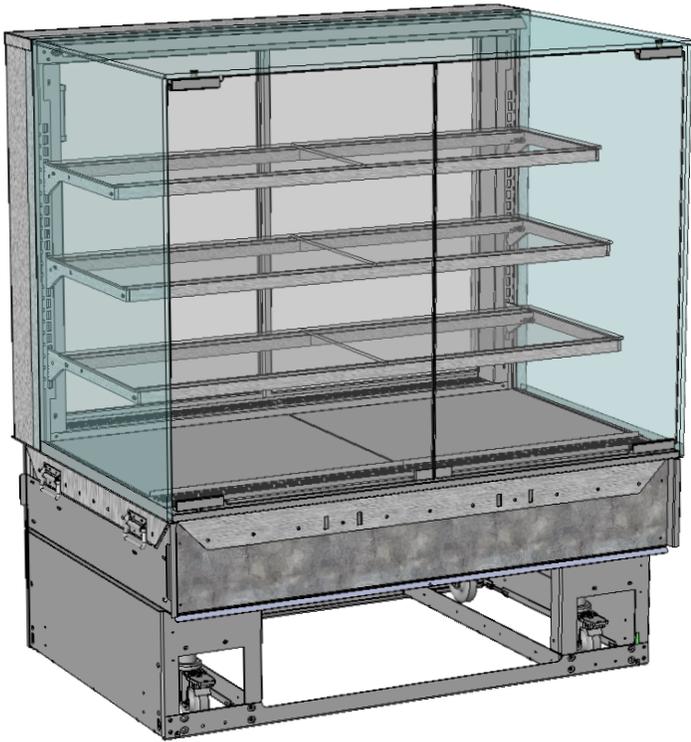


# Reveal<sup>®</sup> User Manual

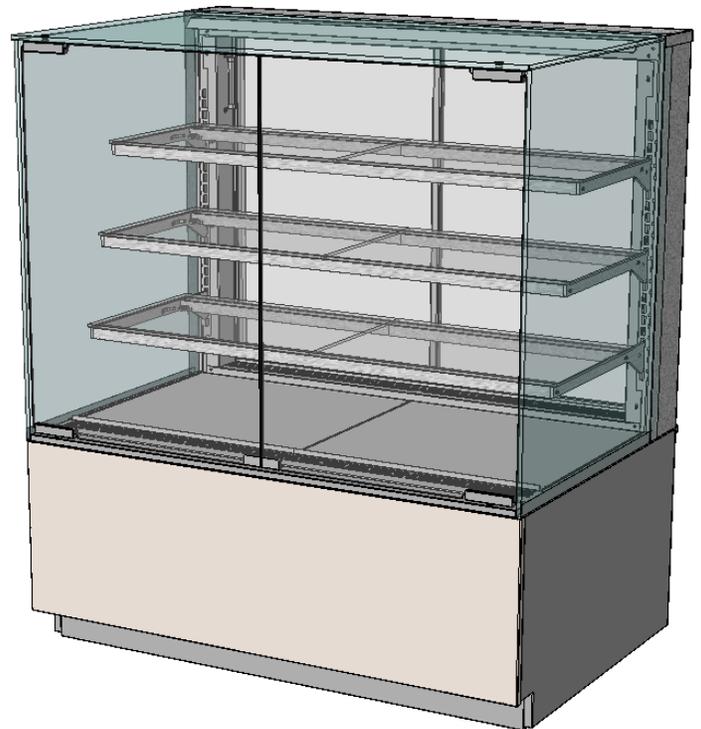
SCC P/N  
20-18041

**REVEAL<sup>®</sup> FREE-STANDING HEATED SERVICE MERCHANDISERS**

- > REAR SLIDING DOORS
- > **CAUTION! DO NOT PUSH OR PULL ON UPPER GLASS ENCLOSURE!**
- > **ONLY USE HANDLES (AT EACH END OF CASE) TO PUSH OR PULL CASE INTO POSITION!**
- > SEE PAGES 10-11 FOR PANEL, GRILLE & TOE-KICK ATTACHMENT INSTRUCTIONS



Model NR4855HSV Free Standing Unit Shown  
BEFORE Front/Side Cladding and  
Toe-Kick Have Been Attached



Model NR4855HSV Free Standing Unit  
Shown AFTER Front/Side Cladding and  
Toe-Kick Have Been Attached

**Structural Concepts<sup>®</sup>**

DELIVERING FRESH. ALWAYS.<sup>™</sup> Structural Concepts Corp. · 888 E. Porter Rd · Muskegon, MI 49441 Phone: 231.798.8888 Fax: 231.798.4960 · [www.structuralconcepts.com](http://www.structuralconcepts.com)

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**REVEAL® FREE STANDING HEATED SERVICE MODEL APPLICABILITY & DIMENSIONS**

<b>Model</b>	<b>Upper Display Height</b>	<b>Overall Height</b>	<b>Case Depth x Length</b>
NR3633HSV	13 5/8"UDH	32 7/8"OH	33"D x 35 3/4"L
NR3640HSV	20 3/8"UDH	39 5/8"OH	33"D x 35 3/4"L
NR3647HSV	27 7/8"UDH	47 1/8"OH	33"D x 35 3/4"L
NR3655HSV	35 1/4"UDH	54 5/8"OH	33"D x 35 3/4"L
NR4833HSV	13 5/8"UDH	32 7/8"OH	33"D x 47 3/4"L
NR4840HSV	20 3/8"UDH	39 5/8"	33"D x 47 3/4"L
NR4847HSV	27 7/8"UDH	47 1/8"OH	33"D x 47 3/4"L
NR4855HSV	35 1/4"UDH	54 5/8"OH	33"D x 47 3/4"L

**OVERVIEW**

- These Structural Concepts Reveal® heated cases are designed to hold pre-heated, perishable, packaged foods at 140 °F to 180 °F (60 °C to 82 °C).
- Cases should be installed and operated according to this operating manual's instructions to insure proper performance. Improper use will void warranty.
- Product must be pre-heated before placing in merchandiser. This case is NOT designed to heat product from cold or ambient condition.
- All heating elements are thermostat controlled for individual adjustment.

**THERMOMETER**

- Thermometers in equipment reflect internal air temperature only (not actual food temperature).
- Use probe thermometers to determine actual product temperatures.

**COMPLIANCE**

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

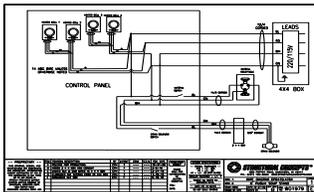
**WARNINGS**

- Please read the important warnings in this document carefully as they can prevent injury or death.
- See next page for **PRECAUTIONS**.



**ATTENTION CONTRACTORS**

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



**WIRING DIAGRAM FORMAT & LOCATION**

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



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



**WARNING**  
 Decks and shelves may be hot! Disconnect and allow to cool before cleaning or removing from case.



**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.
- Please read carefully!



**CAUTION! LAMP REPLACEMENT GUIDELINES**  
LED lamps reflect specific size, shape and overall design.  
Any replacements must meet factory specifications.

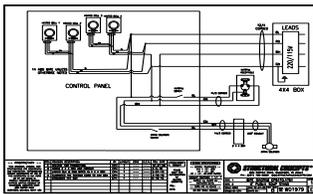


**CAUTION! GFCI BREAKER USE REQUIREMENT**  
If N.E.C. (National Electric Code) or your local code requires GFCI (Ground Fault Circuit Interrupter) protection, you **MUST** use a GFCI breaker in lieu of a GFCI receptacle.



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

- Thermometers and thermostats reflect air temperatures **ONLY**.
- For **PRECISE** food temperatures, use calibrated food thermometers **ONLY**.



**WIRING DIAGRAM FORMAT & LOCATION**

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



**CAUTION!**

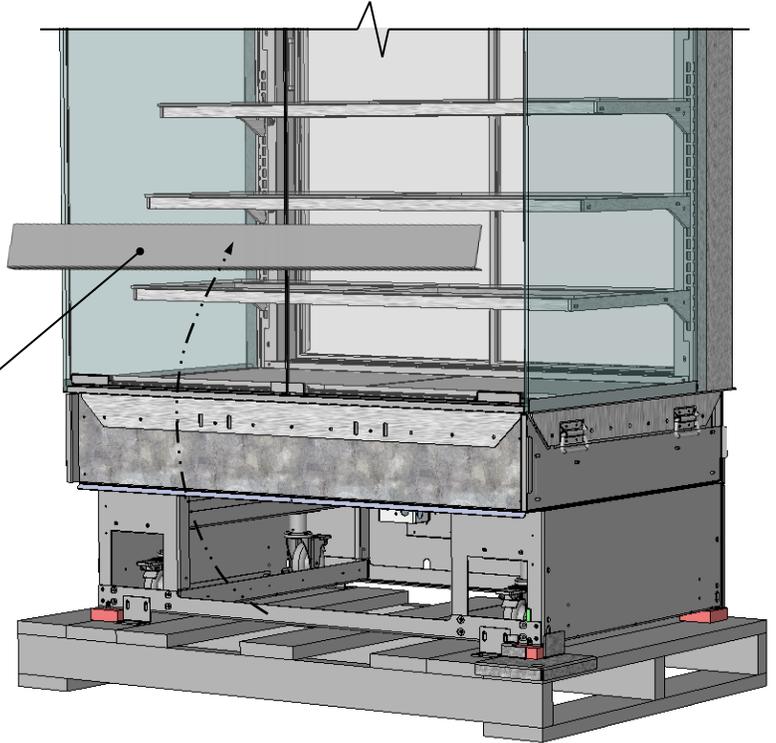
- To prevent sagging or breakage, do not exceed **5 LBS (2.3 KG)** weight load per top glass section (between vertical supports).
- To prevent scratching or marring, do not place **ANY** items on glass.

## INSTALLATION: TOE-KICK REMOVAL / DISCONNECTING CASE FROM PALLET

### **1. Remove Front Toe-Kick From Case**

- To prevent damage to case, remove front toe-kick from case before removing from pallet.
- Toe-kick is held in place by magnets only. No screw removal is required.
- Place front toe-kick in secure location while removing case from pallet.

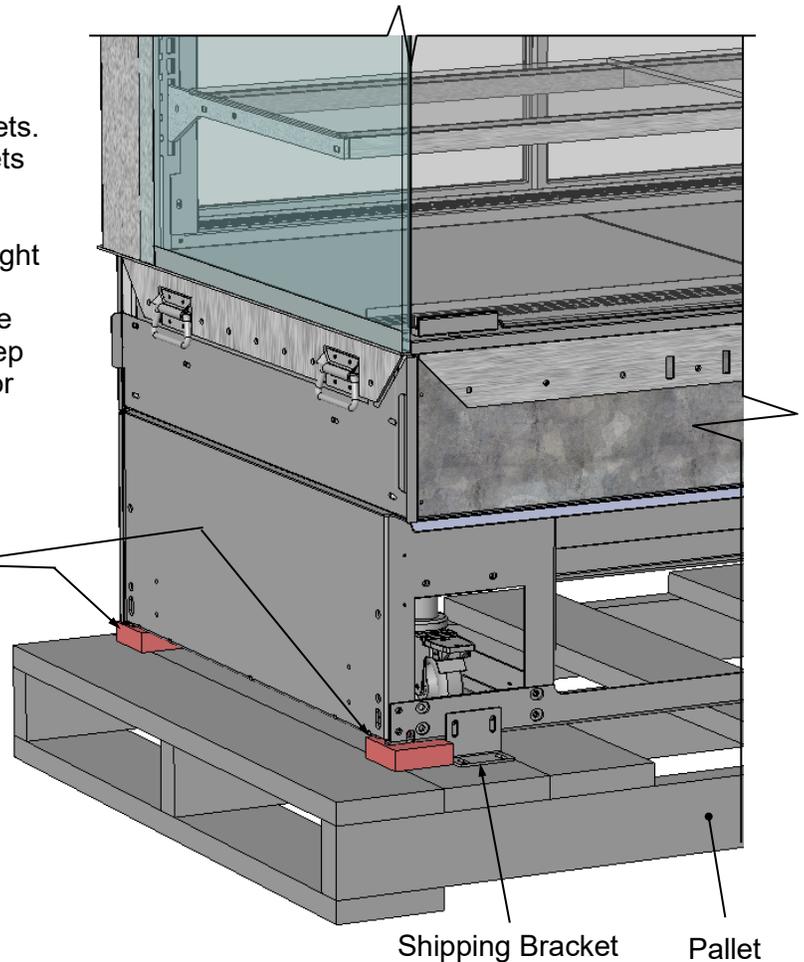
Front Toe-Kick



### **2. Disconnect Case From Pallet**

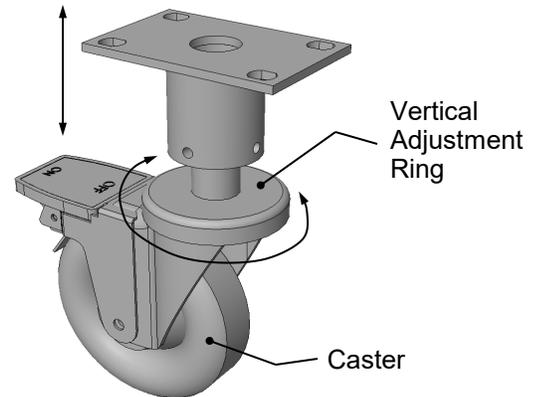
- Remove screws from shipping brackets. Remove and discard shipping brackets from pallet.
- Place J-bar/pry under base frame. Raise case up from pallet to take weight off casters.
- With case raised, lower casters all the way down against pallet (see next step for detailed instructions on lowering or raising casters).
- Remove rubber shipping blocks.

Rubber Shipping Blocks, (Typ.)



### 3. Caster Height: Raising and Lowering

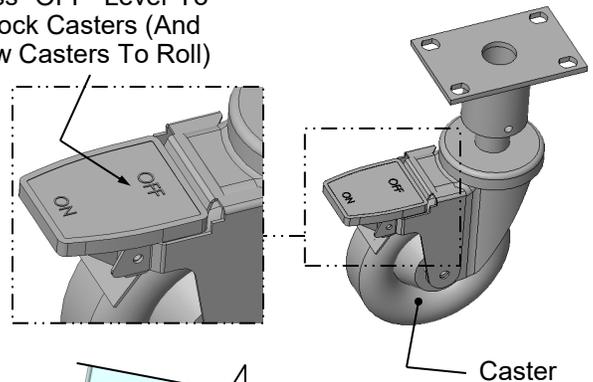
- Raise or lower casters (to adjust case height) by rotating casters' vertical adjustment rings.
  - Rotate vertical adjustment ring clockwise to lower caster (and increase height of case).
  - Rotate vertical adjustment ring counter-clockwise to raise caster (and decrease height of case).



### 4. Caster Rolling Capability: Unlocking

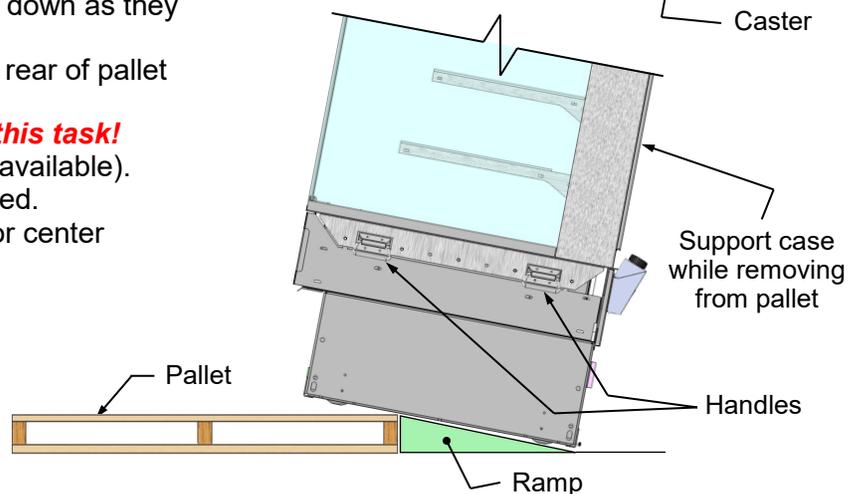
- Important! Case is shipped with caster mechanisms factory set at **ON** (locked) to prevent case from rolling.
- Unlock casters by pressing **OFF** on the caster mechanism.
- See illustration at right.

Press "OFF" Lever To Unlock Casters (And Allow Casters To Roll)



### 5. Carefully Remove Case From Pallet

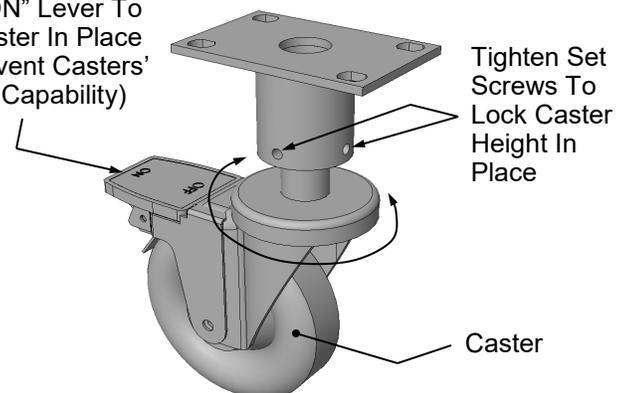
- Check that casters are lowered as far down as they will go (as instructed in step #4).
- Use handles to carefully slide case to rear of pallet (see illustration at right).
- **Caution! 4 people are required for this task!**
- Carefully lower to floor (using ramp if available).
- Slide pallet from under case as required.
- Maintain support of case at all times or center of gravity may cause case to fall.
- See illustration at right.



### 6. Casters: Locking

- After case is at desired position (and height), use level to check that case is level and plumb.
- Readjust height as needed (as instructed in step #4).
- **Locking Height:** After proper height (and positioning) of case is attained, tighten the two (2) set screws to lock each caster's height in place.
- **Locking Movement:** Then, to prevent casters' rolling capability, lock casters by pressing ON atop the "ON" and "OFF" lever mechanism (shown at right). Case will now be secured at its new location.

Press "ON" Lever To Lock Caster In Place (And Prevent Casters' Rolling Capability)



## INSTALLATION, CONT'D: SHELVING ASSEMBLY COMPONENTS

### 7. Shelf Assembly Components

- Check that glass shelving is in proper position before placing product in case
- Shelves may be adjusted vertically or entirely removed from merchandiser.

- Metal shelving brackets ARE NOT able to be angled. They are at a fixed 90° position.
- These components comprise EACH shelf assembly.

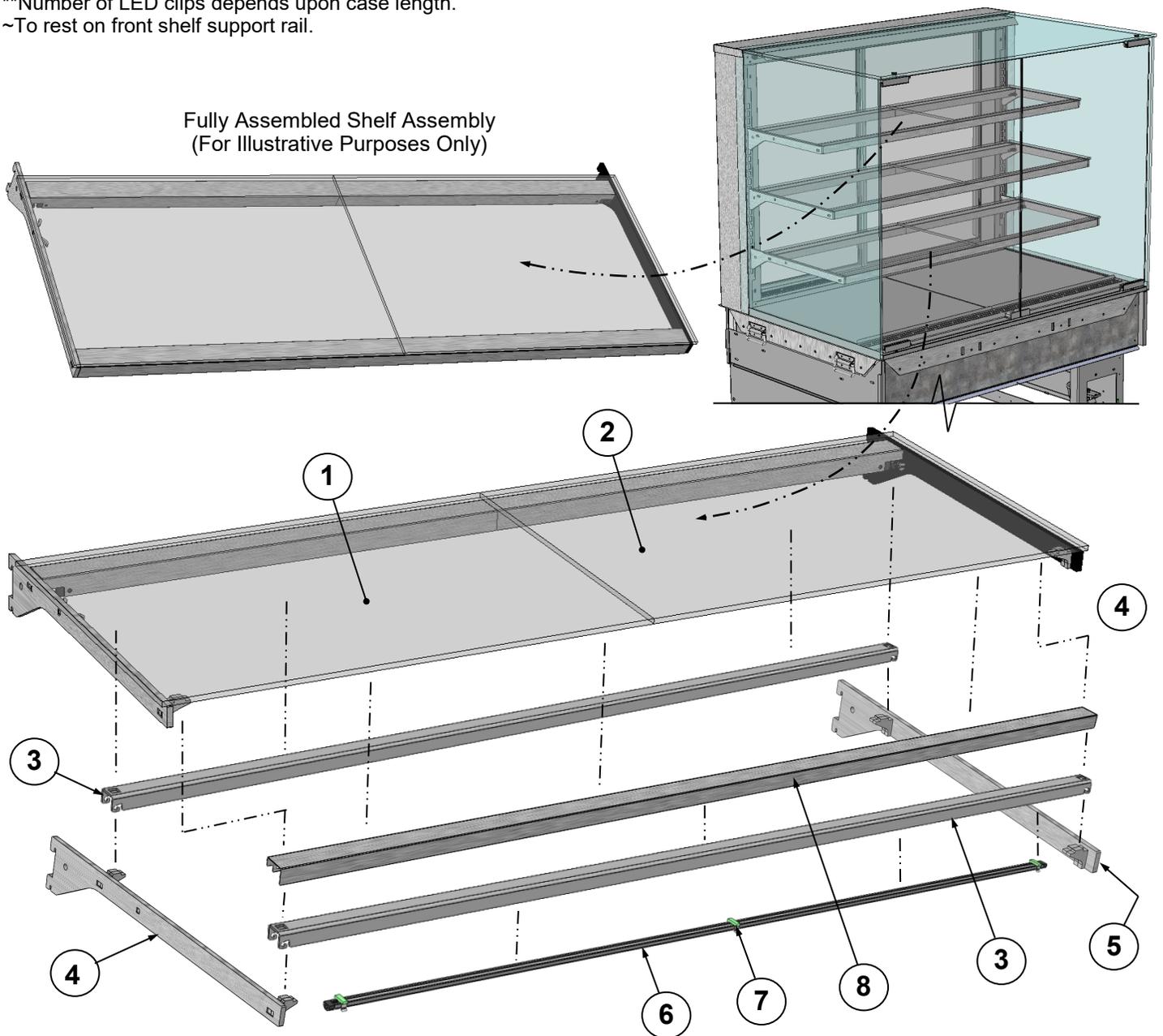
#### SHELF ASSEMBLY COMPONENTS

P/N	COMPONENT NAME	AMOUNT	P/N	COMPONENT NAME	AMOUNT
1	GLASS, LEFT HAND*	1	5	BRACKET, RIGHT HAND	1
2	GLASS, RIGHT HAND*	1	6	LIGHT, LED	1
3	REAR/FRONT SHELF SUPPORT RAIL	2	7	CLIP, LED	2-3*
4	BRACKET, LEFT HAND	1	8	FRONT COVER~	1

\*Assembled with rear cover (to rest on rear support rail) before leaving factory.

\*\*Number of LED clips depends upon case length.

~To rest on front shelf support rail.



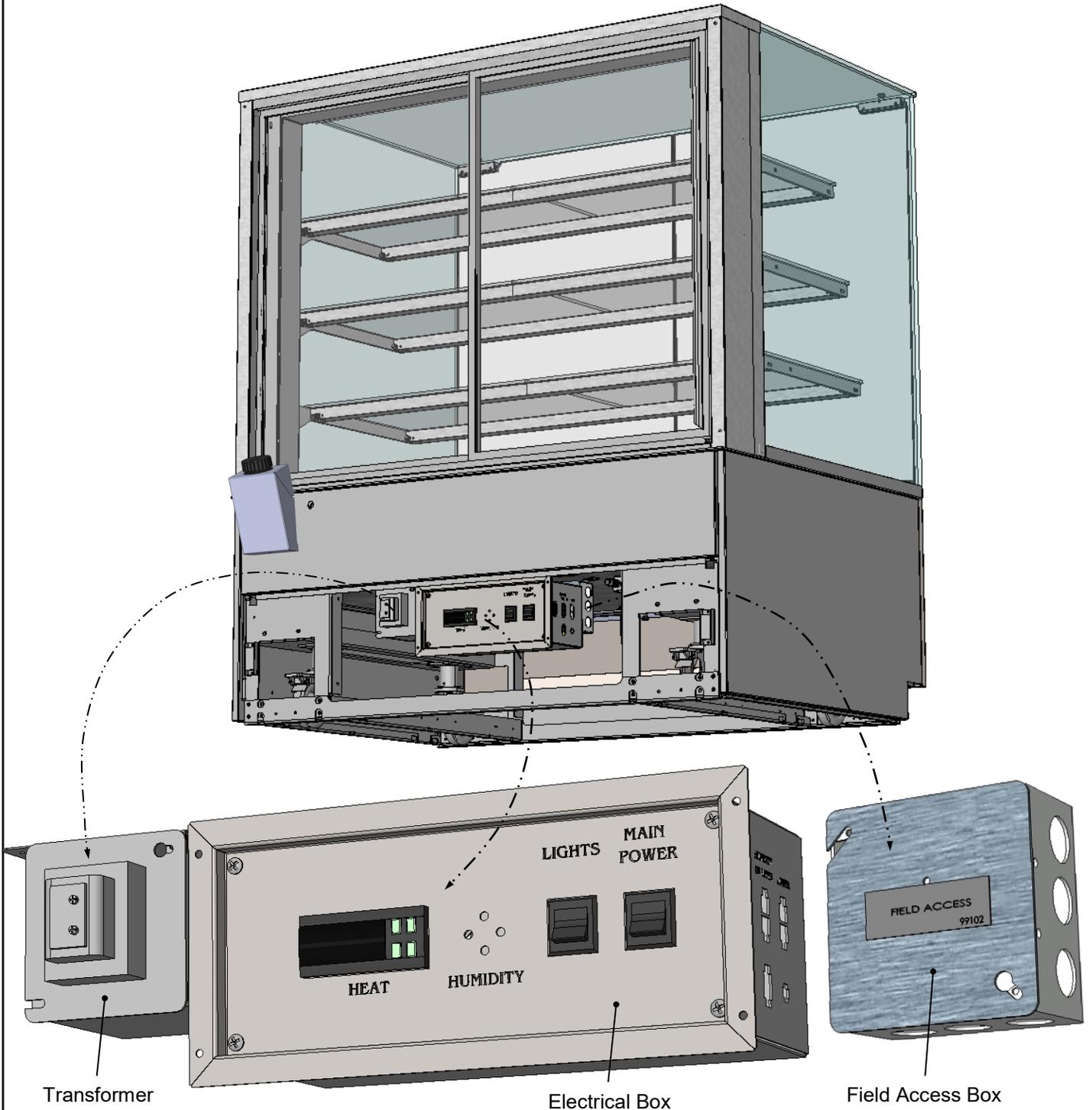
## INSTALLATION, CONT'D: PLUG IN UNIT / TURN ON MAIN POWER SWITCH AND LED LIGHT SWITCH

### **8. Plug Case In**

- Check field access box for factory-supplied power cord.
- Plug case into electrical outlet.
- See enlarged illustration below-right.

### **9. Main Power Switch / LED Light Switch**

- Main power switch and LED lights switch is accessible at case rear electrical box.
- Turn on main power switch and LED lights switch.
- See partially-disassembled illustration below.



## INSTALLATION, CONT'D: ATTACHING FRONT PANEL COMPONENTS

### 10. Shipping Brace

- Shipping brace keeps case secure during shipment as well as during positioning in store.
- After case is in position, shipping brace may be removed from case front (though not required).

### 11. Attaching Front Panel Components

- Carefully remove components from packaging.
- Note: All front panel components may be attached to case via magnets (WITHOUT screw attachments).
- Attach front toe-kick to case (via lower magnets).

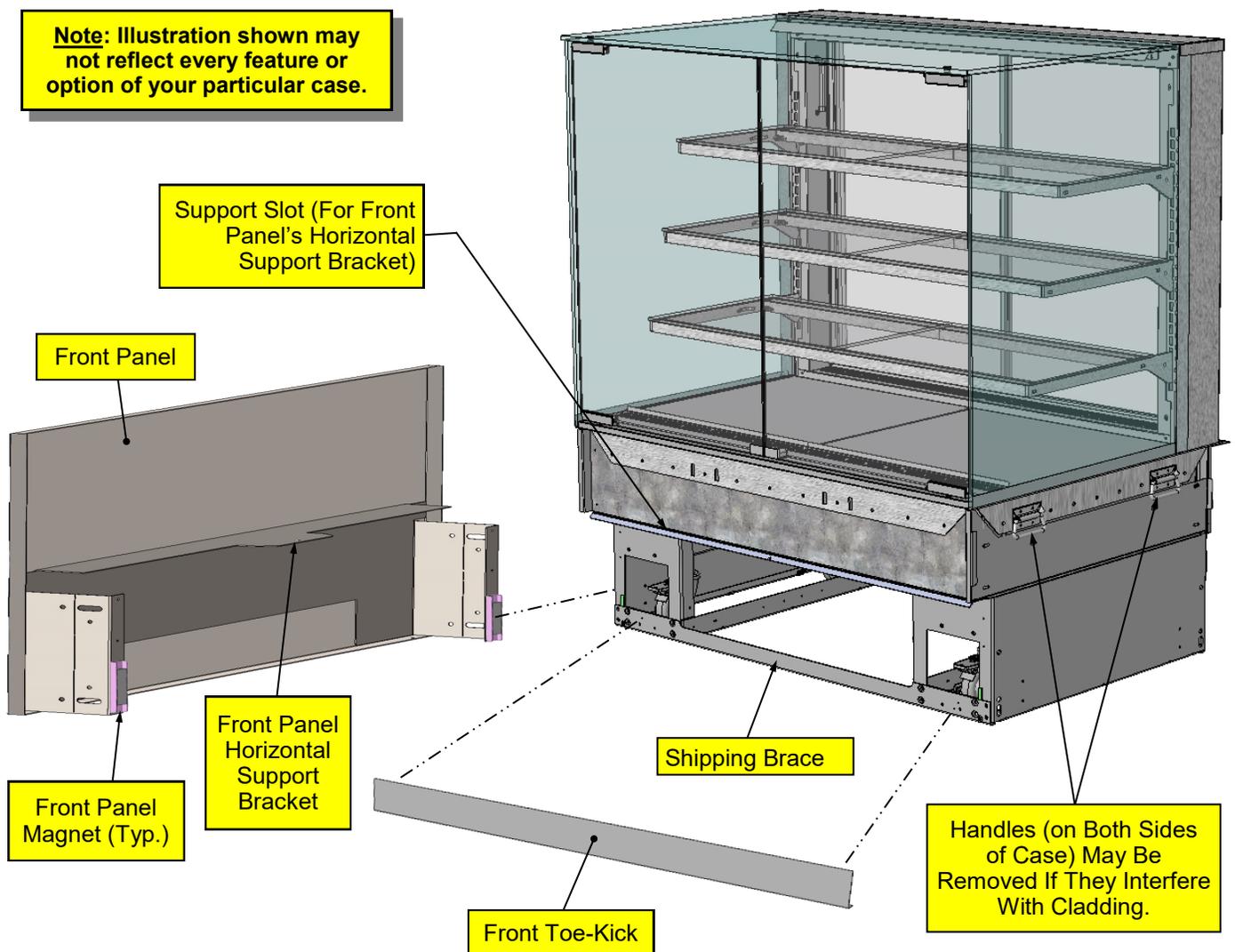
- Slide front panel horizontal support bracket into case's support slot (line up arrows).
- Then, slide front panel into case until it attaches to case via lower magnets.
- See illustration below.

### 12. Handles On Sides of Case

- Handles may remain on case after it has been moved into position and cladding is attached.
- However, if handles interfere with the placement of cladding, they may be removed.

>> See Next Page For Instructions on **ATTACHING SIDE PANELS, REAR PANEL AND GRILLE.**

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



## INSTALLATION, CONT'D: ATTACHING SIDE PANELS AND REAR PANELS

### 13. Attaching Side Panels

- Attach side panels to case using slot/hook method.
- Use latches at case rear to firmly attach side panels to case.
- See illustrations below.

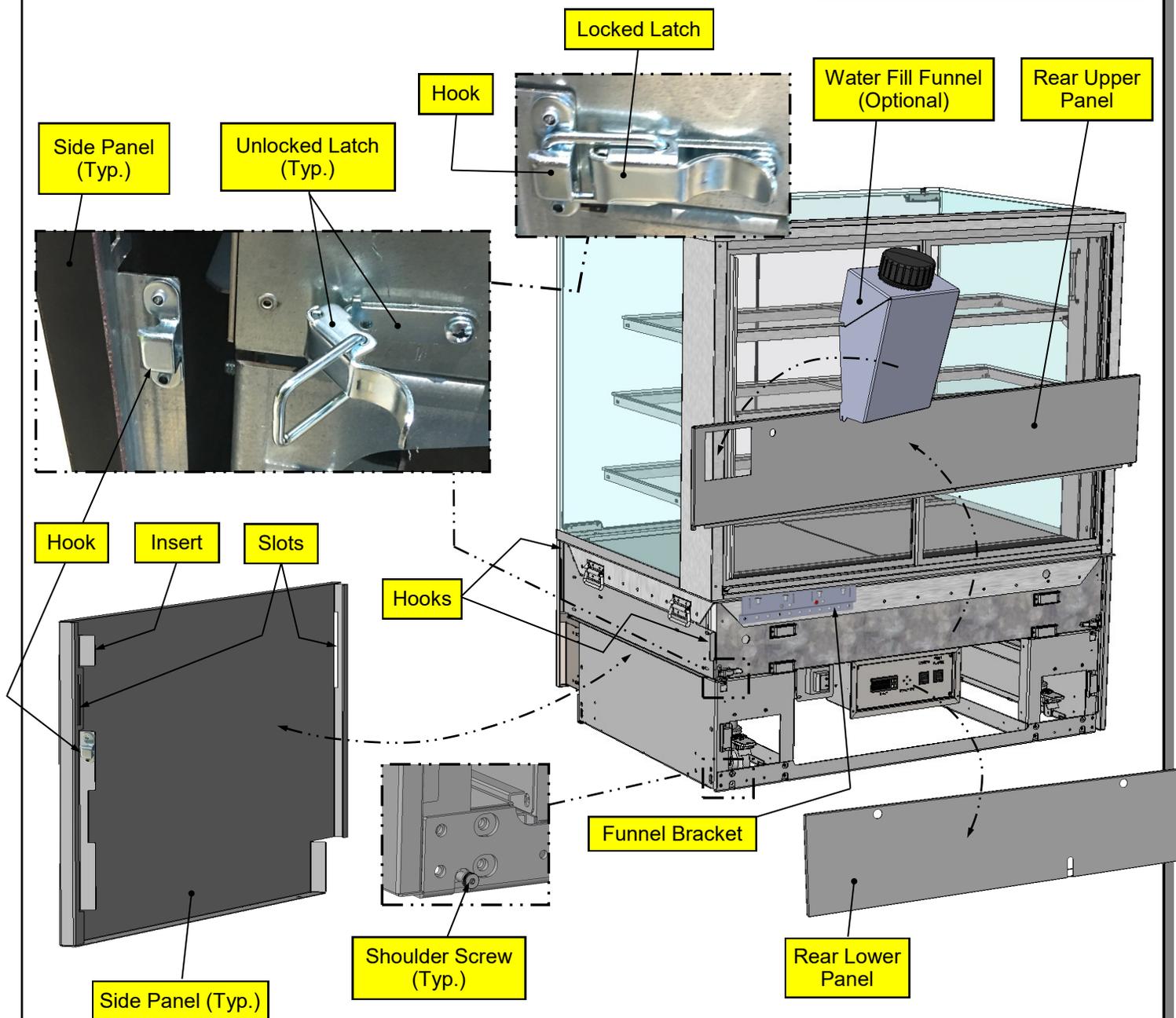
### 14. Attaching Rear Upper Panel

- Place rear upper panel onto care rear.
- Four (4) magnets will hold it firmly in place.
- See illustration below

### 15. Attaching Rear Grille

- Use finger holes to place rear grille onto lower rear of case. Magnets will hold it firmly in place.
- >> **Note:** Components may be removed in reverse order they were shown being attached on this sheet.

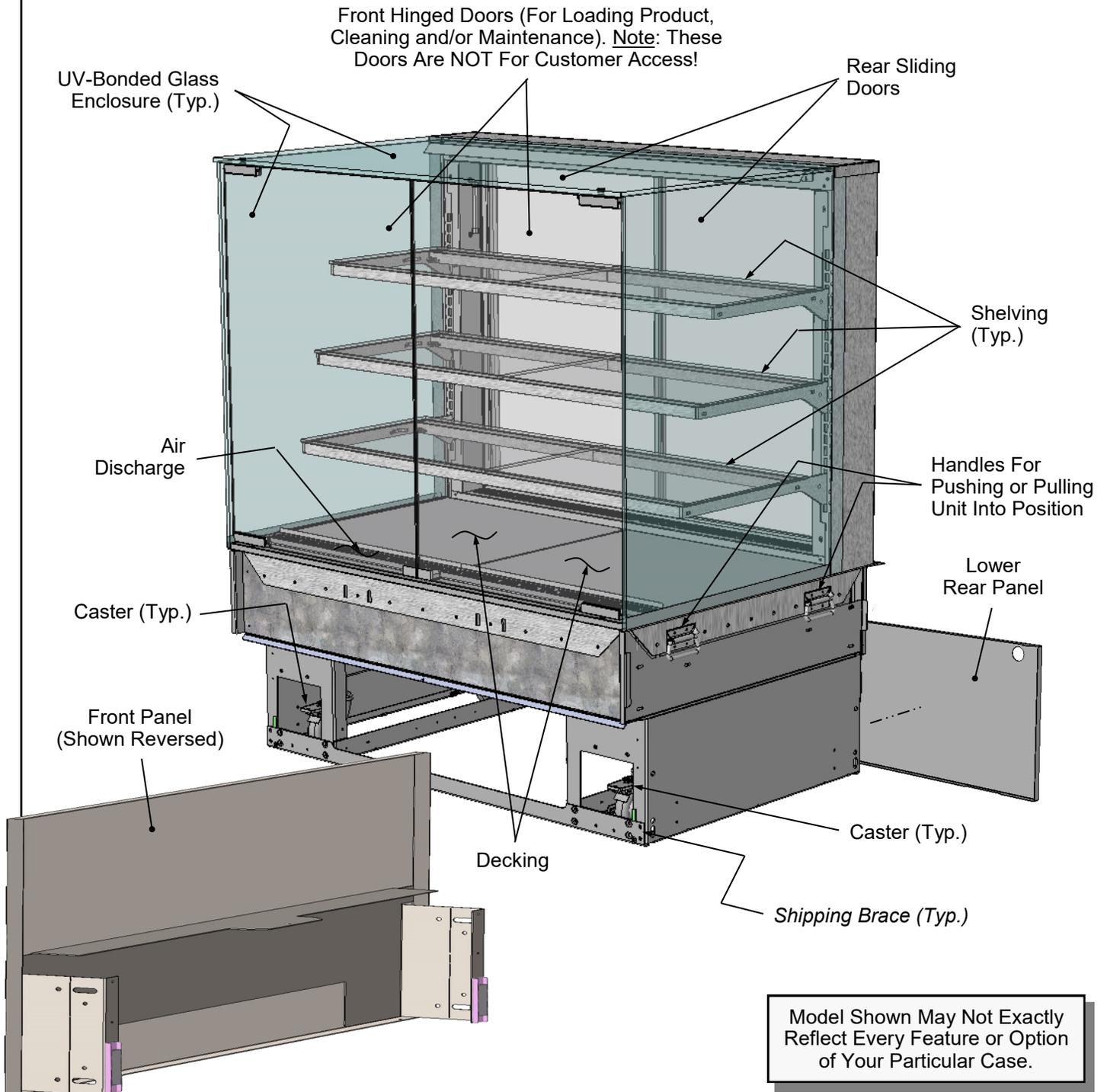
**Note:** Illustration shown may not reflect every feature or option of your particular case.



## CASE DESIGN: FRONT VIEW OF FREE STANDING, SERVICE MERCHANDISERS

### 1. Front View Of Free Standing, Service Merchandisers

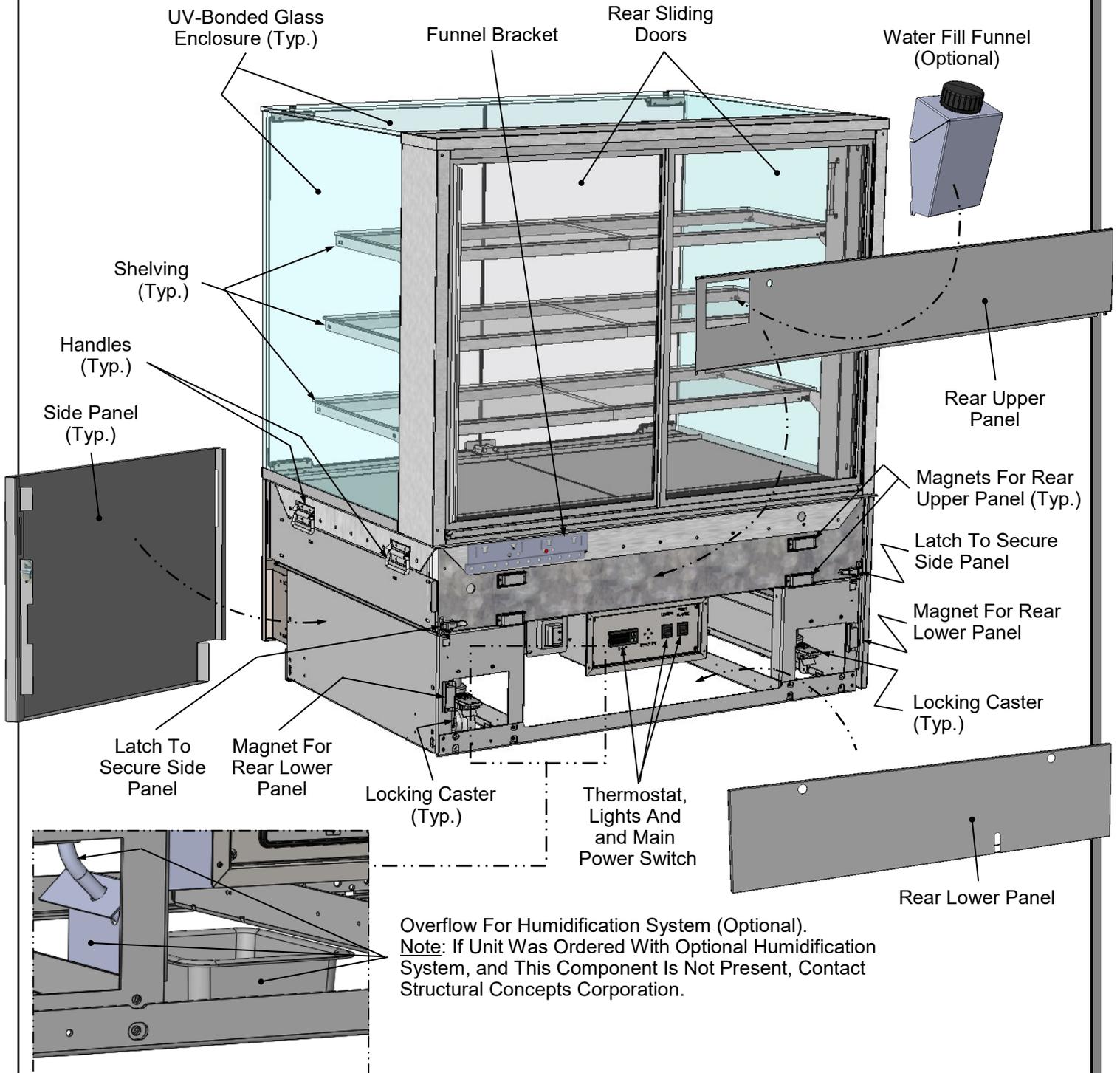
- Model NR4855HSV is illustrated below.
- Side cladding, front base kick & front panel are removed for illustrative purposes only.
- **As these units are for service cases only, front hinged doors are for loading product, cleaning and/or maintenance (NOT for customer access)!**
- See next page for rear view.



**2. Rear View Of Free-Standing, Service Merchandisers**

- Random free-standing unit is illustrated below.
- Rear panels, side cladding & shipping brace are removed for illustrative purposes only.

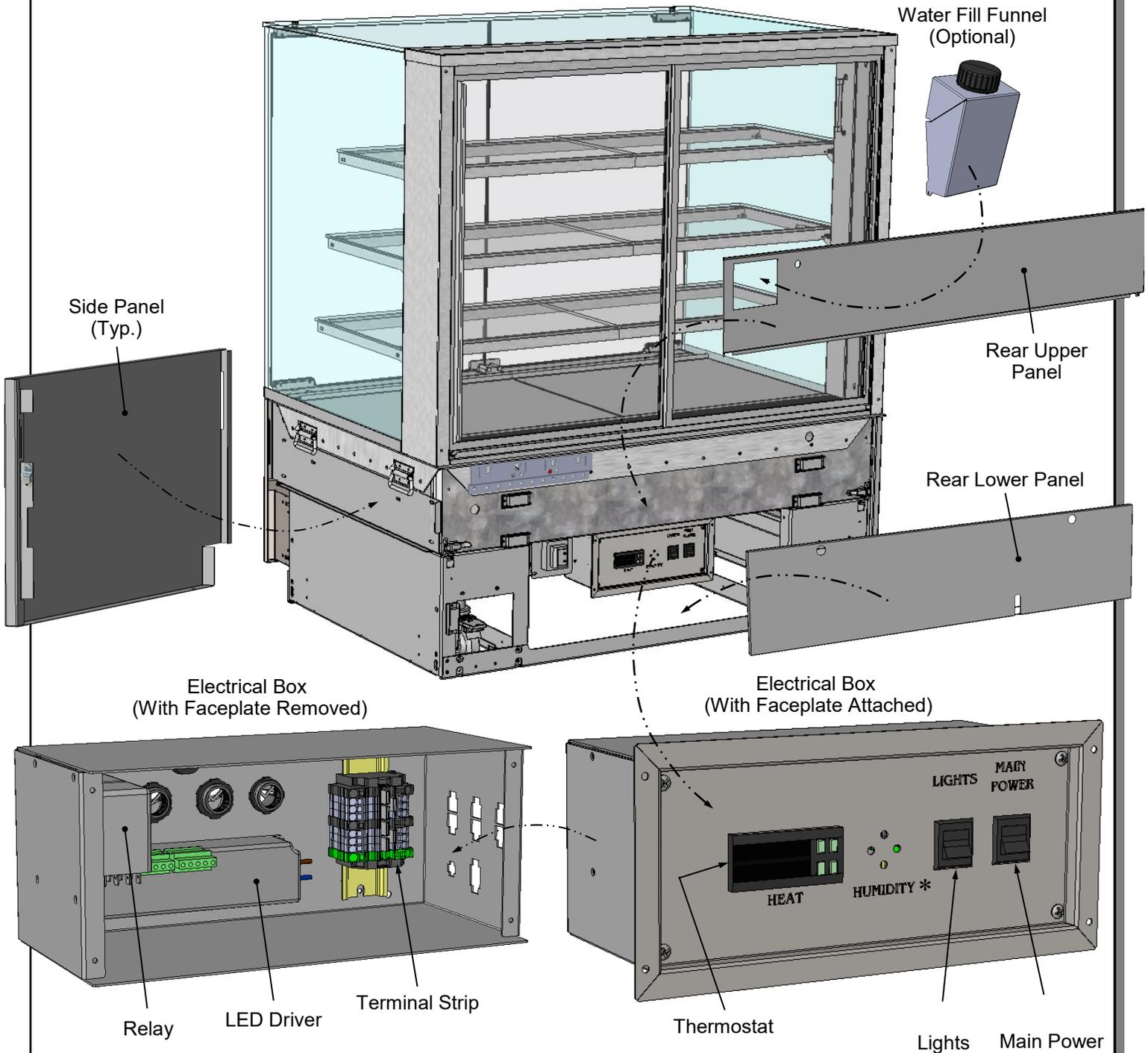
Model Shown May Not Exactly Reflect Every Feature or Option of Your Particular Case.



**3. Thermostat / LED Driver / Lights / Main Power Switch**

- Remove rear lower panel by lifting up and off; no screw removal is required.
- Remove 4 screws from the controller/DC driver box cover to access electrical components.

- Note: Only certified electricians are to access electrical components in case.
- After accessing controller, return components to case in reverse order they were removed.



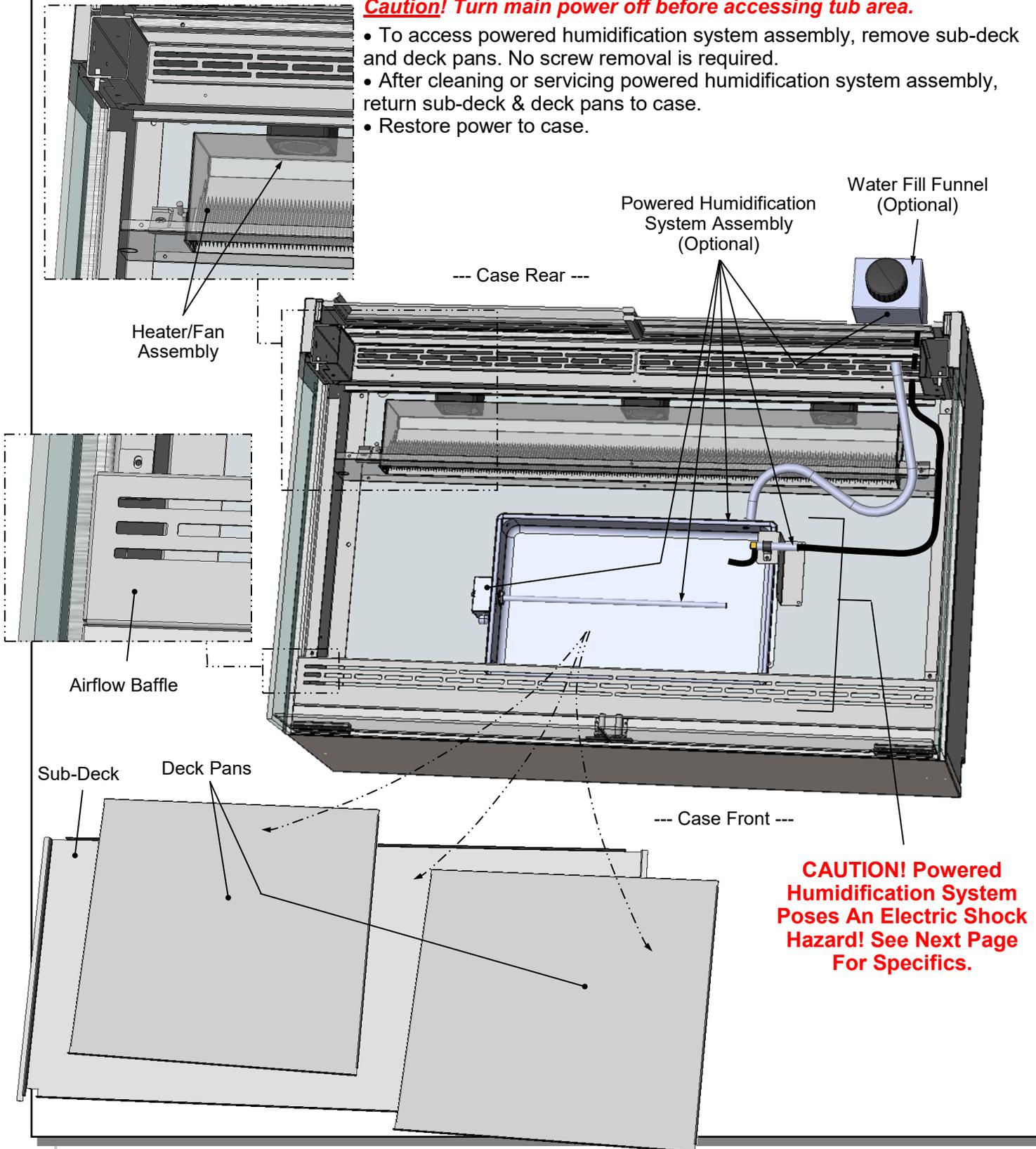
\*Note: If "HUMIDITY" etching is on faceplate, simply ignore; such markings are not applicable to cases in this manual.

#### 4. Tub Area Access / Heater / Powered Humidification System (Optional) Access

**Note:** Powered humidification system assembly service is to be performed by refrigeration/electrical contractors only.

**Caution!** Turn main power off before accessing tub area.

- To access powered humidification system assembly, remove sub-deck and deck pans. No screw removal is required.
- After cleaning or servicing powered humidification system assembly, return sub-deck & deck pans to case.
- Restore power to case.



**CAUTION!** Powered Humidification System Poses An Electric Shock Hazard! See Next Page For Specifics.

**5. Powered Humidification System (Optional)**

**CAUTION! ELECTRIC SHOCK HAZARD!**

- **Overfilling Powered Humidification system can cause electrical shock.**
- **LED indicator will alert case operator when MAX CAPACITY has been reached.**
- **DISCONTINUE filling the funnel (shown at right) when Powered Humidification system is FULL (and MAX CAPACITY is reached).**

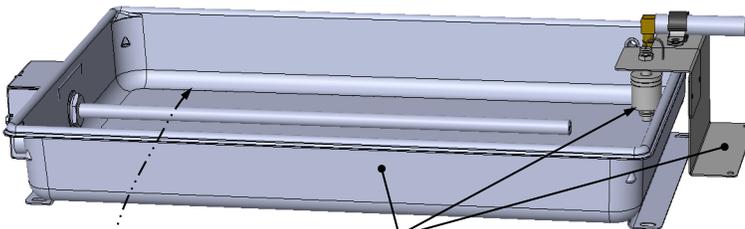
**6. Water Capacity - Important! Please Read!**

- Capacity of MOST units is 7 quarts.
- Capacity of SMALLER units (NR3633HSV, NR4833HSV and ALL PASSIVE HUMIDIFICATION UNITS ) is only 3.5 quarts
- At initial fill, ADDITIONAL water will be required for the water fill funnel.
- Do NOT overfill (see above for warnings).
- **IMPORTANT! If humidification system overfills, you must check overflow at rear of case. See next page its location and illustration.**

- **IMPORTANT! If MAX CAPACITY light malfunctions, check overflow periodically to assure that water does not overflow onto floor.**

**7. Type of Water**

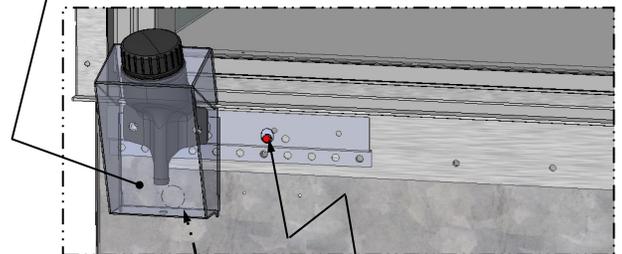
- Use ONLY distilled water (to prevent corrosion of electrical & mechanical components).
- DO NOT use deionized water, as it may damage heating element.
- Regardless of type of water utilized, regular cleaning must be performed to prevent residue, lime and mineral deposits. See **PREVENTIVE MAINTENANCE** section in manual for funnel and cleaning instructions.



Powered Humidification System  
(To Be Attached To Tub)

Water Fill Funnel  
(Optional) / Shown  
Transparent

--- Rear View of Case ---

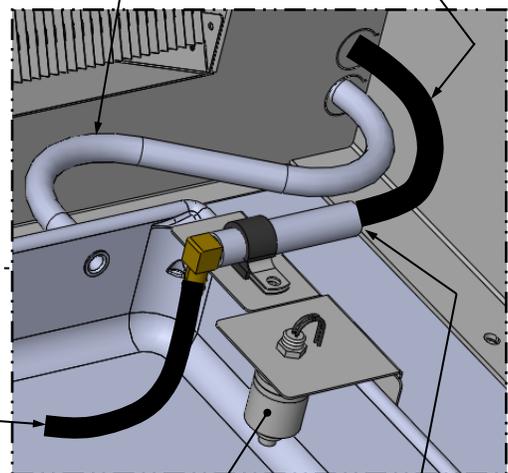


**MAX CAPACITY  
WHEN ILLUMINATED**

21-18808

Hose From  
Humidification  
System To Overflow

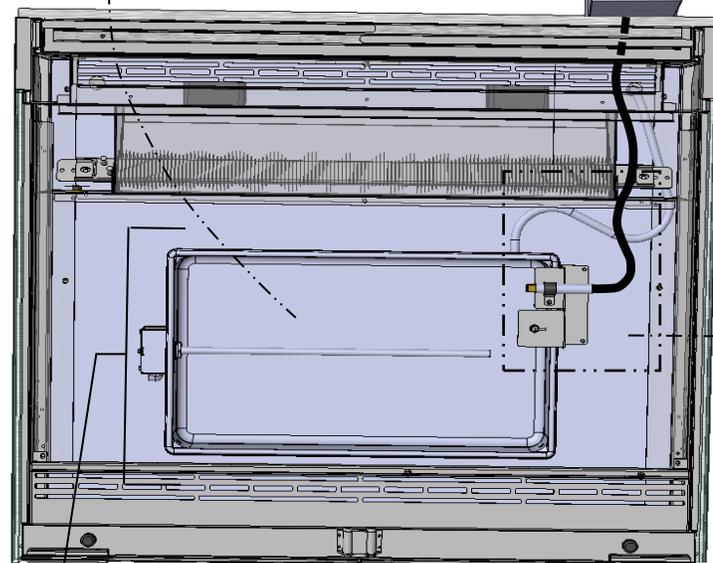
Hose From Water Fill  
Funnel (Optional) To  
Humidification System



Water  
Inlet  
Hose

Float (Activates  
Humidification System  
Based On Water Level)

Connect  
Quick-Connect Coupling  
Here (For Water Inlet)

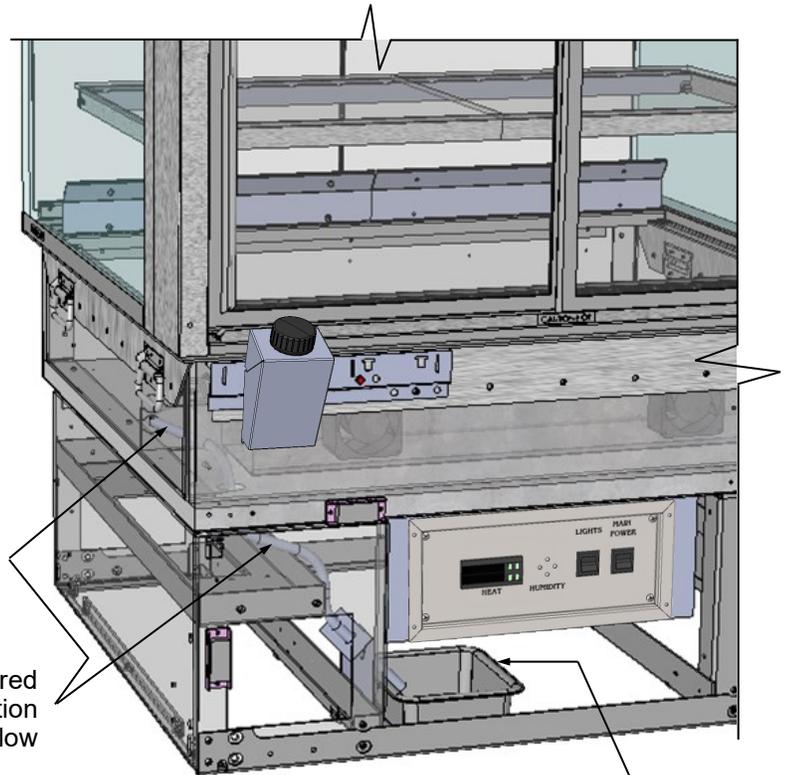


Powered  
Humidification System

--- Case Front ---

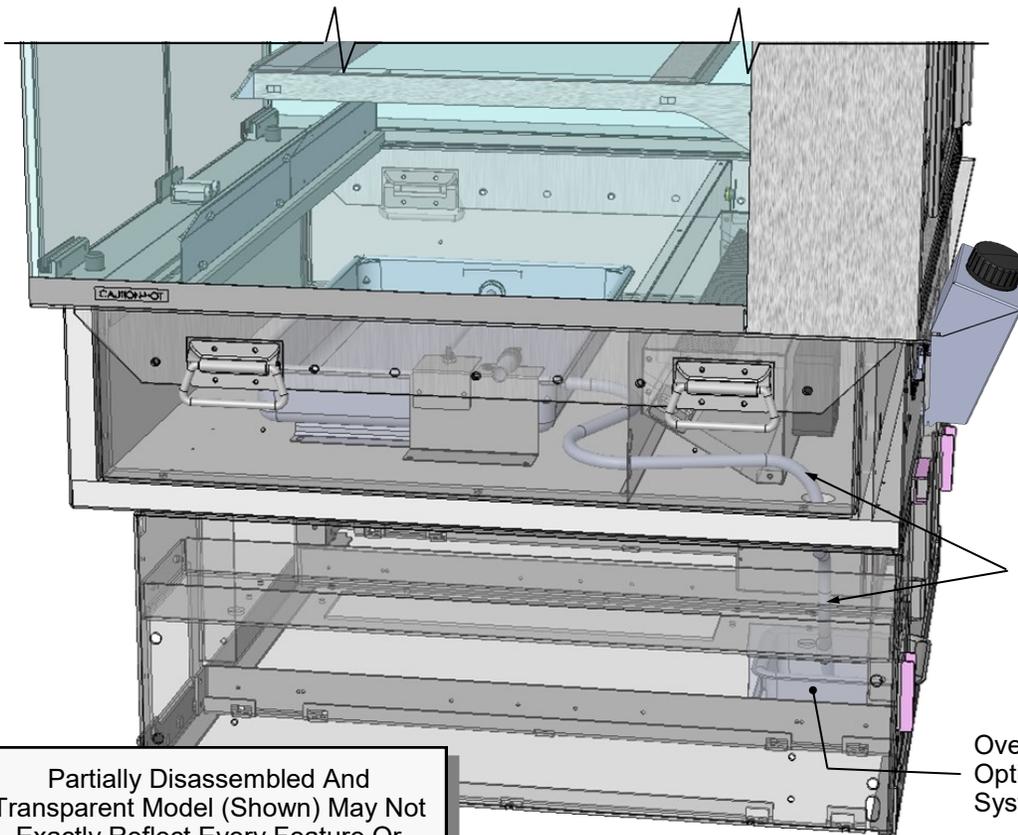
**8. Overflow Systems (For Powered or Passive Humidification Systems)**

- An easily viewable overflow is located at the lower-rear of case.
- **Important! Overflow MUST BE emptied regularly to prevent overflowing onto floor!**
- **IMPORTANT! If Humidification system overfills, you must check overflow (shown).**
- **IMPORTANT! If MAX CAPACITY light malfunctions, you must check overflow periodically to assure that water does not overflow onto floor.**
- Partially transparent and disassembled illustrations are shown at right and below.



Hose From Optional Powered (or Passive) Humidification System To Overflow

Overflow For Optional Humidification System



Hose From Optional Humidification System To Overflow

Overflow For Optional Humidification System

Partially Disassembled And Transparent Model (Shown) May Not Exactly Reflect Every Feature Or Option of Your Particular Case.

**9. Passive Humidification System (Optional)**

- Passive Humidification Systems are **ONLY ON SMALL UNITS** (NE3613HSV & NE4813HSV).
- **Cases with these systems DO NOT have humidity controlled by thermostat (at case rear).**
- Instead, humidity is controlled by sliding the outer cover's control lever either left or right (as shown below).

**10. Humidity Control Via Lever and Key**

> Access the humidity control lever by inserting the control lever key **THROUGH** front grille slot and attaching it to outer cover's lever.

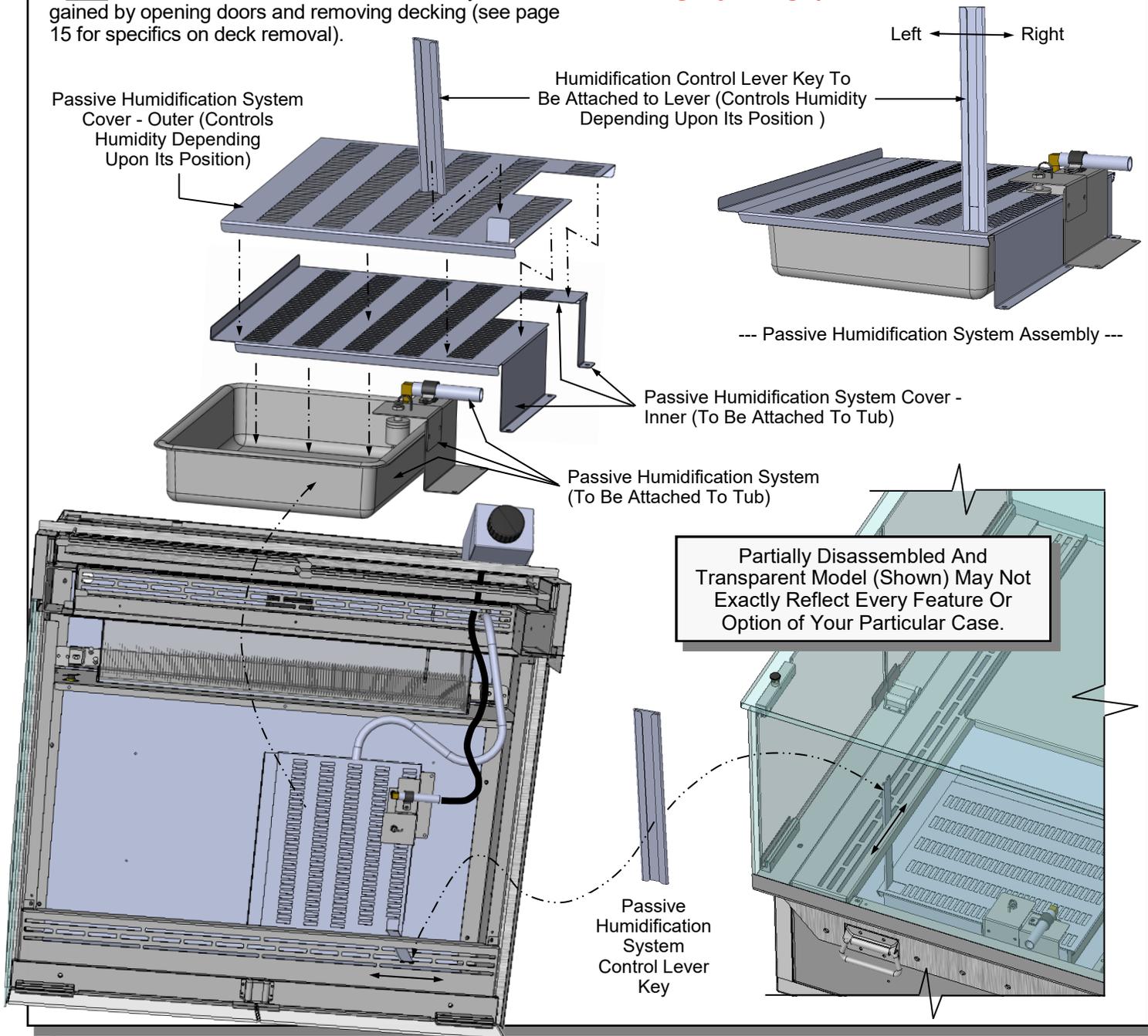
> Note: Access to humidification cover/lever may ALSO be gained by opening doors and removing decking (see page 15 for specifics on deck removal).

A. If product seems to be drying out, simply slide the lever to the left (**OPEN POSITION**); more humidity will fill case, making product more moist.

B. If product seems to be overly moist, simply slide lever to the right (**CLOSED POSITION**); less humidity will permeate case, making product less moist.

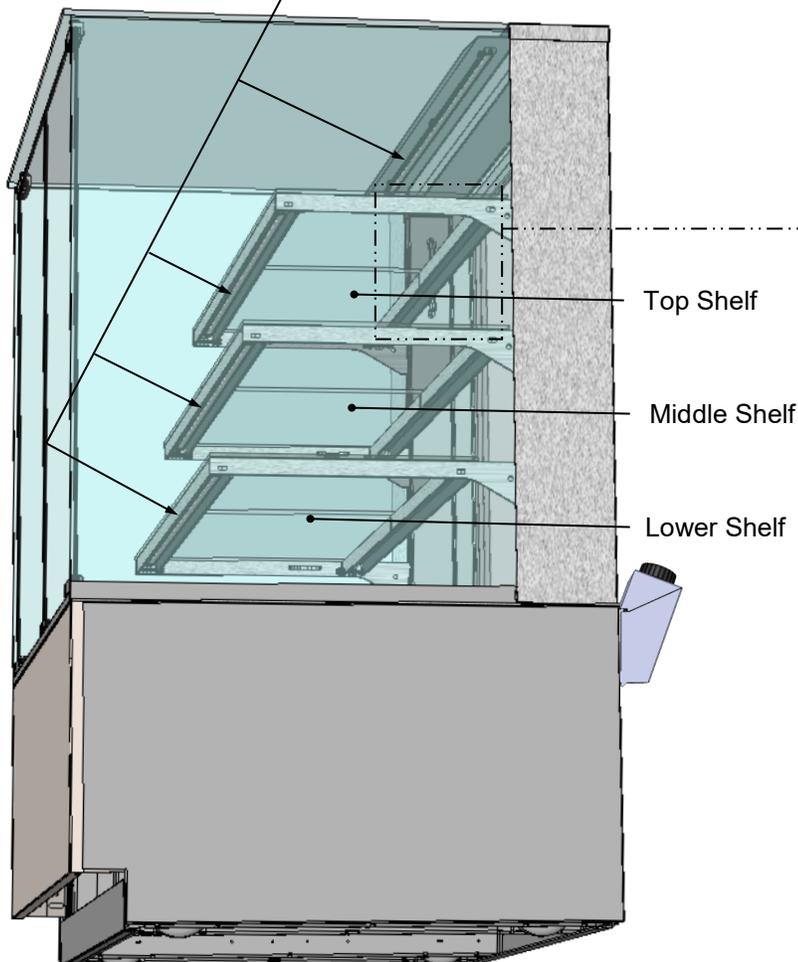
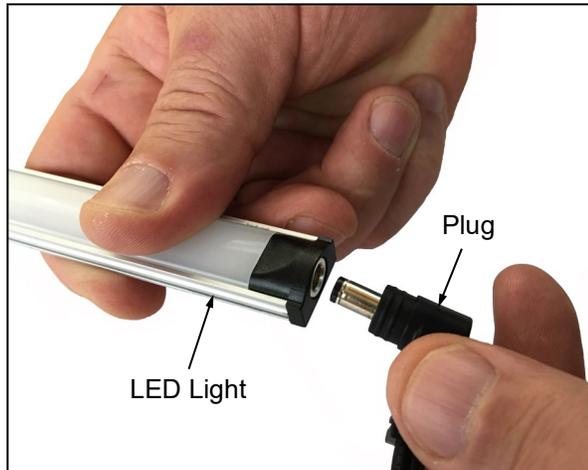
C. Passive Humidification System lever can be **PARTIALLY OPENED** (by sliding lever midway along slot) to incrementally control humidification (and product moistness) in case.

> **Caution!** The humidification control lever key has magnet to allow it to be stored/attached at case rear so it is not lost! See next page for illustration showing key storage/placement.



### 11. LED Lights

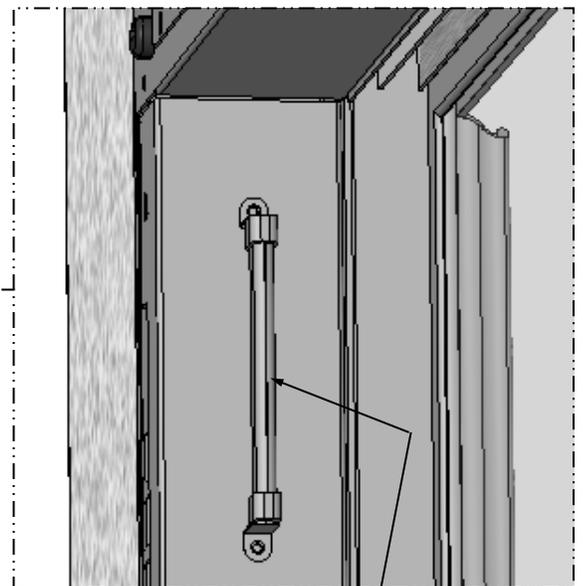
- LED lights are located at both header and shelving of case (as shown below).
- Check that ALL of the light plugs are properly connected to the LED light.



- Plug must be inserted ALL THE WAY into the LED light orifice (with no gap) to work properly.
- See **TROUBLESHOOTING** section in manual if LED lights malfunction.

### 12. Thermometer Function & Placement

- Thermometer provides air temperature of heated section of case.
- Thermometers DOES NOT provide actual food temperature.
- Use probe thermometer to determine actual product temperatures.

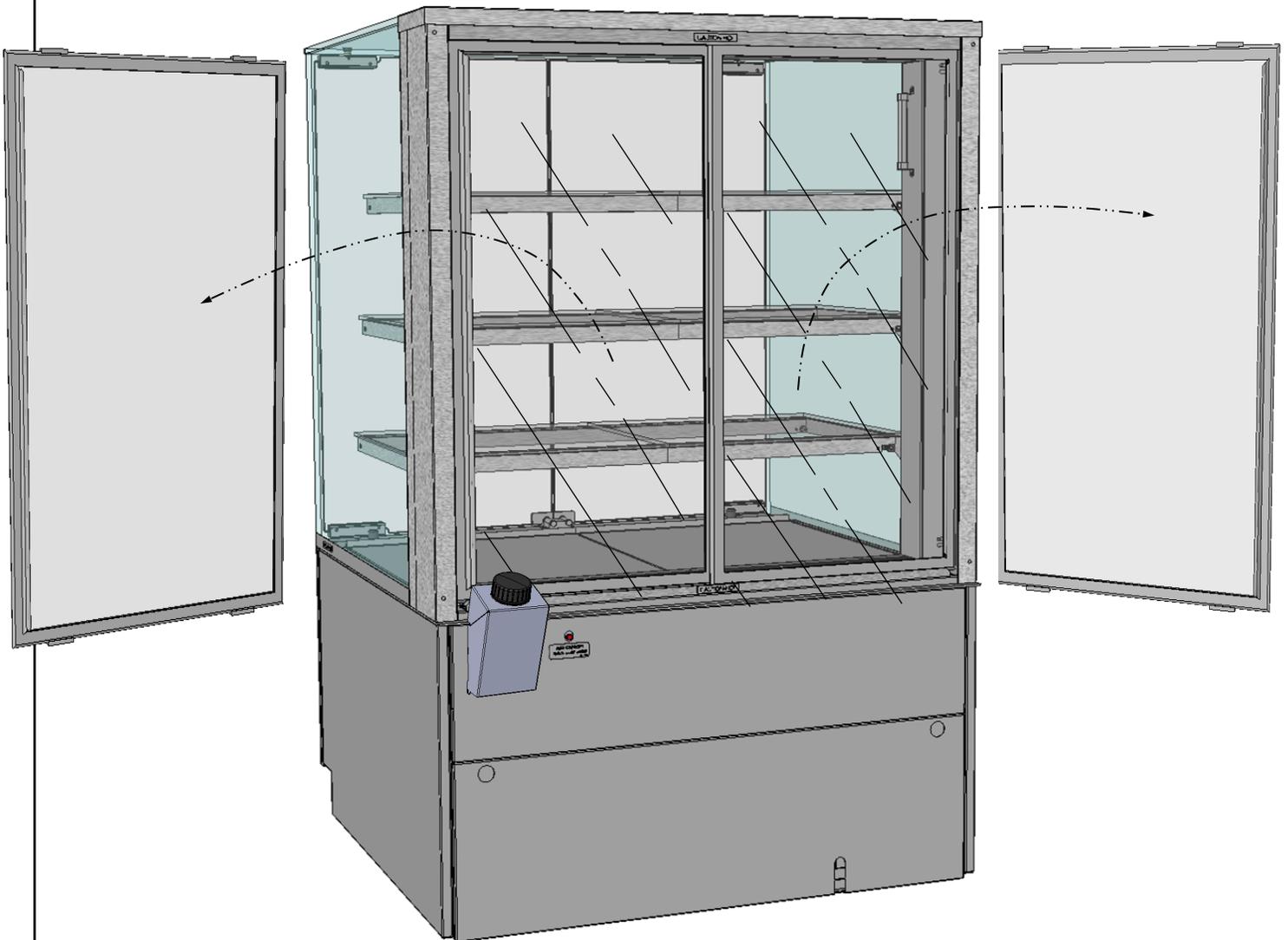


Thermometer Shown  
(Shelving Removed For  
Illustrative Purposes Only)

**13. Rear Sliding Door Removal / Replacement**

- To remove rear sliding doors, move rear doors toward center of the case.
- Individually lift each door up toward the top of the case; pivot the bottom of the door out.
- Return doors to case in reverse order they were removed.

Free-Standing Unit (Shown) May Not Exactly Reflect Every Feature or Option of Your Particular Case.



**1. Main Power Switch**

- Control panel (at case rear) is accessible by removing lower-rear panel.
- Turn main power switch “ON” to energize case.

**2. Heating Up Case / Adjusting Settings**

- **Note:** Case is designed to MAINTAIN product temperatures – NOT heat up product! Do not place product that is cold or ambient temperature in case.
- **Before placing pre-heated food in case, allow 1 1/2 hours (90-minutes) for case to achieve its desired temperature.**
- If adjusting heater settings, allow 20 minutes at new settings for temperature to affect product.

**3. Light Switch**

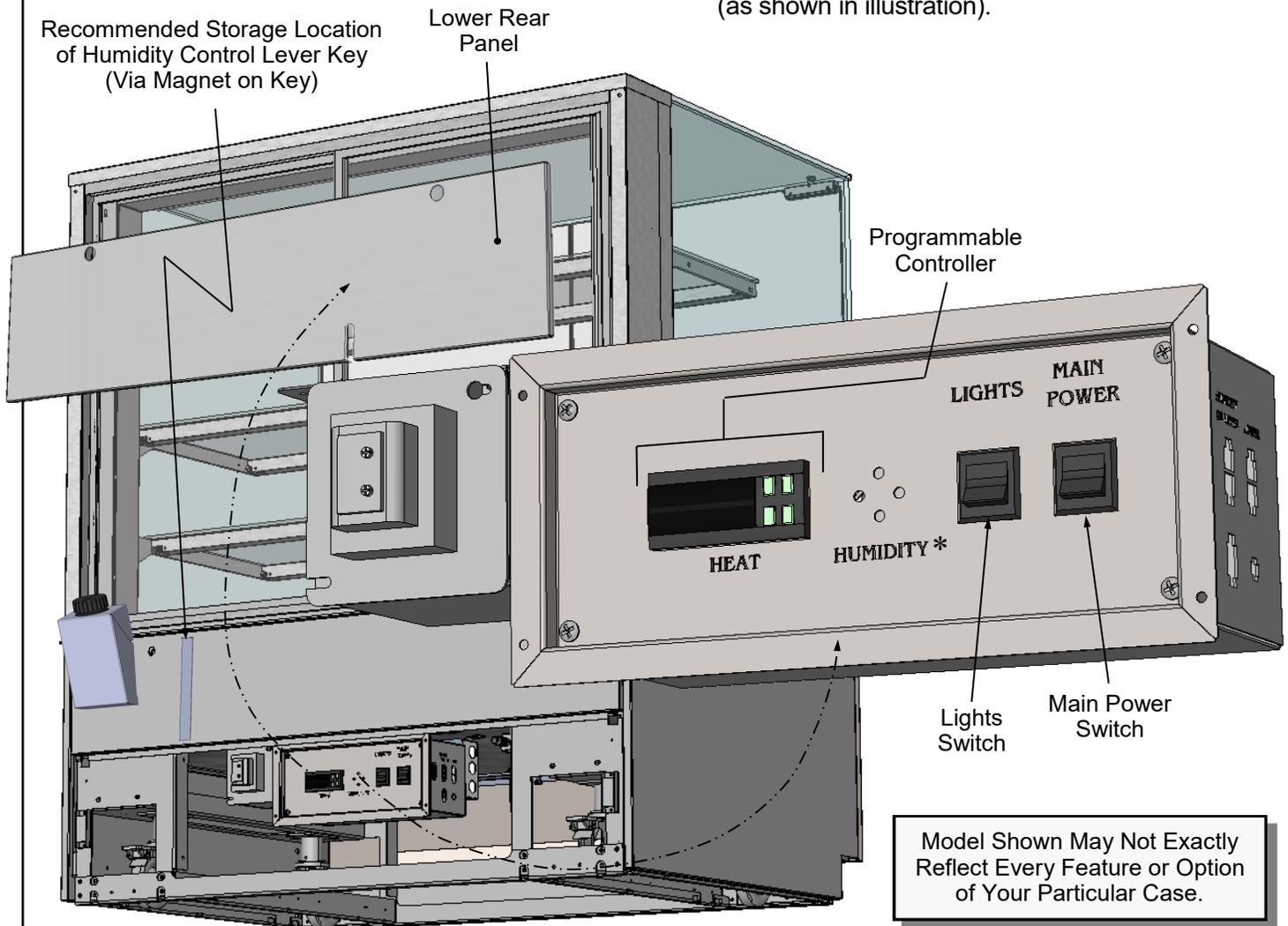
- Turn lights switch “ON” to turn on lights.
- All LED lights will come on at the same time.

**4. Shutting Down Case**

- Remove all product from case.
- Turn main power switch to “OFF” position.
- **Caution! Deck and shelving is hot. Allow case to cool for 45 minutes before cleaning.**
- **Note:** When main power is turned back on, you do NOT need to re-enter settings. Temperatures will revert back to LATEST SETTINGS before shutdown.

**5. Control Lever Key Storage Location**

- For units with passive humidification systems, a control lever key is provided. It is designed with a magnet to hold it securely.
- Control lever key may be stored at case rear (as shown in illustration).



**\*Note:** If “HUMIDITY” etching is on faceplate, simply ignore; such markings are not applicable to cases in this manual.

**PRODUCT PLACEMENT / AIRFLOW CONSIDERATION / LOAD LINES**

**1. Product Placement**

- Product can be placed on decking or steps (risers) within the service display area.
- A wide range of product may be displayed.

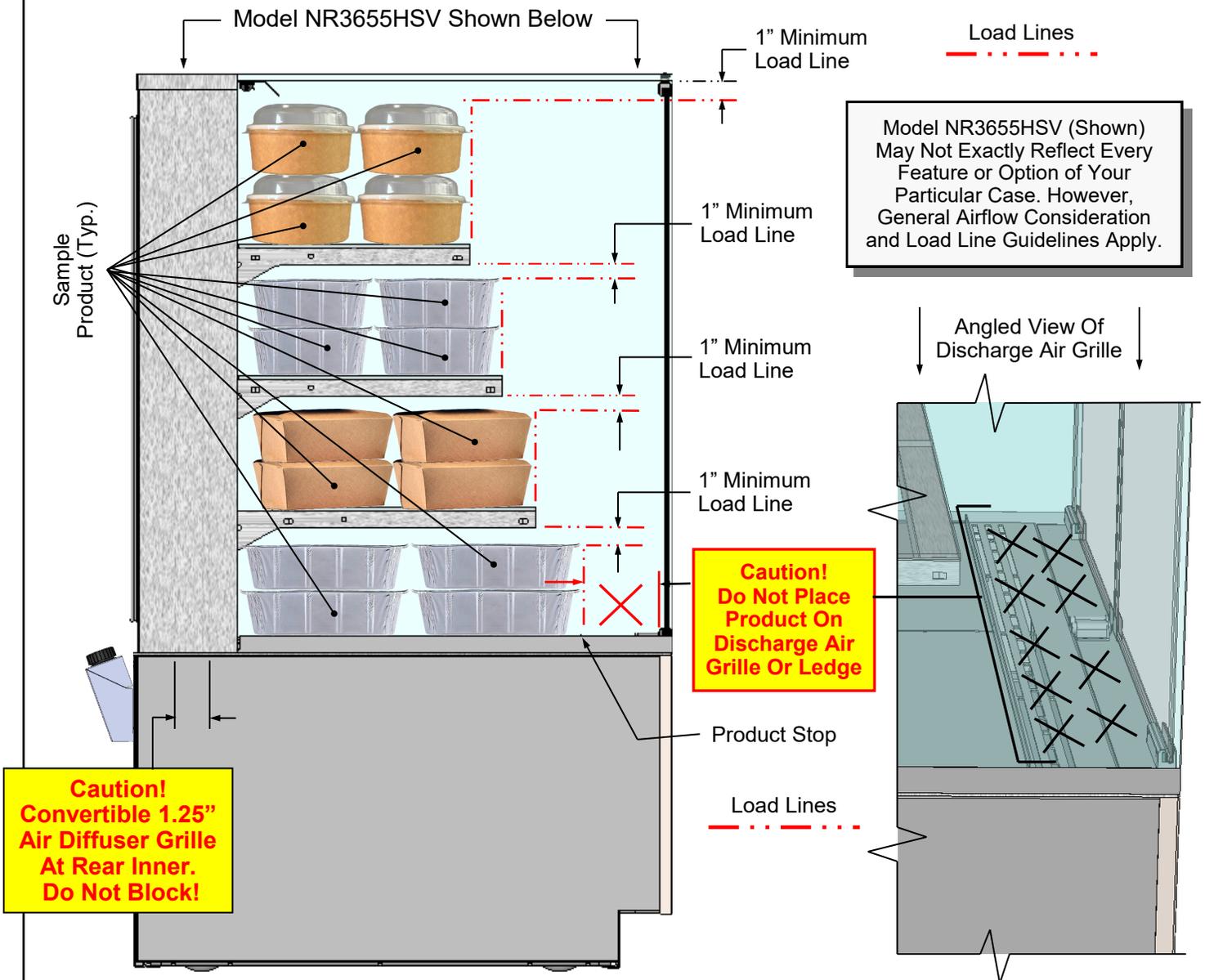
**2. Air Diffuser Grille & Return Air Grille Considerations**

- Proper airflow is critical to maintain proper product temperature.
- Proper product placement will allow front air to flow over (and around) product to return air grille at case rear. See illustration below for specifics.

- Caution! For discharged air to reach the return air grille, you must not block front OR rear grilles with product.
- Do not place product on front ledge of case.

**3. Load Lines**

- Load lines represent the limit that product can be placed (either horizontally or vertically) and/or stacked in case.
- Keep product at or under load lines to assure that heated airflow is properly cycled from air diffuser through return air grille.
- Proper product placement will maintain acceptable product temperature.
- See illustration below.



**CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)**

FREQ.	INSTRUCTIONS
Daily	<b><u>Glass Surfaces (Including Shelves):</u></b> Clean glass surfaces and shelves with household or commercial glass cleaner.
Daily	<b><u>Water Inlet Funnel (Optional) At Rear of Case:</u></b> > Raise lid. Remove/drain water. Spray with disinfectant. Wipe out/remove residue. Refill with distilled water.
Daily	<b><u>Rear Sliding Door Exterior Glass:</u></b> Clean with household or commercial glass cleaner. Clean out rear door track with moist cloth.
Daily	<b><u>End Panels, Front Panel, Toe-Kick, etc.:</u></b> Wipe off all surfaces with warm water and mild soap solution and non-abrasive cloth.
Daily	<b><u>Decks:</u></b> Wipe off decks with moist cloth dipped in mild soap and water solution.
Daily	<b><u>Stainless Steel Surfaces:</u></b> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Never use scouring powders or steel wool as they will scratch stainless steel.</li> <li>• Brighten by polishing with a cloth dipped in vinegar or in ammonia; sprinkle baking soda on sponge and rub gently; rinse. Polish dry with paper towel.</li> <li>• Remove streaks or heat stains from stainless steel by rubbing with club soda.</li> </ul>
Quarterly	<b><u>Under Case Cleaning:</u></b> <ul style="list-style-type: none"> <li>• Remove front and/or lower rear panel.</li> <li>• Use broom or vacuum to remove all dust, dirt, food particles or residue from underside of case.</li> <li>• For units with optional humidification system, check overflow; if it needs to be emptied or cleaned, do so.</li> <li>• Replace front and/or lower rear panel after cleaning.</li> </ul>

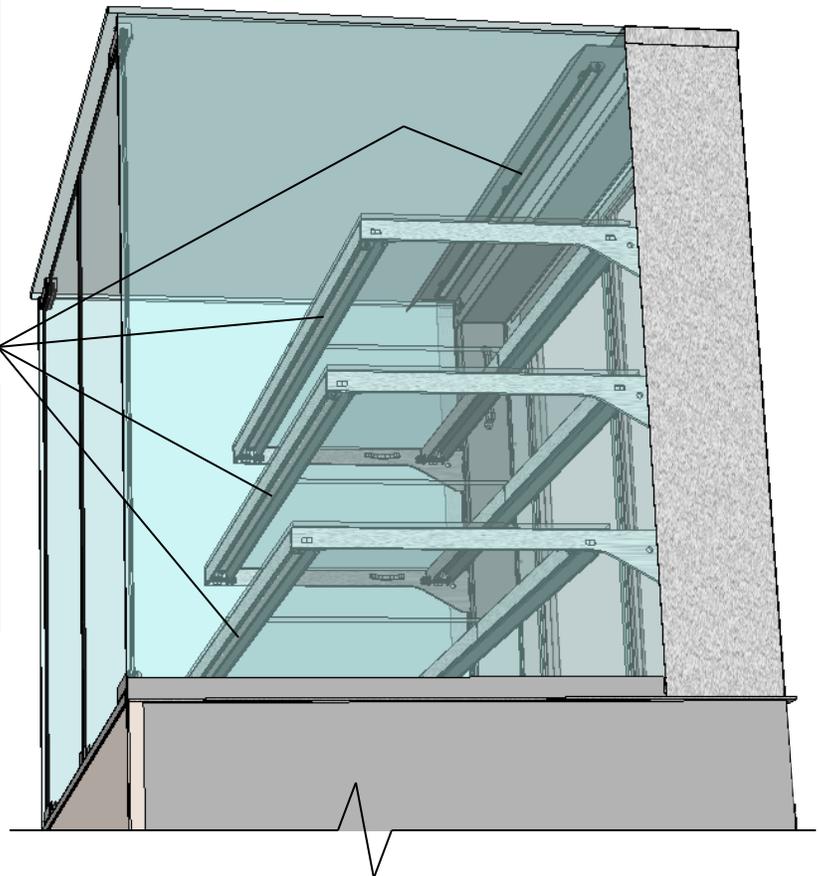
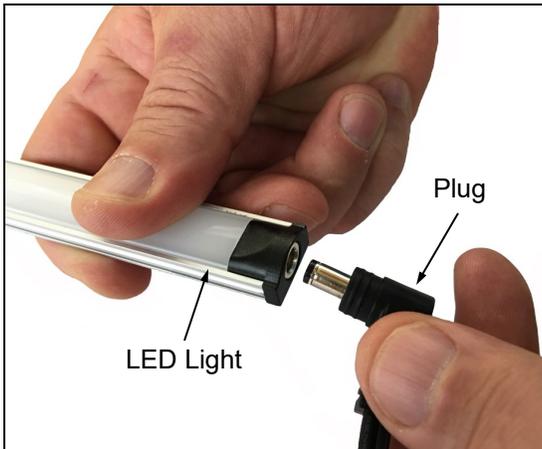
**PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)**

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

FREQ.	INSTRUCTIONS
Quarterly	<p><b><u>Tub Area:</u></b></p> <ul style="list-style-type: none"> <li>• <b>Caution!</b> Turn off power to case. Allow case to cool for 45 minutes before proceeding.</li> <li>• Open front doors to access decking.</li> <li>• Remove sub-deck and deck pans. See <b>CASE DESIGN, CONT'D: TUB AREA / HEATER / OPTIONAL POWERED HUMIDIFICATION SYSTEM ACCESS</b> section in manual for instructions and illustrations.</li> <li>• Wipe down tub, axial fans and deck pan.</li> <li>• Thoroughly clean humidification system to remove residue and grime. Use disinfectant/germicide in spray bottle to kill bacteria. Rinse with clean water in spray bottle.</li> <li>• Return subdeck and deck pans to case.</li> <li>• Restore power to case.</li> </ul>
Quarterly	<p><b><u>Cleaning Optional Powered &amp; Passive Humidification Systems</u></b></p> <p><b><u>Preparation:</u></b></p> <ul style="list-style-type: none"> <li>• <b>Caution!</b> Turn off power to case. Allow case to cool for 45 minutes before proceeding.</li> <li>• Open front doors to access decking.</li> <li>• Remove sub-deck and deck pans. See <b>CASE DESIGN, CONT'D: TUB AREA / HEATER / OPTIONAL POWERED HUMIDIFICATION SYSTEM ACCESS</b> section in manual for instructions and illustrations.</li> <li>• Use wet/dry vacuum to empty the humidification system of water.</li> </ul> <p><b><u>Humidification System:</u></b></p> <ul style="list-style-type: none"> <li>• For <i>Passive Humidification Systems</i> only, remove stainless steel cover (two pieces) from case. Submerge in warm, soapy water and clean thoroughly with soft-bristled brush. Rinse. Dry. Return to case <b>AFTER</b> the humidification system cleaning process has been completed.</li> <li>• For cleaning humidification system, use a mixture of 75% water / 25% unflavored white vinegar to fill the rear water inlet funnel.</li> <li>• Set control panel's HUMIDITY setting at its highest (9) and allow unit to run for 30 minutes.</li> <li>• Use a soft-bristled brush to dislodge the lime/calcium accumulation from the humidification system.</li> <li>• Turn off main power switch and allow the unit to cool.</li> <li>• Use wet/dry vacuum to remove the de-liming solution from the humidification system.</li> <li>• Use a clean sponge and/or clean rags to sop up any remaining de-liming solution.</li> <li>• Then, using clean, pure water, fill and drain the humidification system until any remaining water and/or white vinegar solution is rinsed through and the water discharge is clean.</li> </ul> <p><b><u>Water Inlet Funnel Hose and Hose From Humidification System Pan To Overflow:</u></b></p> <ul style="list-style-type: none"> <li>• Remove the water inlet funnel (from case rear); disconnect from hose. Submerge in warm, soapy water. Clean with soft-bristled brush. Rinse. Dry. Return it to case rear. Securely reconnect hose to water inlet funnel.</li> <li>• Check that hose to BOTH water inlet funnel and humidification system is supple and in good condition; If cracking or showing signs of fatigue, contact Structural Concepts for replacement.</li> <li>• Turn power back on and fill the water inlet funnel back up (as described in the <b>CASE DESIGN, CONT'D: POWERED HUMIDIFICATION SYSTEM / WATER CAPACITY/TYPE</b> section of this manual).</li> </ul>

CONDITION	TROUBLESHOOTING
<p><b>Water Is On The Floor</b></p>	<p>Water on floor can cause extensive damage to flooring! Resolve immediately.                      &gt; For units with optional heated humidification system, check overflow (at rear of case). See <b>CASE DESIGN, CONT'D: POWERED HUMIDIFICATION SYSTEM / WATER CAPACITY/TYPE</b> section in manual for water capacity specifics. Important! You must check overflow periodically (at least weekly) to make sure it is not going to overflow. Also, to be able to always SEE overflow state, it may be a good practice to REMOVE lower end panel!                      &gt; Check condition of BOTH the humidification system fill funnel hose and overflow hose. If they are cracking or show fatigue, they must be replaced. Contact Structural Concepts Corp. for replacement hose(s).                      &gt; Check connections (including quick-connects) and/or clamps on all hoses. If loose or poorly connected, tighten securely.</p> <ul style="list-style-type: none"> <li>• Access to water fill funnel connector is gained by lifting it up and off rear of case.</li> <li>• Access to humidification system is gained by removing decking. Caution! You must turn off power to case and allow to cool for 30 minutes before accessing components under decking!</li> <li>• See <b>CASE DESIGN, CONT'D: POWERED HUMIDIFICATION SYSTEM / WATER CAPACITY/TYPE</b> After checking all the above, if water is still dripping onto floor, call service provider.</li> </ul>
<p><b>Poor or No Humidification</b></p>	<p>&gt; Check that heating element works (on water inlet side).                      &gt; Check that float is functional. See <b>CASE DESIGN, CONT'D: POWERED HUMIDIFICATION SYSTEM / WATER CAPACITY/TYPE</b> section in manual for location/ illustration. If it is malfunctioning call service provider.                      &gt; Humidity is to be adjusted based on product.</p> <ul style="list-style-type: none"> <li>• Adjust humidity control by adjusting controller (at case rear).</li> <li>• Raise humidity level one point at a time (e.g., if humidity level is at “5”, press the “up” key to change it to “6”).</li> <li>• See <b>CASE DESIGN, CONT'D: MAIN POWER / LIGHTS / PRE-HEAT / OPERATION / SHUTTING DOWN</b> section specifics on adjusting humidity.</li> </ul>
<p><b>Fan Noise Is Excessive</b></p>	<p>Call service provider.</p>
<p><b>Case is Not Holding Proper Temperature</b></p>	<p>If a large amount of cool (or ambient) product was added to the case, it will take time for the temperature to adjust. Product must be pre-heated before placing in case.</p>
	<p>See <b>PROGRAMMABLE CONTROLLER INFORMATION</b> section in this User Manual for thermostat specifics.</p>
	<ul style="list-style-type: none"> <li>• Check air return grilles (area at front of decking) for obstructions.</li> <li>• DO NOT set product on air grilles as this will prevent proper airflow!</li> <li>• See <b>PRODUCT PLACEMENT / AIRFLOW CONSIDERATION / LOAD LINES</b> section in manual for product placement guidelines.</li> </ul>
	<p>Check that the case is not in the sun. See <b>OVERVIEW / THERMOMETER / COMPLIANCE / WARNINGS / PRECAUTIONS</b> section in this manual for specifics.</p>
	<p>If case still is not holding proper temperature, call service provider.</p>

CONDITION	TROUBLESHOOTING
<b>Case Lights Not Working</b>	Check that light switch is in the <i>ON</i> position. <ul style="list-style-type: none"> <li>See <b>INSTALLATION, CONT'D: PLUG IN UNIT / TURN ON MAIN POWER SWITCH AND LED LIGHT SWITCH</b> section in manual for switch location (regardless of case design).</li> </ul>
	If case is not hard-wired, check that power cord is properly connected to wall outlet.
	Check that ALL of the light plugs are properly connected to the LED light. <ul style="list-style-type: none"> <li>Plug must be inserted ALL THE WAY into the LED light orifice (with no gap).</li> <li>See illustrations below-left.</li> </ul>
	Power may not be reaching the case. <ul style="list-style-type: none"> <li>Contact store management to have trained service provider perform troubleshooting.</li> <li>Troubleshooting to be performed by trained service providers only is on next page.</li> </ul>
	If case light still do not come on, it may need to be replaced. <ul style="list-style-type: none"> <li>Contact Structural Concepts' Technical Service Department for replacement light (see <b>TECHNICAL SERVICE</b> section of this manual for contact information).</li> <li>To replace, disconnect plug from existing LED light. Disconnect LED light from its brackets. Replace with new LED light. Insert plug ALL THE WAY into LED light orifice.</li> </ul>



CONDITION	TROUBLESHOOTING
<b>Water Is On The Floor</b>	<p><b>Caution!</b> If too much water fills humidification system, case is designed for water to overflow at rear of case.</p> <ul style="list-style-type: none"> <li>• <b>IMPORTANT! If humidification system overfills, you must check overflow at rear of case.</b></li> <li>• <b>IMPORTANT! If MAX CAPACITY light malfunctions, you must check overflow periodically to assure that water does not overflow onto floor.</b></li> <li>• <b>IMPORTANT! If humidification system overfills, you must soak up excess water from floor with sponge. Otherwise, water on floor can cause damage.</b></li> </ul>
<b>Fans Emit Excessive Noise</b>	Check that the case is aligned, level and plumb.
	Check axial fans for cleanliness.
	Check that fan motors are securely mounted in brackets.
	Check that nothing is preventing blade rotation.
	Check that the fan shroud is properly secured.
<b>Fans Are Not Working</b>	Check that the MAIN power switch is on.
	Check that fans are plugged.
	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.

CONDITION	TROUBLESHOOTING
<p><b>Case Lights Are Not Working</b></p>	<p>See <i><b>TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)</b></i> section in manual for most common troubleshooting solutions.</p>
	<p>Check power.</p> <ul style="list-style-type: none"> <li>• If power is not supplied to the case, facility may have faulty power distribution.</li> <li>• If power is supplied to the case but lights are not energized, case's power supply may be faulty.</li> </ul>
<p><b>Case Is Not Holding Temperature</b></p>	<p>If a large amount of product was added to the case, it will take time for the temperature to adjust.</p>
	<p>Check that case is not in sun or near a heat or air-conditioning vent.</p>
<p><b>Digital Control Display Is Blank</b></p>	<p>Check that the MAIN power switch is on.</p>
	<p>Check the circuit breaker box for tripped circuits.</p>
<p><b>System Is Not Operating</b></p>	<p>Check that the utility power is on.</p>
	<p>Check that the MAIN power switch is on.</p>
	<p>Check the circuit breaker box for tripped circuits.</p>

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

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

- Sample serial label 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

**Reveal**

MODEL NRS3648RXV-SAMPLE  
SERIAL NO. 12345X30DZ098765

**ETL LISTED**  
Intertek

**SAMPLE ONLY**

3048256  
Conforms to UL Std. 65  
CERTIFIED TO CAN/CSA  
STD C22.2 NO 120

120 VOLTS      60HZ  
FOR PARTS OR SERVICE CALL  
STRUCTURAL CONCEPTS  
AT 1-800-433-9489

SINGLE PHASE 1.84 AMPS

SCAN FOR PRODUCT LITERATURE



Sample QR Code

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



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



**Carel® PJEZ Platform**



**Carel® ir33 Platform**



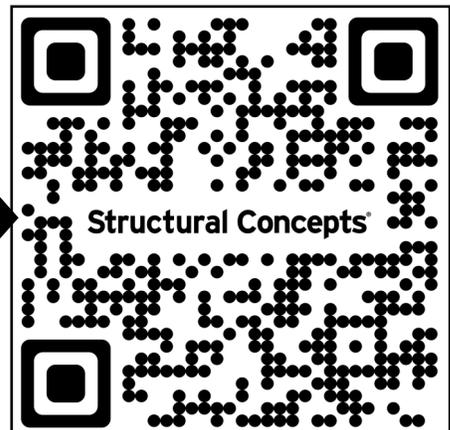
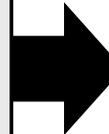
**Carel® iJF Platform**



**Dixell® XM670K-XM679K Platform**

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

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



**STRUCTURAL CONCEPTS TECHNICAL SERVICE CONTACT INFORMATION & LIMITED WARRANTY**

**TECH SERVICE/WARRANTY CONTACT INFO:**  
1 (800) 433-9490 / EXTENSION 1  
**DAYS/HOURS AVAILABLE:**  
MONDAY - FRIDAY (CLOSED HOLIDAYS)  
8:00 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.

