, from case rear.
- See illustration at top right.

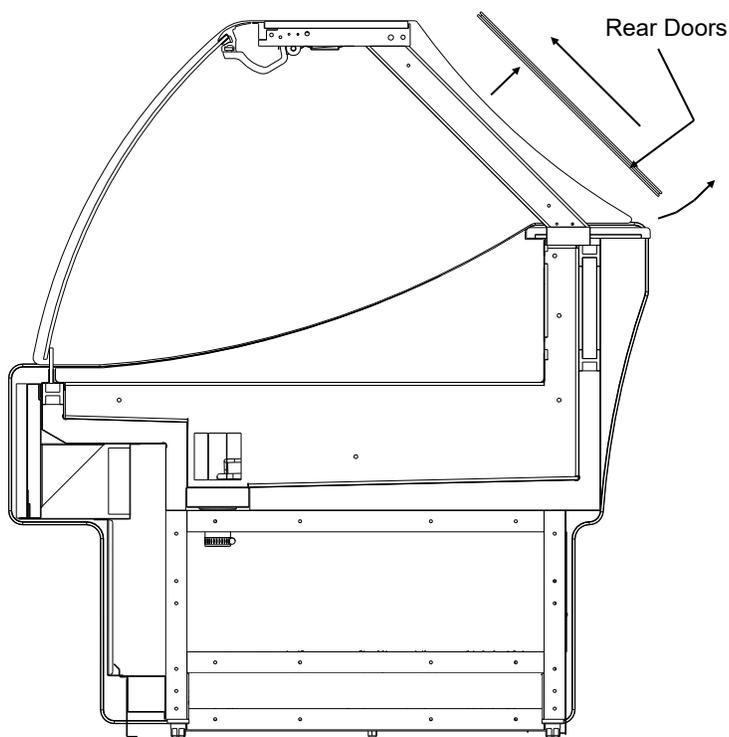
4. Removing Rear Doors (Optional)

- See illustration below left.
- Move rear doors toward the center of case.
- Individually lift each door up toward the top of case and pivot bottom of the door out.
- **Caution:** Gently set doors down to avoid marring, scraping, scratching or breakage.

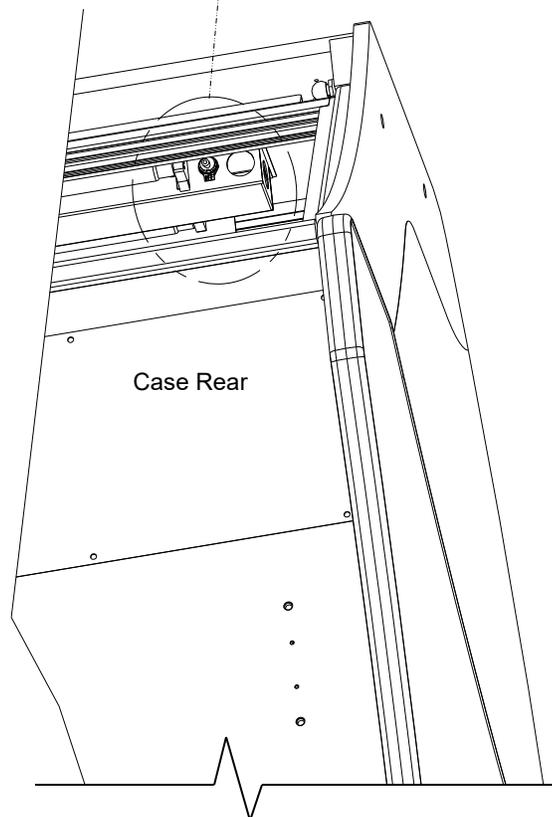
Note: Illustrations shown may not exactly reflect your particular model, features or options.



Light Switch



View of Rear Doors being lifted up, pivoted out and away from case.

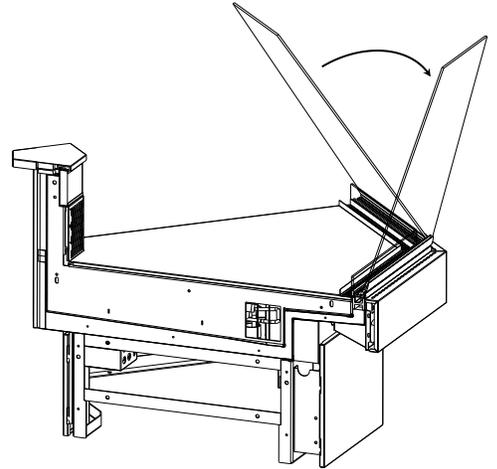


Case Rear

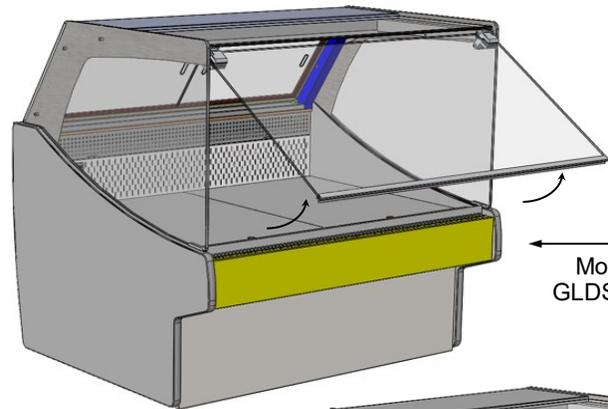
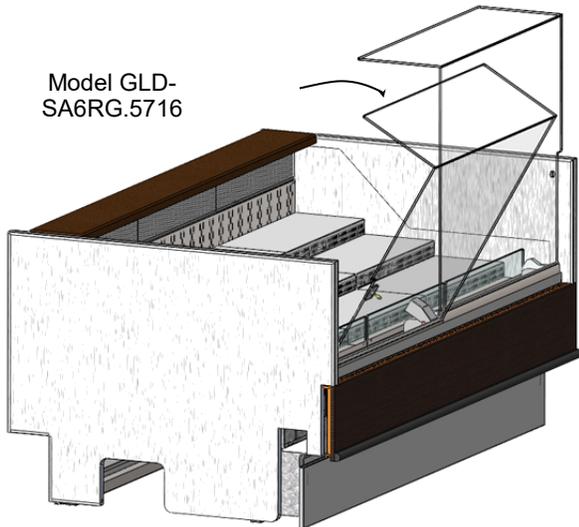
5. Adjustable Front Glass (For Cleaning, Etc.)

- Front glass can be raised and lowered to allow more thorough cleaning.
- Certain glass hinges are at the lower part of the case (as shown immediately below).
- Other glass hinges are at the upper part of the case (as shown at bottom of this page).
- See **CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)** section in this manual for cleaning instructions.
- Grasp the top (or bottom) of the glass and slowly lower (or raise).
- After cleaning, be sure to return front glass to its original position.
- **Note:** *Illustrations shown may not reflect your particular model, features or options.*

Model
GLDSX4R.5380

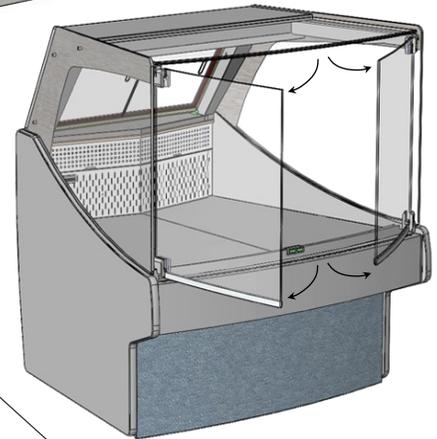


Model GLD-
SA6RG.5716

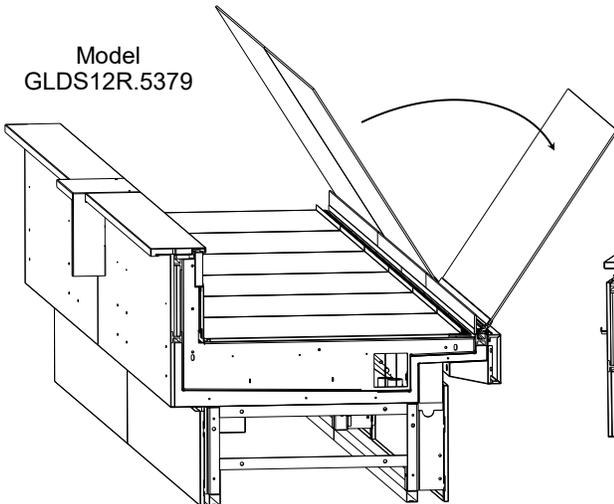


Model
GLDSV4R

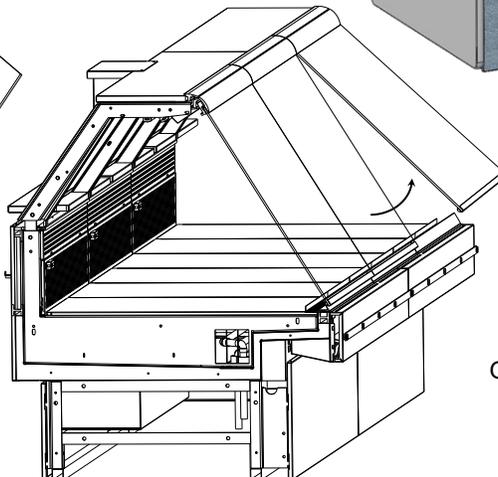
Model
GLDSVX2R



Model
GLDS12R.5379



Model
GLDS12R.5067

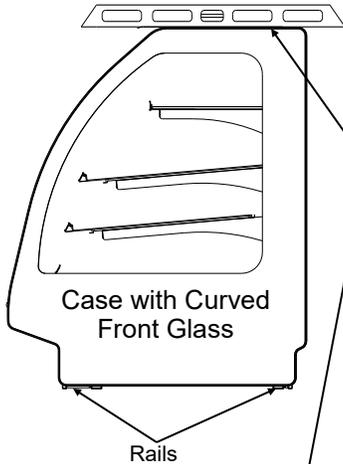


INSTALLATION: FRONT GLASS ALIGNMENT & ADJUSTMENT (VIA RAIL SYSTEM)

Front Glass Alignment & Adjustment via Rail System (For Curved and Flat Front Glass)

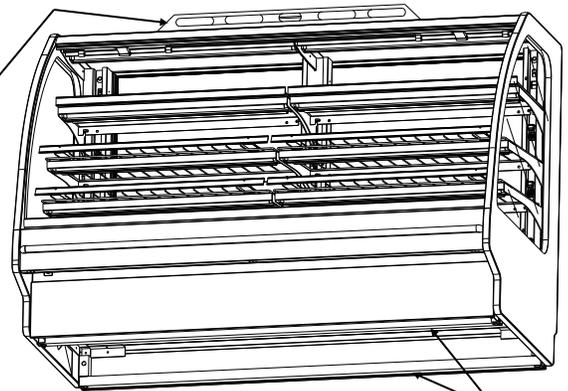
- Proper alignment of the front glass is important to create and maintain a seal inside the case.
- Improper alignment can cause air leaks compromising the environment inside the case and create condensation.
- Follow the five steps listed below to assure proper front glass alignment.
- Illustrations shown may not exactly reflect every feature or option of your particular case.

1. **Side-to-Side Leveling:** Place a level on top of display case (parallel to front glass). Raise or lower either side of case by inserting shims under the rails to level the case (following steps 3 and 4 below).



2. **Front-to-Back Leveling:**

- Place a level on top of case, perpendicular to the front glass.
- Raise or lower either side of case by shimming under the rails (following steps 3 & 4 below).
- Double-check the side-to-side level.



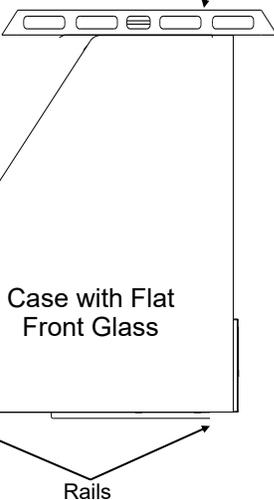
END PANEL

FRONT
GLASS

Rails

3. If FRONT-LEFT CORNER is too close to end panel (or hitting it), insert shims at the BACK LEFT CORNER of case.

LIFT



FRONT
GLASS

END PANEL

4. If FRONT-RIGHT CORNER is too close to end panel (or hitting it), insert shims at the BACK RIGHT CORNER of case.

LIFT

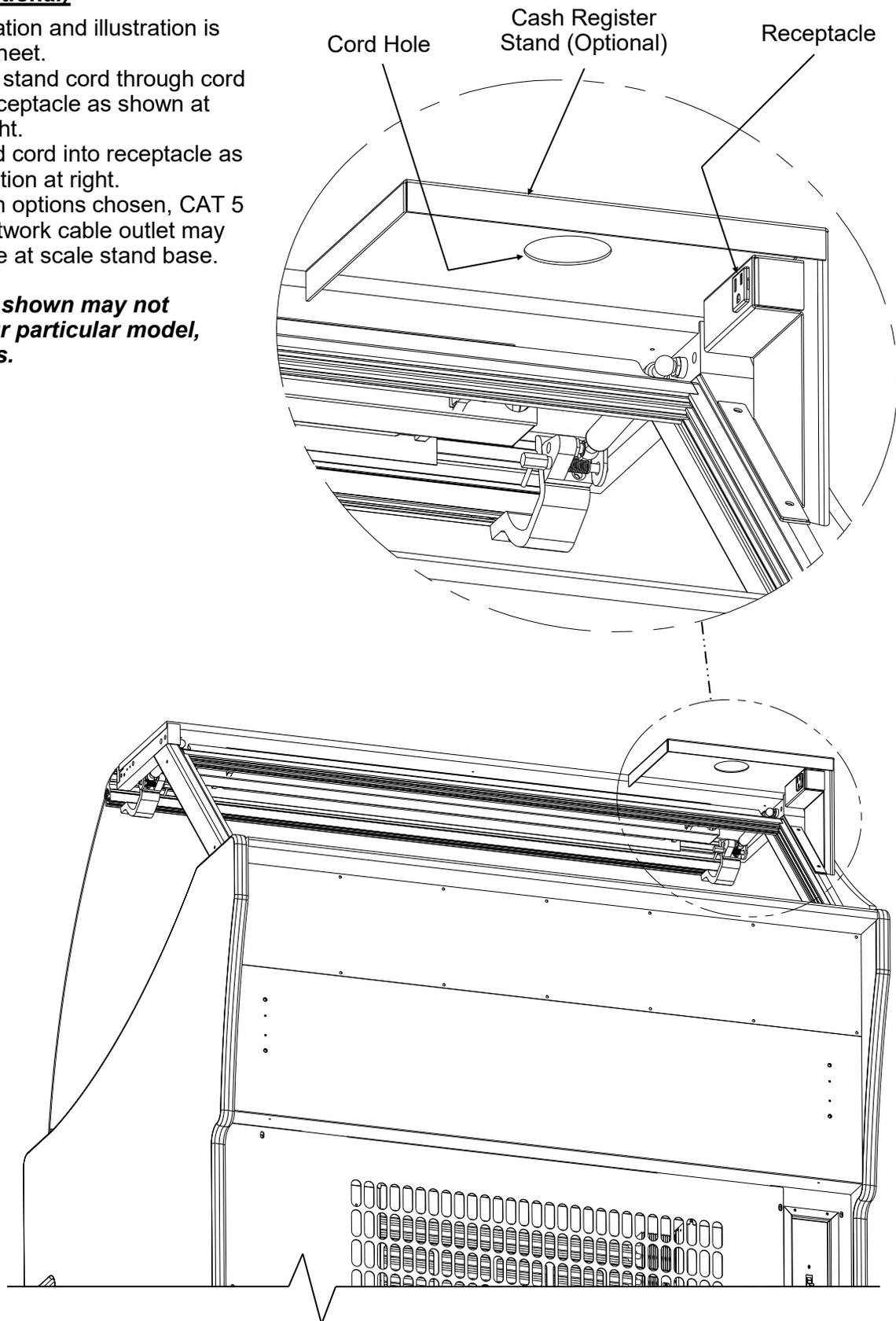
5. **Verification:**

- After inserting shims, open and shut the front glass.
- Verify (again) that the front glass is properly aligned at both left-hand and right-hand side of the case.
- If not, repeat the shimming procedure until the front glass is properly aligned along both sides of the case.

1. Scale Stand (Optional)

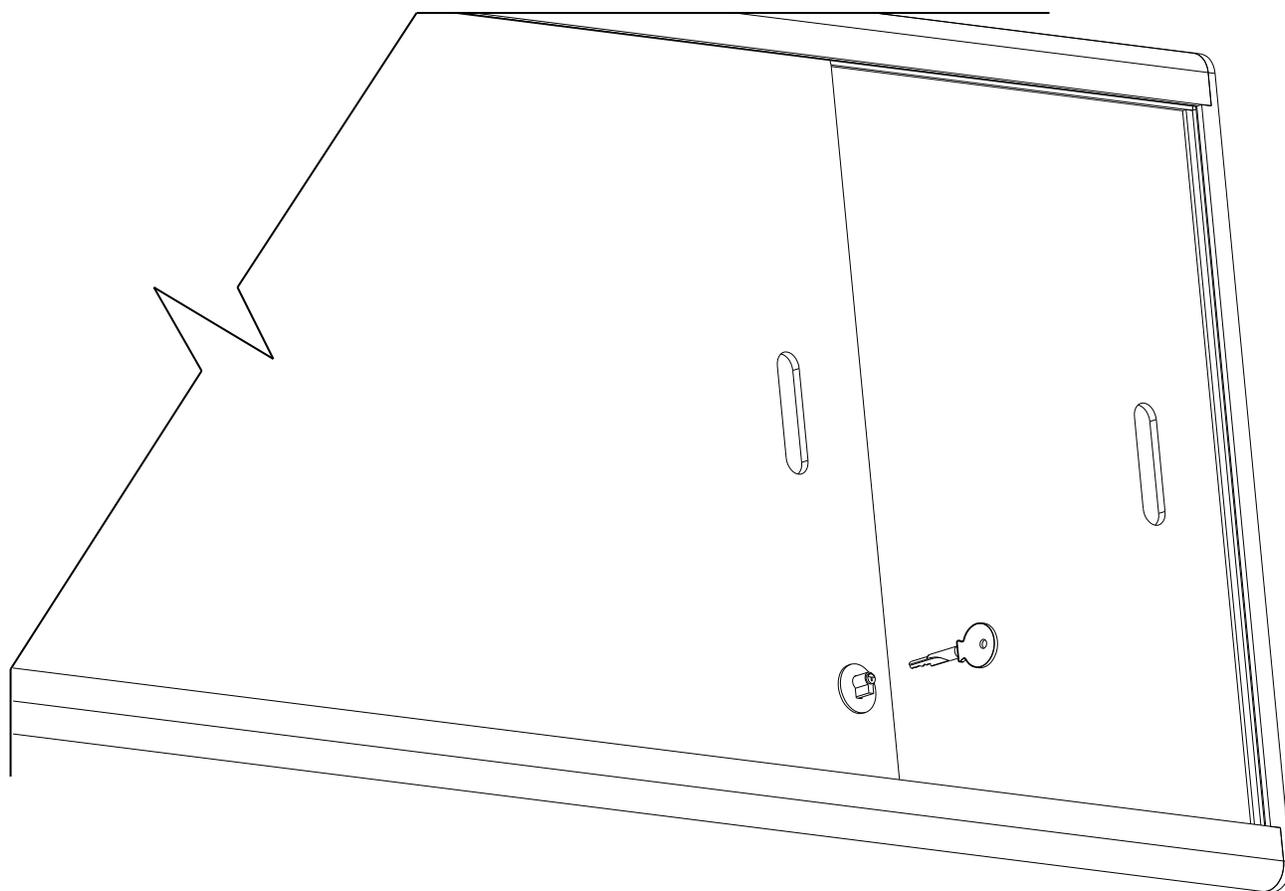
- Scale stand location and illustration is shown on this sheet.
- Route the scale stand cord through cord hole and into receptacle as shown at illustration at right.
- Plug scale stand cord into receptacle as shown in illustration at right.
- Depending upon options chosen, CAT 5 (Category 5) network cable outlet may also be available at scale stand base.

Note: Illustrations shown may not exactly reflect your particular model, features or options.

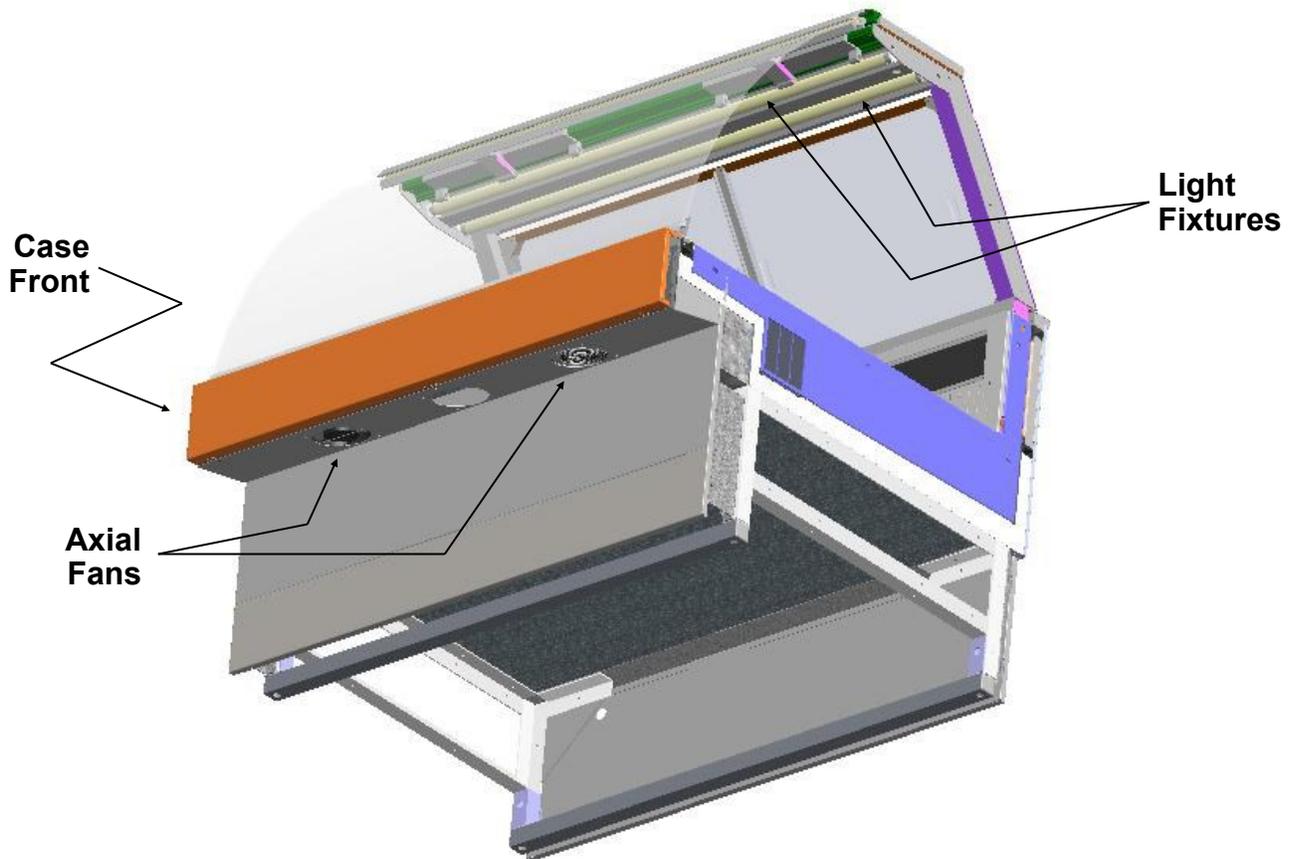


2. Locking Mechanism Option - Rear Sliding Doors

- Make certain doors are slid completely into “closed” position.
- Use SCC-provided key to lock rear sliding doors in place.
- To release rear sliding doors, simply use SCC-provided key to unlock unit.
- Place SCC-provided key in specific, accessible location to avoid loss.



Above illustration shows rear sliding doors and the SCC-provided key ready to be inserted into lock.



3. Fluorescent Light Fixtures

Warning! Disconnect power before providing maintenance and service to unit.

Caution: Lamps have been treated to resist breakage and must be replaced with similarly treated lamps.

Light fixtures are to be located on underside of shelf assembly, at the top inside of case, and lower front nose of case. See next page for light fixture locations.

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 back side at bulb ends and pulling the remaining contact from sockets.

Installation of lamp:

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

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



4. LED Style Light Switch

- Light switch is at rear-right (as shown below).

5. LED Style Light Fixtures

Removal of Faulty LED Lights:

- LED lights rarely require change-out.
- 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.

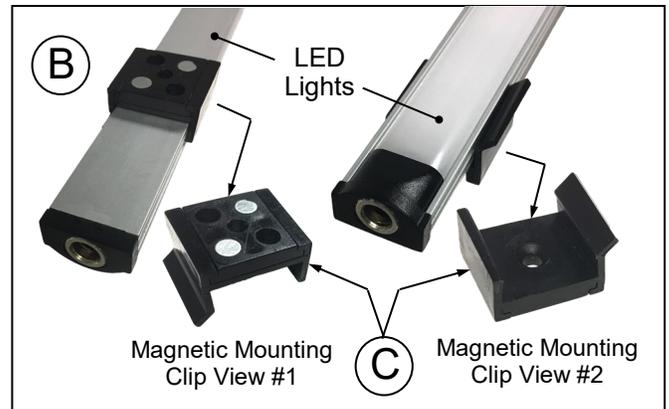
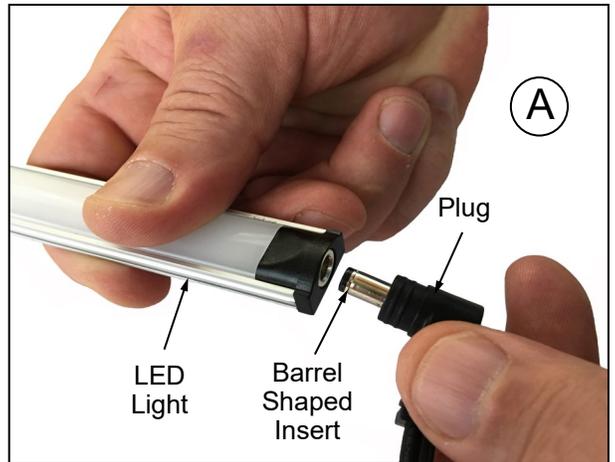
>> **Note:** Mounting clips MAY be riveted to shelf or header. In such instances, simply remove LED light from mounting clips by pressing against flange part of clips with thumb.

Replacement of LED lights:

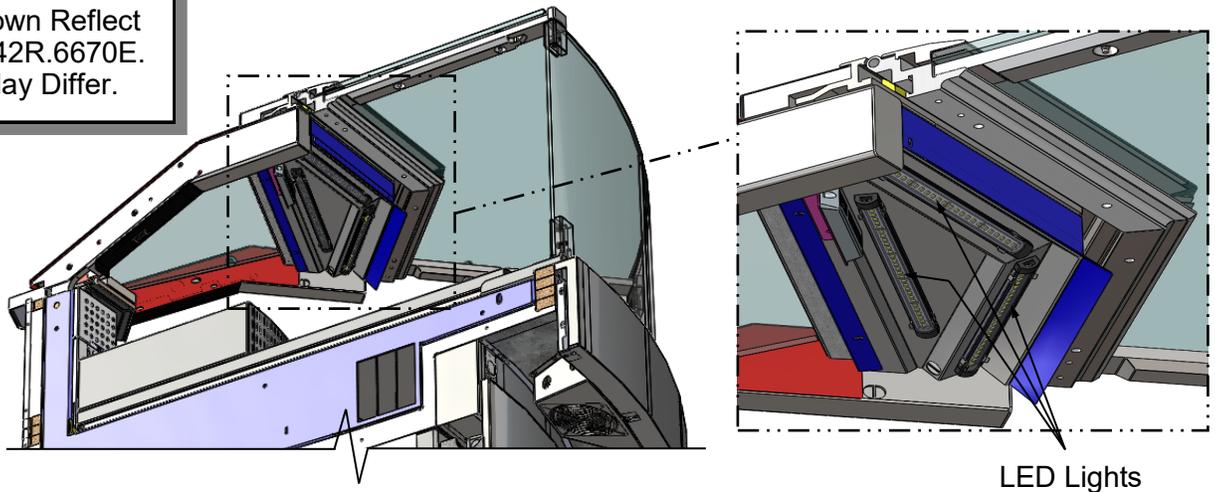
- Attach magnetic mounting clips onto LED light.
- Adjust magnetic mounting clips so they are equally spaced on LED light.
- Reattach LED light assembly to its shelf/header.
- Position properly in shelf/header.

>> **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 all the way 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 at right.
- Turn LED light switch back on.



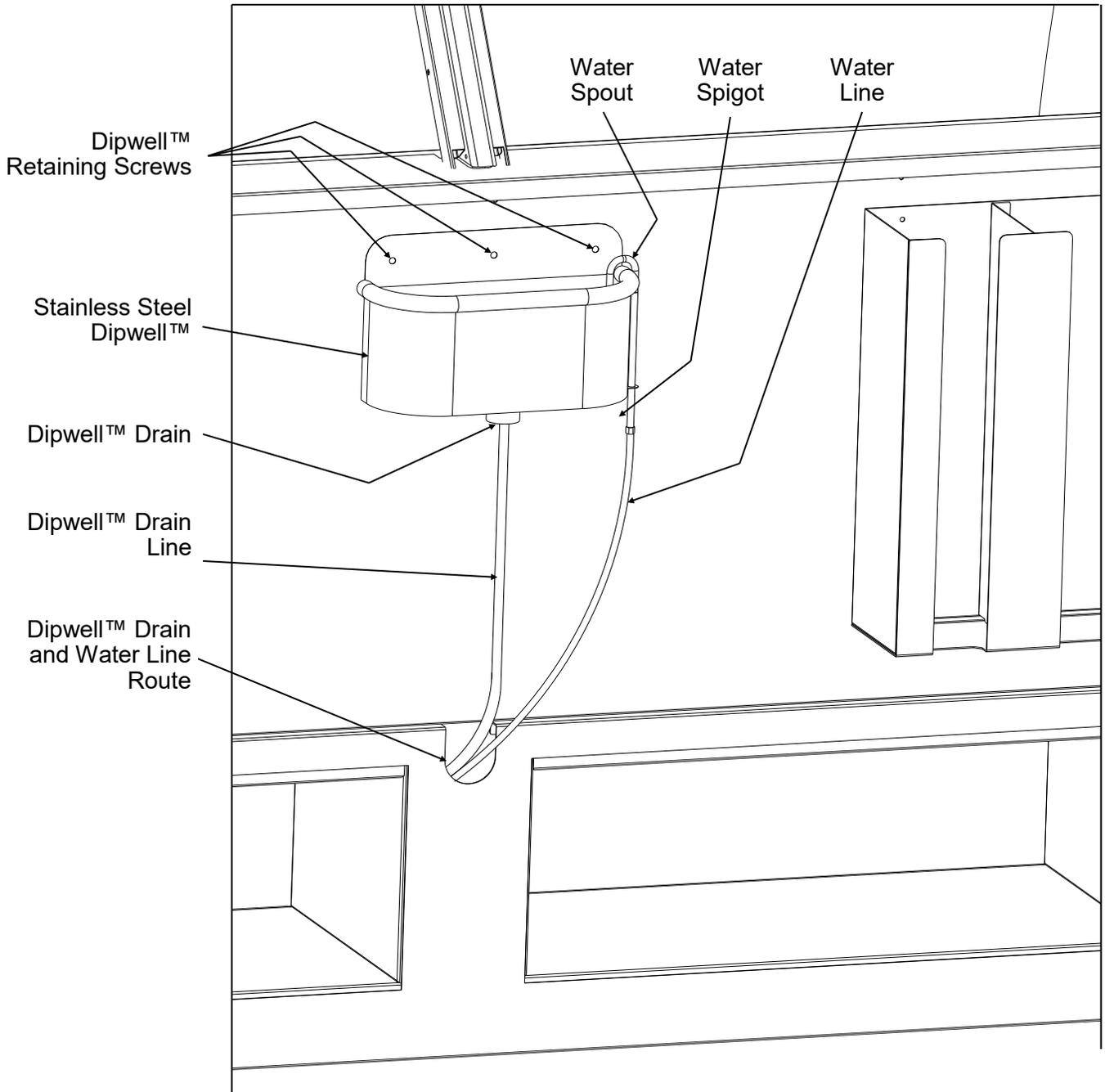
Illustrations Shown Reflect Model LDSVX442R.6670E. Your Model May Differ.



DIPWELL™ OPERATION AND REMOVAL FOR CLEANING

Dipwell™ (Shown In Illustration Below) Is For Thawing Cold Scoops

- See cleaning schedule for specifics on cleaning Dipwell™.
- To remove Dipwell™ from case, it may be necessary to remove retaining screws.
- It may also be necessary to remove retaining clamp holding drain line to Dipwell™.
- Illustration below may not exactly reflect every feature or option of your particular Dipwell™ assembly.
- See **CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)** section in this manual for specifics on cleaning.



DIGITAL THERMOMETER / PROGRAMMABLE CONTROLLER LOCATION & ACCESS

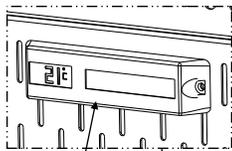
1. Digital Thermometer (Locations Vary)

- Thermometers provided with equipment reflect air temperature only (not actual food temperature).
- Use probe thermometers to determine actual food temperatures

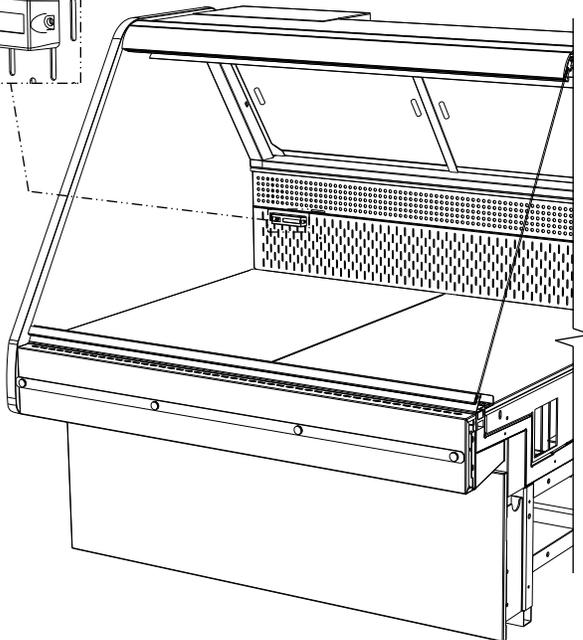
2. Programmable Controller

- Programmable controllers are primarily placed on self-contained units.

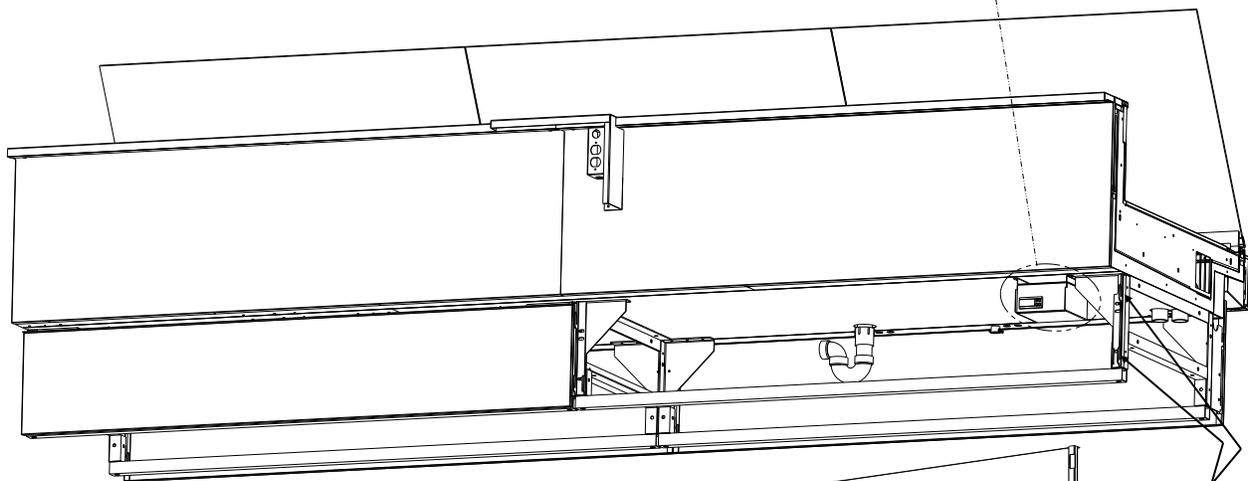
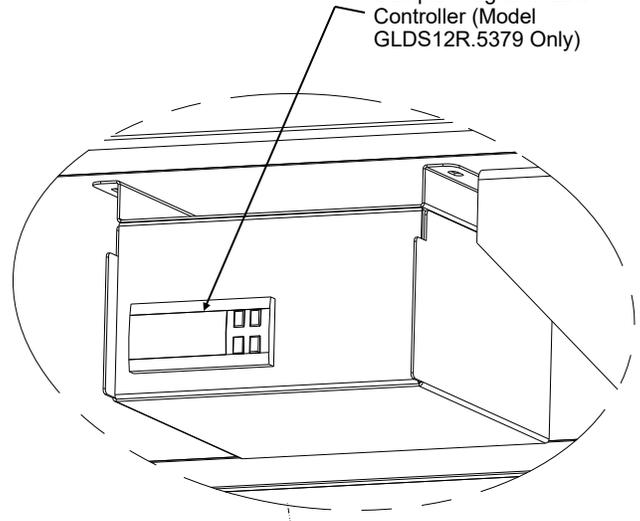
- However, certain remote units (as model GLDS12R.5379 shown below) also have programmable controllers.
- Access programmable controller by removing panel (as shown below); no screw removal is required.
- Programmable controller (sample shown below) is found at case rear; however, certain cases may have temperature controller at front of case.
- See **PROGRAMMABLE CONTROLLER INFORMATION** section in User Manual for more information about accessing the particular controller for your merchandiser.



Thermometer



Sample Programmable Controller (Model GLDS12R.5379 Only)



Slots (Typ.)

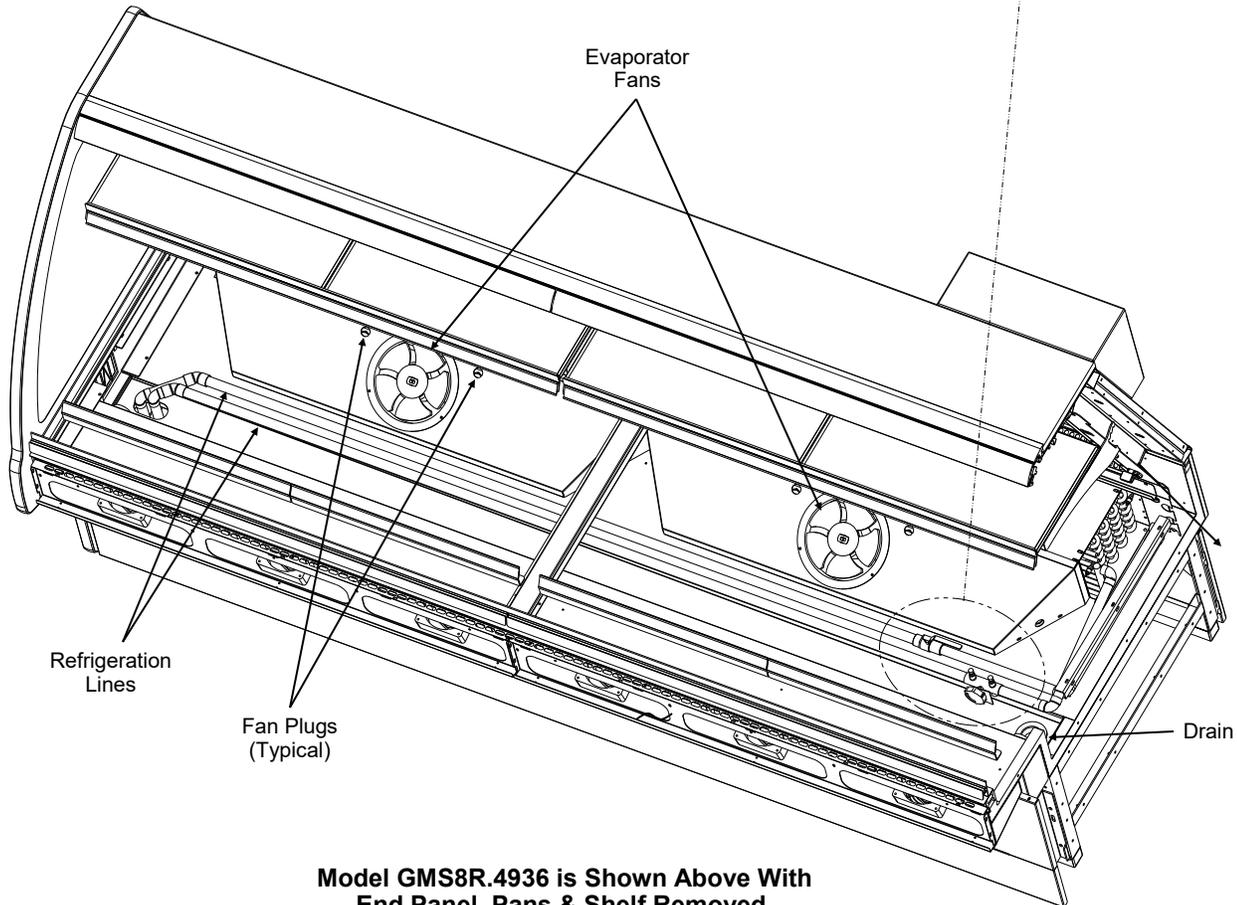
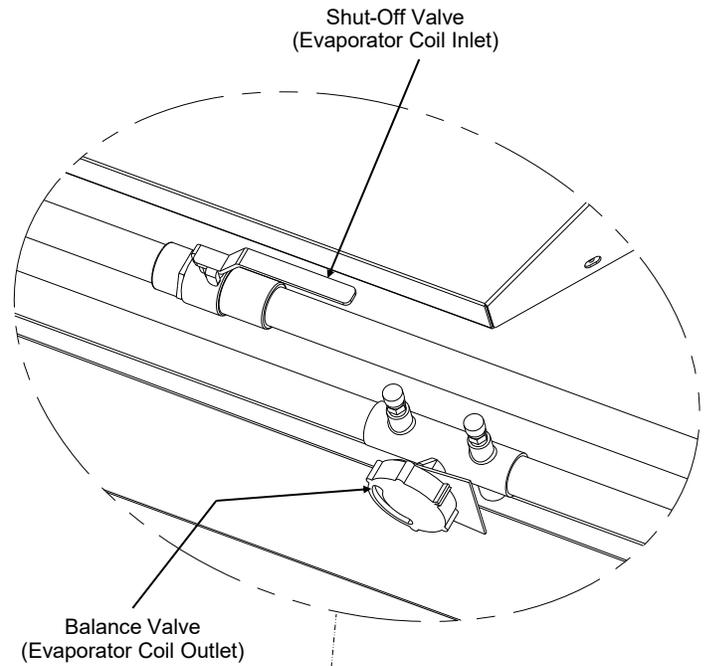
Panel Hooks (Typ.)

Rear Panel (Removable by Lifting Up and Off Hooks)

DRAIN / SHUT-OFF VALVE / BALANCE VALVE LOCATION & ACCESS

Drain / Shut-Off Valve / Balance Valve Access

- Access to valves and drain can be achieved by removing deck pans.
- All are accessible from front of case.
- Fans: Unplug fans and remove the fastener from the access panel in the front right (or left) side of the unit.
- See illustrations on this page for general location.
- **Caution!** Only authorized refrigeration technicians are to access valves!



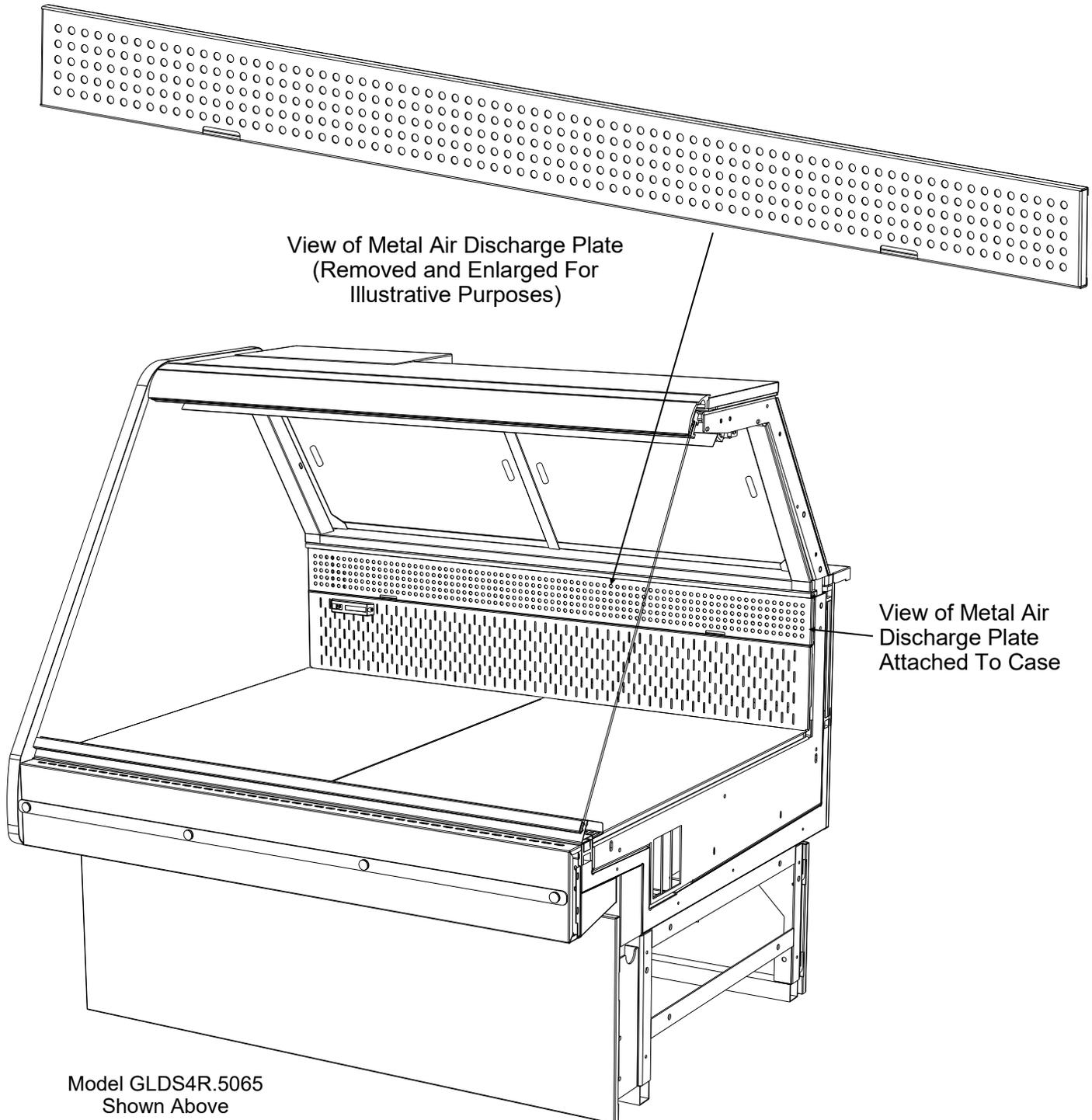
**Model GMS8R.4936 is Shown Above With
End Panel, Pans & Shelf Removed.
Your Case May Differ.**

METAL AIR DIFFUSER PLATE / REMOVAL / REPLACEMENT (FOR CERTAIN CASES)

Metal Air Diffuser Plate / Removal / Replacement

Metal air diffuser plate is perforated. It is located in discharge air duct. To access it, follow these instructions:

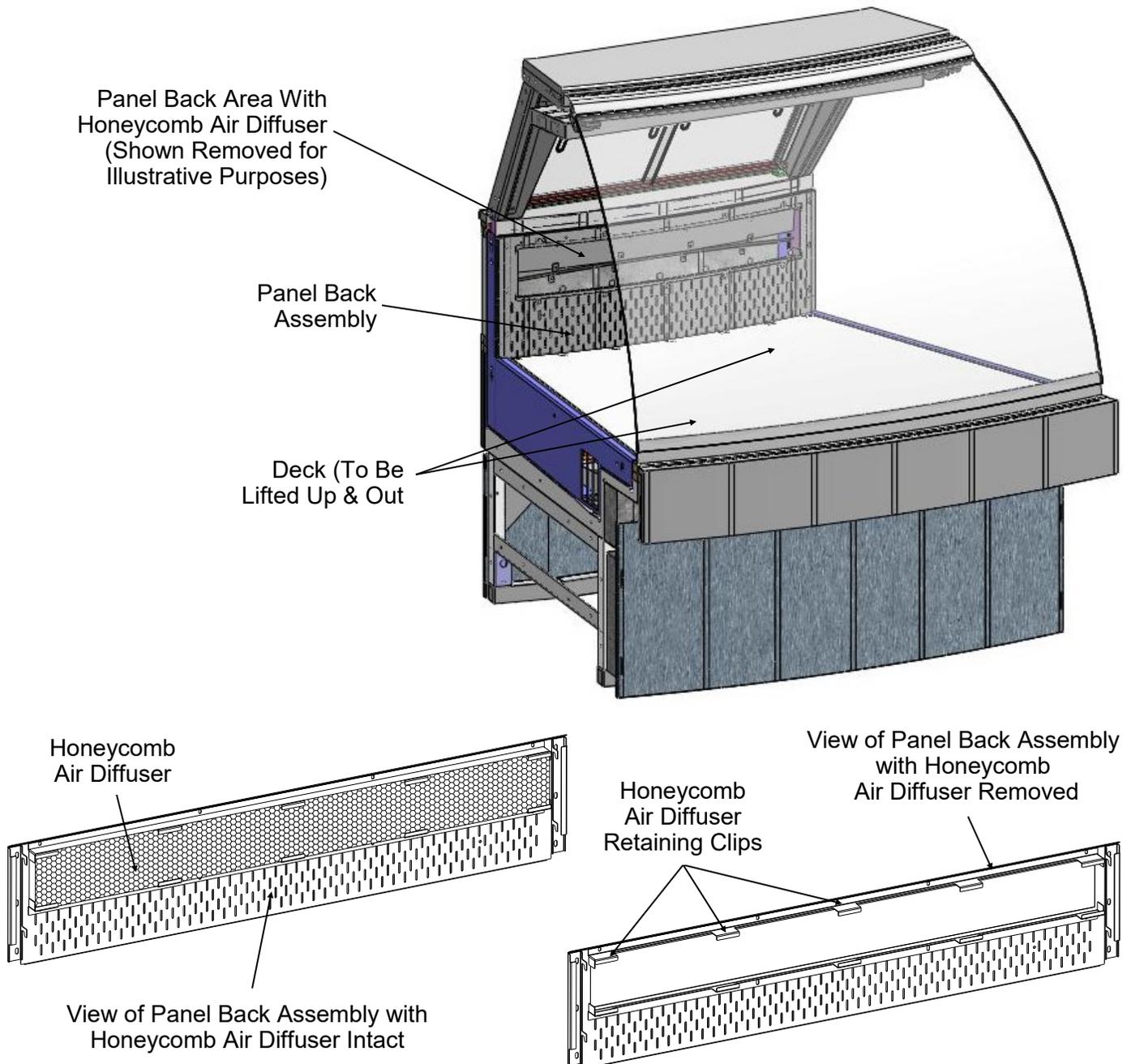
- Simply lift upward on metal air diffuser plate and out from case.
- See below illustration.
- After cleaning, be certain to replace metal air diffuser plate in same position so as not to disrupt airflow.



HONEYCOMB AIR DIFFUSER REMOVAL / REPLACEMENT (FOR CERTAIN CURVED CASES)

Honeycomb Air Diffuser Removal / Replacement For Curved Cases

- **Note:** See next page for Honeycomb Air Diffuser Removal / Replacement for Straight Cases.
- Honeycomb is located in discharge air duct. To access honeycomb, follow these instructions:
- Lift decks up and out.
- Grasp underside of panel back assembly (see illustration below). Lift up and out from case.
- To remove the honeycomb from the back panel assembly, simply squeeze (“pinch”) together and lift out from between retaining clips. See below illustration.
- **Caution! Heat tape wire is connected to panel back assembly!** To avoid disconnecting heat tape wire, keep panel back assembly within proximity of panel back area.
- After cleaning replace honeycomb in exact same position so as not to disrupt airflow.



HONEYCOMB AIR DIFFUSER REMOVAL / REPLACEMENT (FOR CERTAIN STRAIGHT CASES)

Honeycomb Air Diffuser Removal / Replacement

- Honeycomb is located in discharge air duct.
- To access honeycomb, follow these instructions:
 1. Grasp tabs. Pull outward from rear plenum.
 2. Grasp underside of panel back assembly (as shown below). Lift up and out from case.
- To remove the honeycomb from the back panel assembly, simply squeeze ("pinch") together and lift out from between retaining clips. See below illustration.
- After cleaning, be certain to replace honeycomb in exact same position so as not to disrupt airflow.

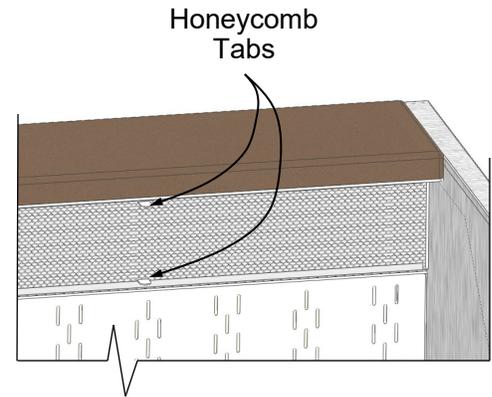
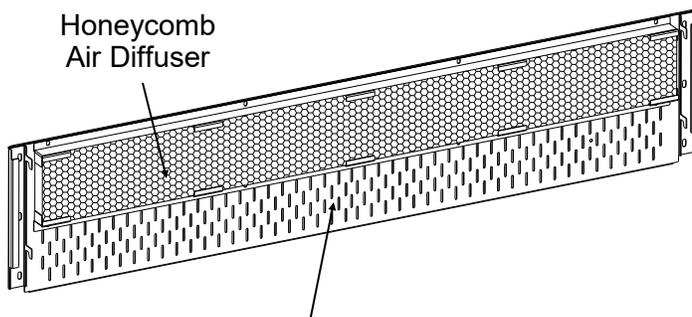
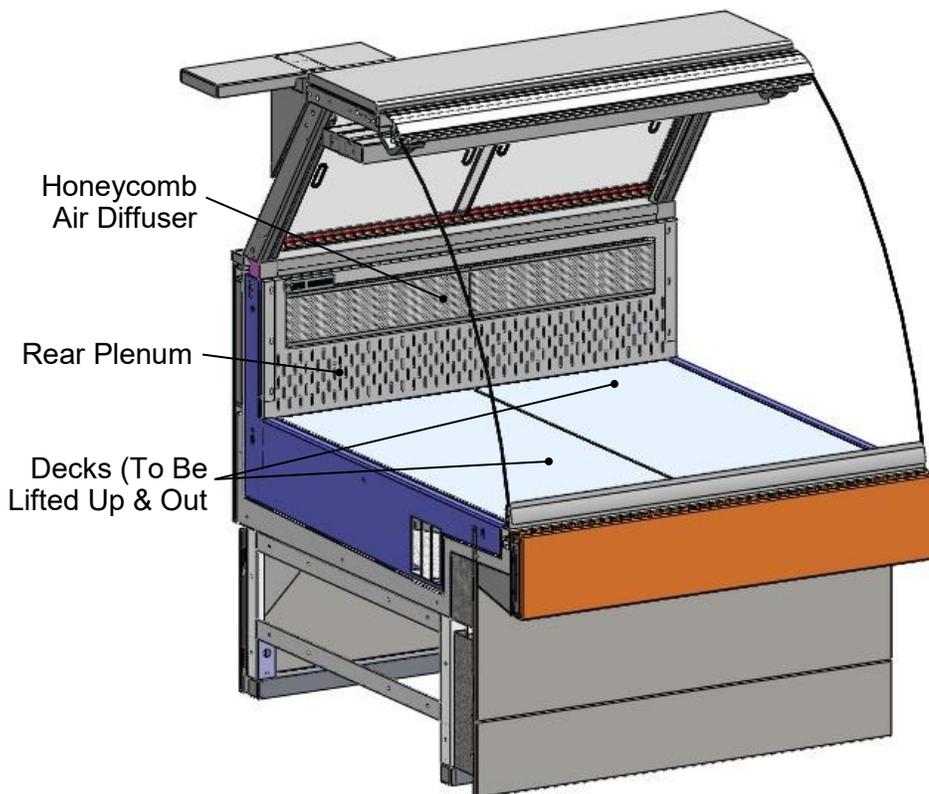
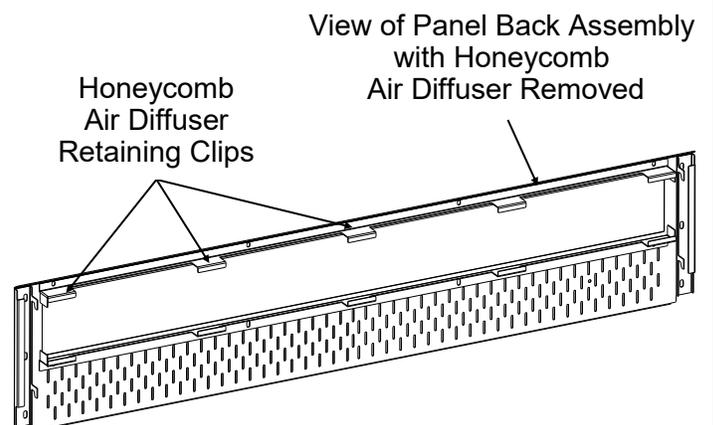


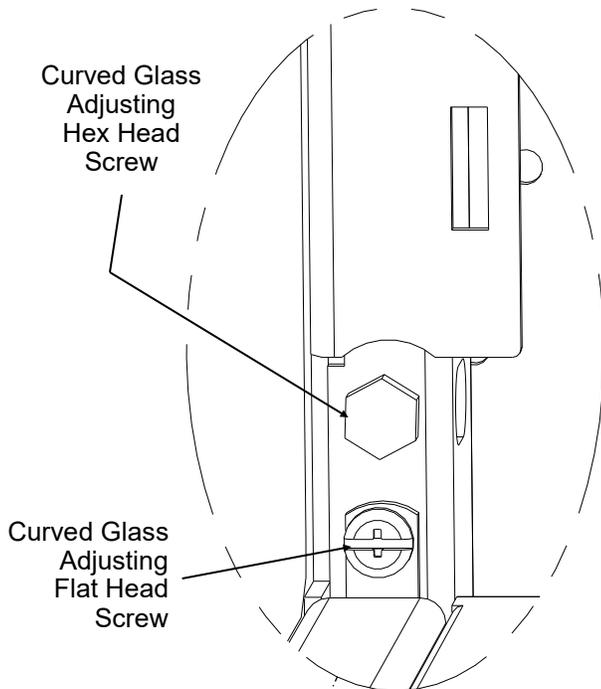
Illustration shown may not exactly reflect your model but is for illustrative purposes only.



View of Panel Back Assembly with Honeycomb Air Diffuser Intact

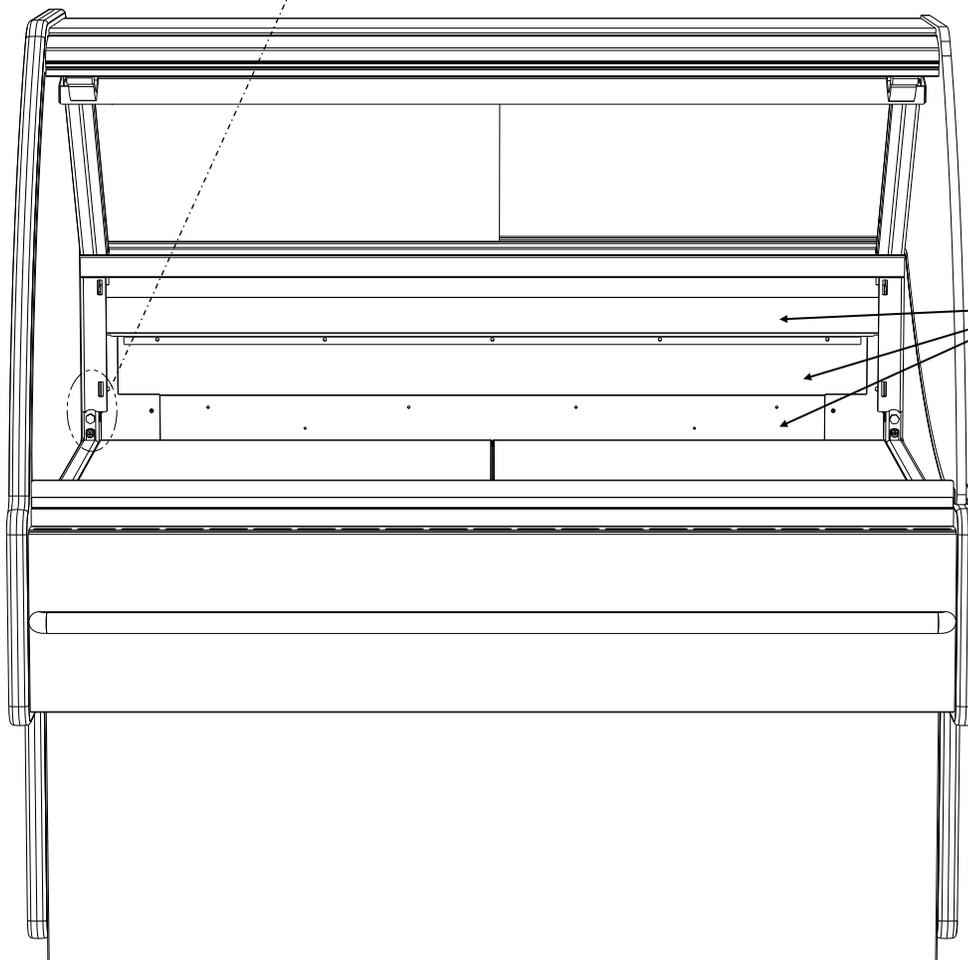


CURVED GLASS ADJUSTMENT PROCEDURE



Curved Glass Adjustment Procedure

- Views shown are after Honeycomb Air Diffuser Panel Back Assembly has been removed.
 - Curved Glass must be lifted up to access adjustable screws.
1. Use large flat head screwdriver to loosen flat head screw.
 2. Use 1/2" hex head socket to adjust hex head screw.
 - a. Adjusting hex head screw clockwise (inward) will lower curved glass downward.
 - b. Adjusting hex head screw counter-clockwise (outward) will raise glass upward.
 3. Adjust screws on BOTH sides of case in tandem to assure proper curved glass position.
 4. Raise and lower curved glass while at different screw positions to determine best fit.
 5. After achieving proper position, tighten flat head screws on BOTH sides of case.



View of case with Panel Back Assembly removed

Illustration shown may not exactly reflect your model but is for illustrative purposes only.

CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)

NOTE: BOTH REMOTE AND SELF-CONTAINED UNITS ARE COVERED IN THE INFORMATION BELOW. IF YOUR CASE IS REMOTE, SELF-CONTAINED ITEMS WILL NOT APPLY TO YOUR CASE.

AREA TO CLEAN	FREQUENCY	INSTRUCTIONS
Case Exterior	Daily	Condensing Coil: Vacuum or brush grille area on back of case.
	Daily	Glass (Front Curved or Flat / Rear Sliding Doors / Rear Folding Doors): Clean with a household or commercial glass cleaner. If tilting glass upward (or downward) be sure to return to original position.
	Daily	Front Panel (if Veneer): Do not use general cleaning solutions on veneer. Use Pledge™ or Murphy's Oil™.
	Daily	Natural Quartz Surfaces: See next page for cleaning instructions.
	Daily	Dipwell™ Unit: Remove Dipwell™ Unit by removing three (3) screws. (see DIPWELL™ OPERATION AND REMOVAL FOR CLEANING section in this manual for illustration). Submerge in hot, soapy water and wash with sponge or clean cloth. Rinse, dry, and return to case. Clean area around case rear (where Dipwell™ is to be reattached) with hot, soapy water and clean cloth.
	Weekly	Sliding Rear Doors and Door Track (Optional): Remove sliding rear doors and clean with a household or commercial cleaner. Clean door track with moist cloth. Return to case in reverse order they were removed.
	Weekly	Rear Storage Areas: Clean with a warm water and mild soap solution and soft cloth. Wipe dry with paper towel or soft cloth.
	Weekly	Lid Display (At Rear): <ul style="list-style-type: none"> • Wash with a solution of hand dishwashing liquid detergent and water; or a solution of baking soda and water. Rinse and polish dry with paper towel or soft cloth. • Never use scouring powders or steel wool as they will scratch stainless steel.
Case Interior	Weekly	Decks: Wipe off decks with moist cloth.

CLEANING & MAINTENANCE of NATURAL QUARTZ (AND OTHER STONE) SURFACES

Routine Care	<p><u>For Daily, Routine Cleaning:</u></p> <ul style="list-style-type: none"> • Natural quartz (and other stone) surfaces require very little maintenance. Simply wipe surfaces with soap and warm water on a regular basis to maintain its shine. Any pH balanced general-purpose household cleaner may be used.
Chemicals To Avoid	<p><u>Chemicals To Avoid:</u></p> <p>Avoid exposing natural quartz (and other stone) surfaces to strong chemicals and solvents.</p> <ul style="list-style-type: none"> • Items to avoid include: nail polish remover, permanent markers or inks, oil soaps, and furniture cleaners or paint strippers that contain trichlorethylene or methylene chloride. • Also avoid exposing surface to chemicals with high alkaline/PH levels, i.e., oven cleaners. <p>Caution must be used with the following products:</p> <ul style="list-style-type: none"> • Avoid using products containing oils or powders as may leave a residue. • Avoid repetitive use of abrasive scrubs/cleaners as they may dull the finish. • Avoid oven/grill cleaners as they may discolor the finish. • Avoid exposure to extreme heat as it may damage the finish. <p>Apparent stains like coffee, food, makeup, etc.:</p> <ul style="list-style-type: none"> • Apply the appropriate cleaner with a paper towel and wipe. If necessary, the area may be soaked with pads of paper towels from 3-10 minutes; • Scrub the area. Rinse thoroughly. Dry thoroughly.
Difficult Spills	<p><u>For Difficult Spills:</u></p> <p>To remove difficult spills on natural quartz (and other stone) surfaces, follow these guidelines.</p> <ul style="list-style-type: none"> • Wipe the surface with warm water and soap. If needed, apply a common household cleaner. • For stains that harden as they dry (such as food, gum, nail polish, and paint), remove by gently scraping off of surface (using a blade or putty remover), and then clean using warm water and soap. Gray marks left by the razor, can be wiped away with soap and water. • Natural quartz (and other stone surfaces) are resistant to damaging chemicals. Difficult spots may be treated with one of the cleaners listed below: > Rubbing Alcohol > Ammonia > Vinegar <u>Note:</u> Allow the desired cleaner to sit for up to 10 minutes. Scrub and rinse thoroughly. Dry thoroughly.
Cleaning Cases With Silicone	<p><u>Cleaning Cases With Silicone In And Around Surfaces:</u></p> <ul style="list-style-type: none"> • Cases with silicone between inserts and the surrounding natural quartz (and other stone) surfaces should be cleaned with any of the following: > Soapy water (e.g., Dawn® dish soap and warm water) > Simple Green® All Purpose Cleaner > Ammonia > Rubbing Alcohol > Vinegar > Any solution containing more than 90% IPA (iso-propyl alcohol) • Solutions and cleaners to AVOID while cleaning cases with silicone in and around natural quartz (and other stone) surfaces include the following: > Acetate > Lacquer Thinner > Mineral Spirits > Paint Thinner > Windex® Without Ammonia (Windex® WITH Ammonia is Acceptable) > Formula 409® > Fantastik® > Bleach > Citrus cleaners (or Cleaners With Citrus in it)
Extreme Heat Protection	<p><u>Extreme Heat Protection:</u></p> <ul style="list-style-type: none"> • Natural quartz (and other stone) surfaces are extremely resistant to heat, and can withstand moderately high temperatures for brief periods of time without being damaged. • Although natural quartz (and other stone) surfaces are more heat resistant than any many others, ALL stone surfaces (including quartz) can be damaged by sudden and extreme temperature changes, especially near the edges. For this reason, always use a trivet or a hot pad to protect surfaces from extreme heat.
Extreme Scratch Protection	<p><u>Extreme Scratch Protection:</u></p> <ul style="list-style-type: none"> • Although natural quartz (and other stone surfaces) are extremely scratch resistant, surfaces should be protected by using a cutting board to avoid damage to knives.

TROUBLESHOOTING

NOTE: BOTH REMOTE AND SELF-CONTAINED UNITS ARE COVERED IN THE INFORMATION BELOW. IF YOUR CASE IS REMOTE, SELF-CONTAINED ITEMS WILL NOT APPLY TO YOUR CASE.

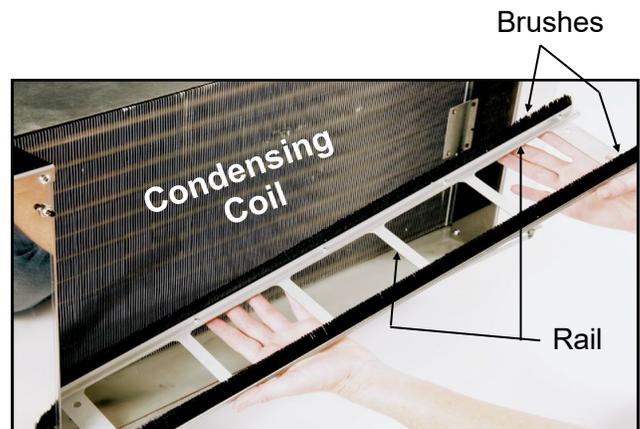
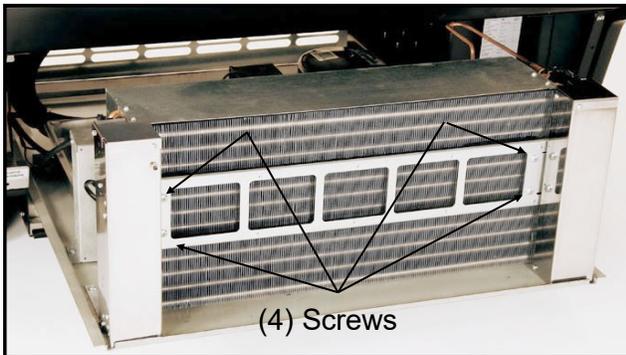
CONDITION	TROUBLESHOOTING
Case Not Lining Up	See Installation Section for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On The Floor	<u>Trained Service Providers Only</u> : Check that drain trap is free of debris.
	Check that the drain hose is correctly positioned over condensate pan (or floor drain, for remote units).
	Check store conditions. Conditions should be 55% humidity / 75 °Fahrenheit to prevent condensation.
	<u>Trained Service Providers Only</u> : Check that condensate pan is plugged in.
	<u>Trained Service Providers Only</u> : Check condensate pan float for proper operation.
	<u>Trained Service Providers Only</u> : Check that condensate pan is heating.
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	<u>Trained Service Providers Only</u> : Check condensate fan for cleanliness.
	<u>Trained Service Providers Only</u> : Unplug/power off fan motors. Check motor shafts for excessive bearing wear.
	<u>Trained Service Providers Only</u> : Check that fan motors are securely mounted in brackets.
	<u>Trained Service Providers Only</u> : Verify that fan blades are securely mounted to fan motors.
	<u>Trained Service Providers Only</u> : Check that nothing is preventing blade rotation.
	<u>Trained Service Providers Only</u> : Check that the fan shroud is properly secured.
Fans Are Not Working	Check that the MAIN power switch is on.
	<u>Trained Service Providers Only</u> : Check that fans are plugged in at the fan shroud.
	<u>Trained Service Providers Only</u> : Check for foreign material obstructing fan performance.
	<u>Trained Service Providers Only</u> : Check that fan blades freely rotate within fan shrouds
	<u>Trained Service Providers Only</u> : Check that power is going to fans
	<u>Trained Service Providers Only</u> : Check that fan wiring is connected on terminal blocks.

TROUBLESHOOTING, CONTINUED

NOTE: BOTH REMOTE AND SELF-CONTAINED UNITS ARE COVERED IN THE INFORMATION BELOW. IF YOUR CASE IS REMOTE, SELF-CONTAINED ITEMS WILL NOT APPLY TO YOUR CASE.

CONDITION	TROUBLESHOOTING
Case Lights Are Not Working, continued.	Check that Light switch is in the <i>on</i> position.
	Check for burned out bulbs. Turn lights off & replace.
	Clean dirt and dust from the bulbs to prevent flickering.
	<u>Trained Service Providers Only</u> : Check that voltage is at ballasts. If voltage is entering but not exiting ballast, ballast is faulty.
Control Display Is Flashing	<i>See Temperature Controller Section for Model's particular Thermostat Controller Operation's Settings</i>
Case Is Not Holding Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Unit needs product to be pre-chilled.
	Temperature changes during defrost mode but will return to normal. Fourth LED will indicate defrost cycle in progress.
	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 that condenser coil has been cleaned.
	Check air grilles for obstructions.
	<u>Trained Service Providers Only</u> : Check sight glass for flashing and/or low charge.
	<u>Trained Service Providers Only</u> : Check Set Point Temperature; it may be adjusted too high.
Condensing Unit Is Not Operating	Carefully review Controller's Settings for accuracy. <i>See Temperature Controller Section for Model's particular Thermostat Controller Operation's Settings.</i>
Digital Control Display Is Blank	Check that the MAIN power switch is on.
	<u>Trained Service Providers Only</u> : Check the circuit breaker box for tripped circuits.
System Is Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	<u>Trained Service Providers Only</u> : Check the circuit breaker box for tripped circuits.
Case Lights Are Not Working	Turn lights off and then check bulbs for proper connection.

PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
<p>Case Exterior (Self-Contained Units Only)</p>	<p>Monthly</p>	<p>Condensing Coil: <i>Disconnect power from case before cleaning the Condensing Coil!</i></p> <ul style="list-style-type: none"> • Remove Rear Grille (by removing 4 screws). • Roll / Slide out Refrigeration Assembly. Note: At initial slide-out, it may be necessary to remove two (2) Compressor Pan Shipment Screws for Refrigeration Assembly to slide out. • Use air pressure or industrial strength vacuum; clean dust and dirt that may collect on the Condenser Coil. See illustration below. • Caution! Coil fins are sharp. Handle with care! • Slide/Roll Condensing Unit Assembly back under case. • Replace Rear Grille to case (4 screws). • See illustration below.
<p>Case Exterior (Self-Contained Units Only)</p>	<p>Quarterly</p>	<p>Optional Clean Sweep™ Condensing Coil: <i>Disconnect power from case before cleaning Clean Sweep™ Condenser Coil!</i></p> <ul style="list-style-type: none"> • Remove Rear Grille (by removing 4 screws). • Slide/Roll out condensing unit assembly. • Remove the four (4) screws holding the Clean Sweep™ rails intact. • Remove the Clean Sweep™ rail. • Wash rails' brushes in hot water and mild soap solution. • If brushes are worn, they must be replaced. Call Technical Service Department to replace. Toll-Free number is listed at end of manual. • Clean Condensing Coil: Use air pressure or industrial strength vacuum; clean the dust and dirt that may collect on the Condenser Coil. • Caution! Coil fins are sharp. Handle with care! • Reattach Clean Sweep rail to condensing unit (4 screws). • Slide/Roll Condensing Unit Assembly back under case. • Replace Rear Grille to case (4 screws). • See photos below.



--- Above photos are taken after rear grille has been removed from case ---

PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Exterior	Quarterly	<p><u>Compressor Area (Self-Contained Units Only):</u> <i>Disconnect power from case before cleaning Condenser Coil!</i></p> <ul style="list-style-type: none"> • Slide/Roll out from under case. • Use moist cloth to wipe off dust & debris that collects on various parts.
	Quarterly	<p><u>Condensate Pan (Self-Contained Units Only):</u> Disconnect from receptacle box. Remove mounting screw(s) from base. Use a de-scaling solution (such as CLR® that will prevent corrosion, lime and rust) to clean pan. Rinse thoroughly; do not submerge in water.</p>
	Quarterly	<p><u>Under Case Cleaning:</u> Once refrigeration package is clear of unit, vacuum under case to remove all dust and dirt that may collect under case.</p>
Case Interior	Quarterly	<p><u>Tub, Coil and Drain:</u> Remove evaporator fan panel and clean tub, coil and drain with warm water and mild soap solution. Remove any debris that may clog drain.</p>
	Quarterly	<p><u>Fan Blades, Motor, and Bracket:</u> Wipe down each blade, motor and bracket with moist cloth.</p>
	Quarterly	<p><u>Honeycomb:</u> Remove the honeycomb. Vacuum, then clean with warm water and soap. See <i>HONEYCOMB AIR DIFFUSER REMOVAL / REPLACEMENT</i> sheet in this manual for removal / replacement instructions.</p>

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 ---

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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



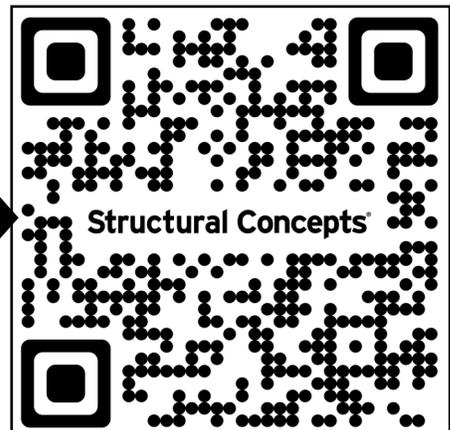
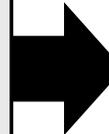
Carel® iJF Platform



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 A.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.

