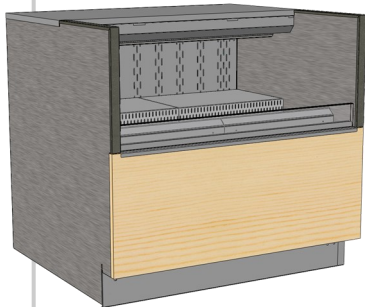


# OASIS<sup>®</sup> USER MANUAL

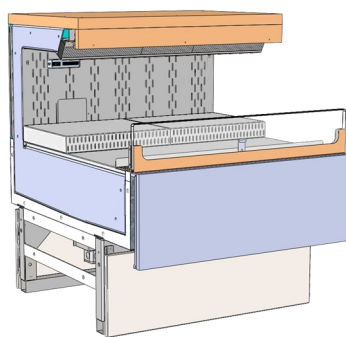
## P/N 20-24002

**Important!**  
See Counter  
Installation Guide  
Section In This  
Manual Before  
Proceeding With  
Installation!

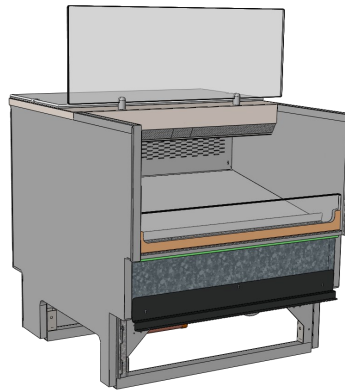
### SELF-SERVICE REFRIGERATED MERCHANDISERS



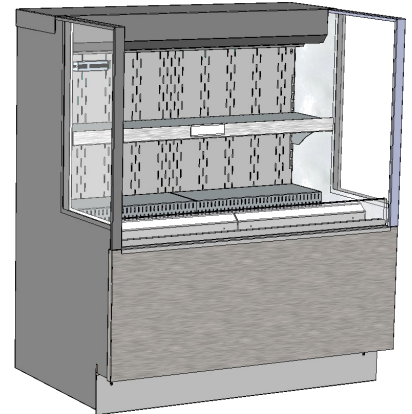
Model CO33R With Counter  
End Panels / Continuous  
Top & Front



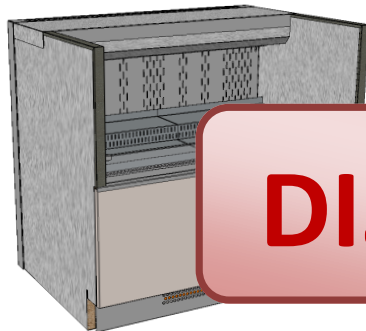
Model CO3034RG.5718 &  
CO3034RG.5718A  
With Product Steps



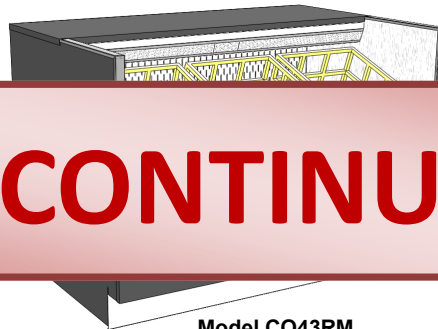
Model CO3436RG.5716  
Without Front Panel / Angled  
Riser & Vertical Sneeze Guard



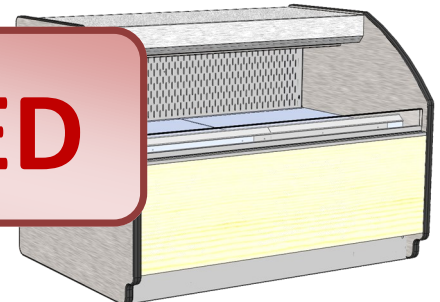
Model CO3324R.7397 (Extended  
Height Version of CO3324R)



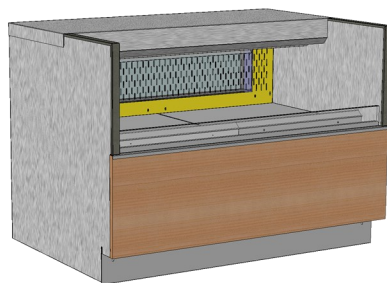
Model CO3324R Front  
Access Condenser Package



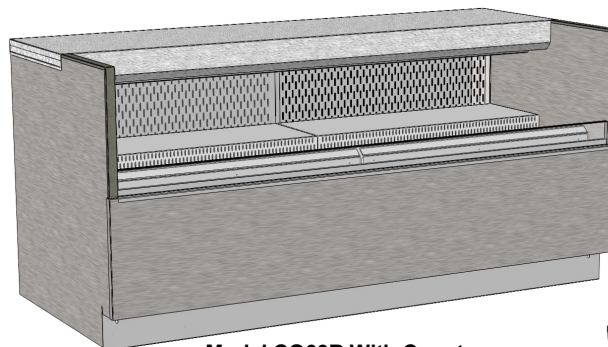
Model CO43RM  
Under Counter Unit



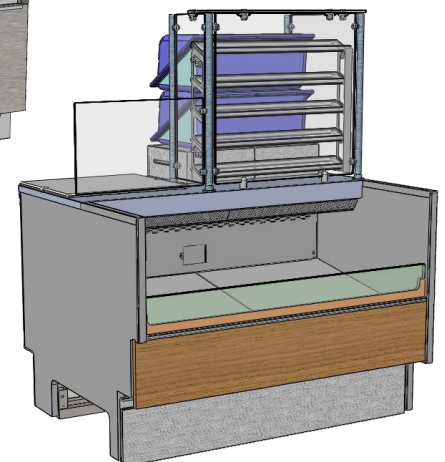
Model CO43R  
With Curved End Panels



Model CO43R-FS "Free  
Standing" Unit With Optional  
Flip-Down Rear Door /  
Perforated Plenum Rear Door

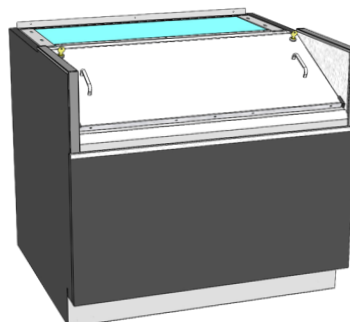


Model CO63R With Counter  
End Panels And Continuous Top & Front



Model CO3436RG.5716,  
CO4836R.5716 and CO4836RG.5716  
(Glycol Unit) Includes SCC's Model  
BDXXXX Removable Bread Display  
On Counter (Next To Sneeze Guard)

Model CO33RM (Similar To  
CO53RM) With Optional Security  
Cover / Shown Without  
Customer Supplied Countertop



**Structural Concepts<sup>®</sup>**

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### **Models Represented In This Operating Manual\***

CO33R CO43R CO53R CO63R CO3324R, CO4324R, CO5324R and CO6324R (24" DEEP VERSION OF CO33R, CO43R, CO53R and CO63R) / CO43R-FS (FREE-STANDING WITH OPTIONAL FLIP-DOWN REAR DOOR) / CO33RM CO43RM CO53RM CO63RM (UNDER COUNTER MILK CRATE UNITS / REFRIGERATED MILK DISPLAYS); AKA CO33RM-UC CO43RM-UC CO63RM-UC. ALSO, CO3434RG.5716 CO3034RG.5718 CO3034RG.5718A CO3436RG.5716 CO4836R.5716 CO4836RG.5716 / CO4324R.7391.

\* This Manual May Also Be Applicable To Models Not Listed Herein.

## OVERVIEW

- These Structural Concepts merchandisers are designed to merchandise packaged products at 41 °F (5 °C) or less product temperatures.
- Product must be pre-chilled to 41 °F (5 °C) or less prior to 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 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 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.

## WARNINGS

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

## PRECAUTIONS, CORD/PLUG MAINTENANCE & WIRING DIAGRAM INFORMATION

- See next page for **PRECAUTIONS, CORD/PLUG MAINTENANCE** and **WIRING DIAGRAM** information.



**ATTENTION  
CONTRACTORS**

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

**WARNING**

**ELECTRICAL  
HAZARD**



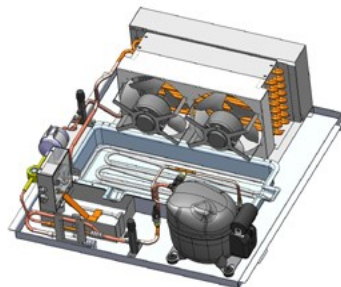
**WARNING**  
Risk of electric shock. Disconnect power before servicing unit.  
**CAUTION!** More than one source of electrical supply is employed with units that have separate circuits.  
**Disconnect ALL ELECTRICAL SOURCES before servicing.**

**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.**



**CAUTION! IF YOUR UNIT IS SELF-CONTAINED, YOU MUST CHECK CONDENSATE PAN POSITION & PLUG!**

Water on flooring can cause extensive damage!  
Before powering up unit, check and confirm that:

- Condensate pan is **DIRECTLY UNDER** condensate drain.
- Condensate pan plug is securely plugged into receptacle.
- Overflow pan has plug connected to its box. Units with optional Clean Sweep® **MUST HAVE** two plugs connected.



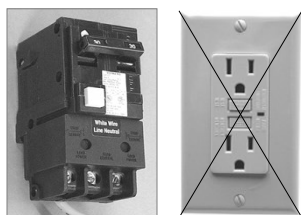
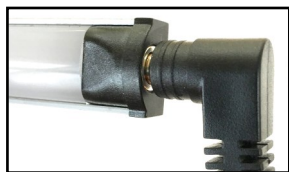
**WARNING:** This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to [P65Warnings.ca.gov](http://P65Warnings.ca.gov).

## PRECAUTIONS

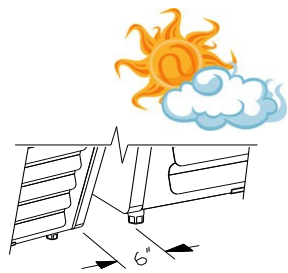
- Following are important precautions to prevent damage to unit or merchandise.
- Please read carefully!
- See previous page for specifics on **OVERVIEW**, **TYPE**, **COMPLIANCE** and **WARNINGS**.

## WIRING DIAGRAM

- Each case has its own wiring diagram folded and in its own packet.
- Placement on case varies (near ballast box, field wiring box, raceway cover, or other related location).



## CAUTION



## 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! LAMP REPLACEMENT GUIDELINES

If LED lamps are used, they must be 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! 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! 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.

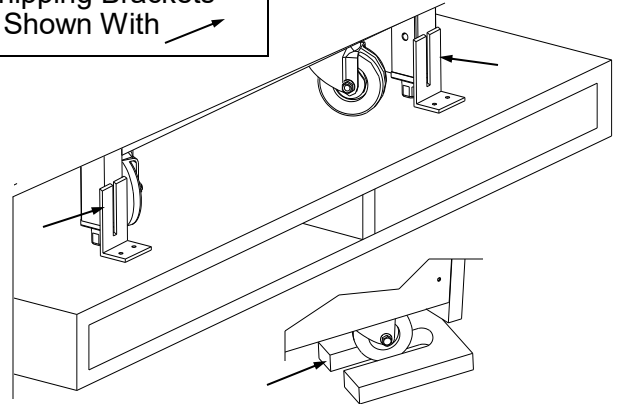
### CAUTION! DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR PRODUCT (FOOD) TEMPERATURES.

- 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.

### 1. Removing Shipping Brackets Attached To Skid

- Remove screws holding case shipping brackets to skid.
- Remove case shipping brackets from skid.
- See illustrations at right. Note: Shipping brackets will vary in size, shape, material and location depending upon case type and model.

Various Types Of Shipping Brackets Shown With

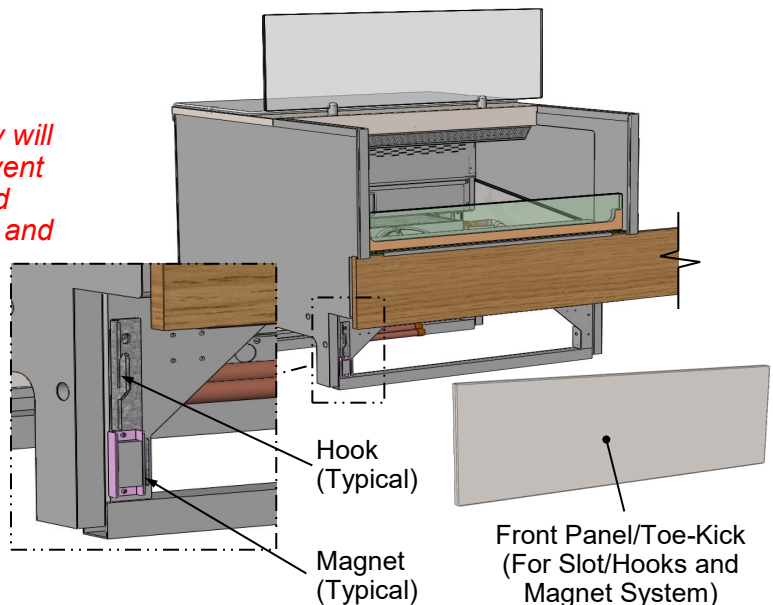


### 2. Remove Front / Rear Toe-Kicks Before Removing From Skid

- Toe-kicks are normally shipped separately.
- If toe-kicks are attached to case, they must be removed.
- Toe-kicks may be attached to case via slot /magnet method.
- Remove toe-kick by pulling away from lower magnet and lifting up and off hooks.
- No screw removal is required.
- See illustrations at mid-right.

### 3. Remove Case From Skid

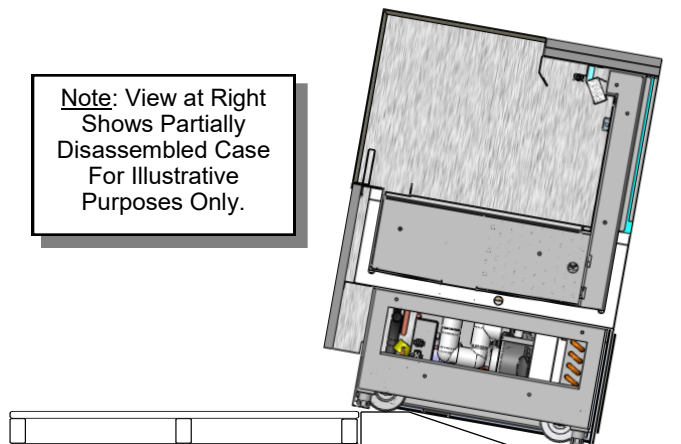
- **Important! If case is shipped with levelers, they will be in the **DOWN** position (for stability). To prevent damage to the case, all levelers must be raised **ALL THE WAY UP** before moving unit off skid and into position.**
- To prevent damage, support case while sliding it toward edge of skid).
- IF NO CASTERS ARE ON SKID, tip case slightly back and slide skid from underside of case. When case is at edge of skid, carefully lower to floor (so two levelers rest on floor).
- IF CASTERS ARE ON CASE, it may be rolled off skid via ramp (as shown in lower-right illustration).
- Carefully slide skid out from under case.
- After removal of case from skid, place into position.
- Note: Illustration below-right may not reflect your particular model or options).



### 4. Position/Align Case Alongside Other Cases

- If lineup requires it, be sure to position/align your case alongside adjoining cases before adjusting levelers or shimming frame support rails.
- This may require the repositioning of the case you are installing or the already positioned cases.

Note: View at Right Shows Partially Disassembled Case For Illustrative Purposes Only.



## CASE ADJOINMENT: URETHANE AND SILICONE APPLICATION / BOLTING ADJOINED UNITS

### Case Adjoinment

>> Warranty is void if improper urethane/sealant is used in this process.

>> Lay generous beads of caulk/sealant as specified.

#### A. Prior To Adjoinment - Apply Industrial Grade Urethane Adhesive (As Shown In Below Illustration)

- Lay a generous bead of industrial grade urethane adhesive in non-visible areas (as illustrated below).
- This urethane adhesive prevents refrigerated air from escaping between cases (causing condensation and reducing refrigeration efficiency) as well as preventing insects from entering the case.
- See industrial grade urethane adhesive illustration below-left.

#### B. Adjoining Cases - Using Bolts and Nuts

- Use appropriately sized nuts and bolts for each hole.
- #1 - Hole is accessible at underside of top surface support.
- #2 - Holes are accessible through rear plenum and behind honeycomb air diffuser.

#3 - Holes are accessible at underside of decking.

Decking must be removed to attach bolts/nuts.

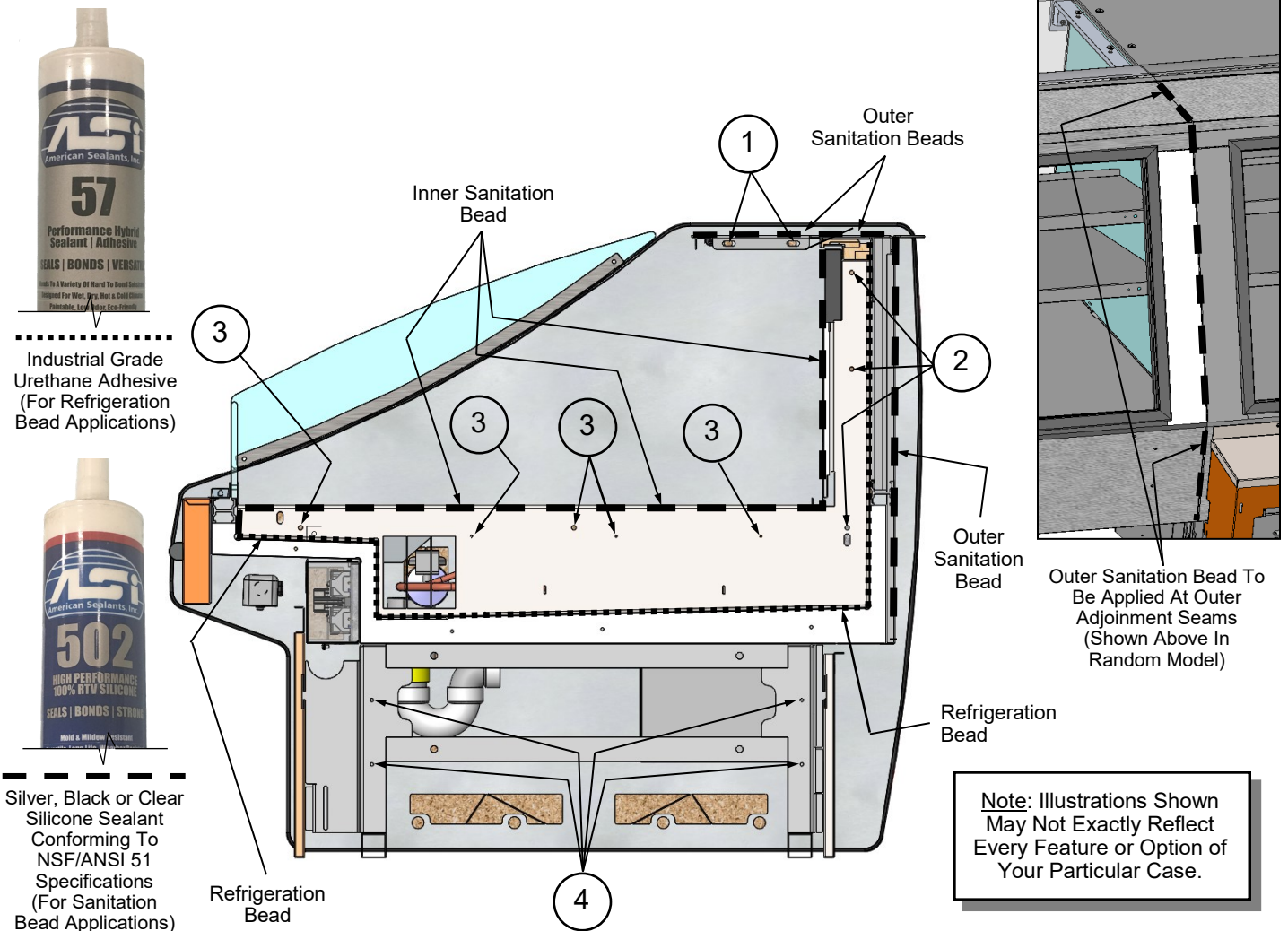
#4 - Holes are accessible at base frame (through front of case after front toe-kicks have been removed).

- Tighten nuts securely (but do not over-tighten).
- See accompanying illustration below.

#### C. After Adjoinment - Apply Food Grade Silicone Sealant To Inner And Outer Seams

- After all nuts/bolts are securely attached to case, apply a generous bead of food grade silicone sealant at both inner and outer adjoinment seams.
- When properly applied, this food grade silicone sealant will prevent water from seeping between cases (into the case or to the floor) as well as crumbs or other residue from entering between case seams.
- See silicone sealant illustration below-left.

>> You must reattach toe-kick and decking after case adjoinment process is complete.



## SHIMMING FRAME SUPPORT RAILS / ADJUSTING LEVELERS

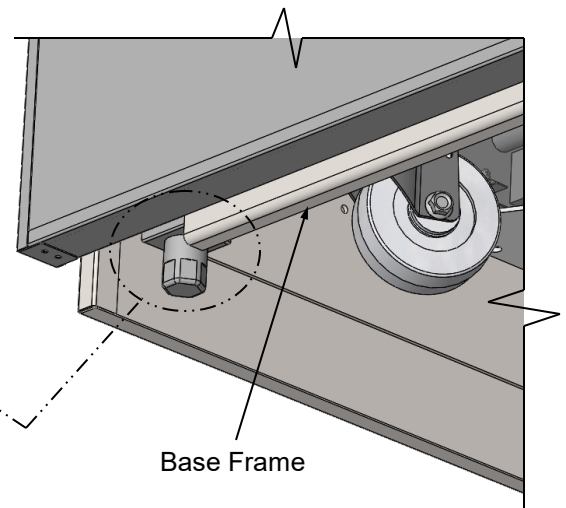
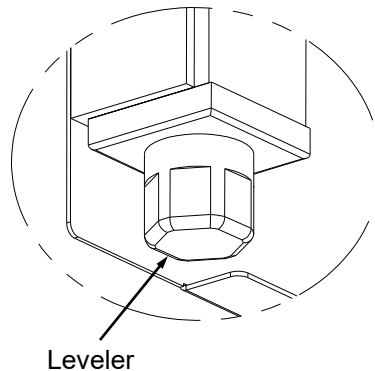
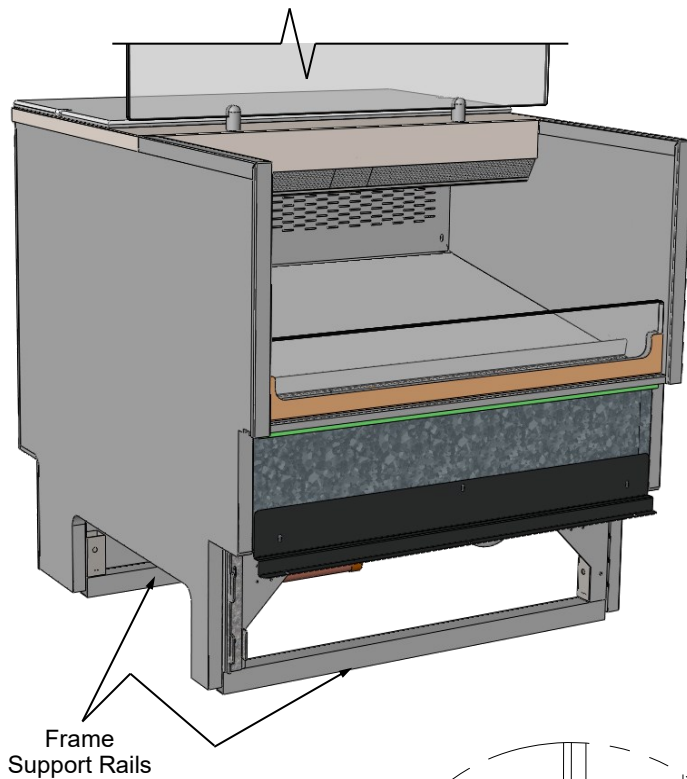
### **1. Cases With Frame Support Rails: Shim**

- Illustration at top-left shows case with frame support rails.
- Shims will be provided on cases with frame support rails.
- Use shims to level case.

### **2. Cases With Levelers: Adjust**

- *Important! For cases with casters, after case is in proper position, levelers must then be LOWERED to floor.*

- Adjust case so it is level and plumb.
- You may need to remove front and/or rear toe-kick to access levelers.
- Use adjustable wrench (and possibly a pry bar) to adjust leveler.
- Do not use pry bar on toe-kick (it may buckle).
- Do not use pry bar on end panel (it may chip).
- Use pry bar ONLY on base frame to avoid damaging case.
- Use a block to reach base frames with pry bar.
- See below-right illustrations.



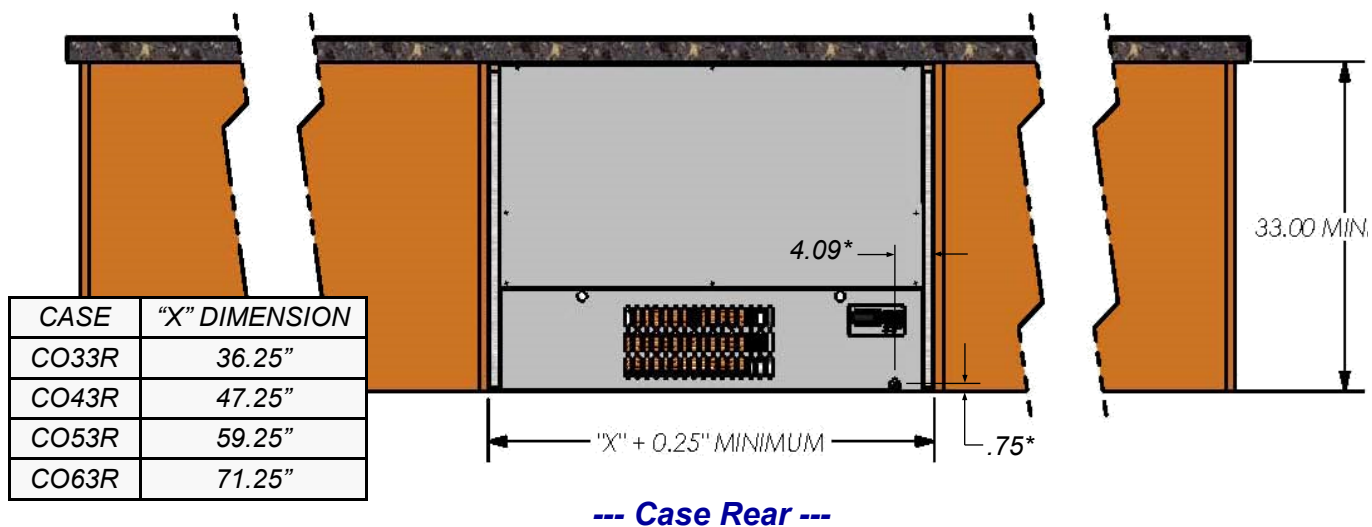
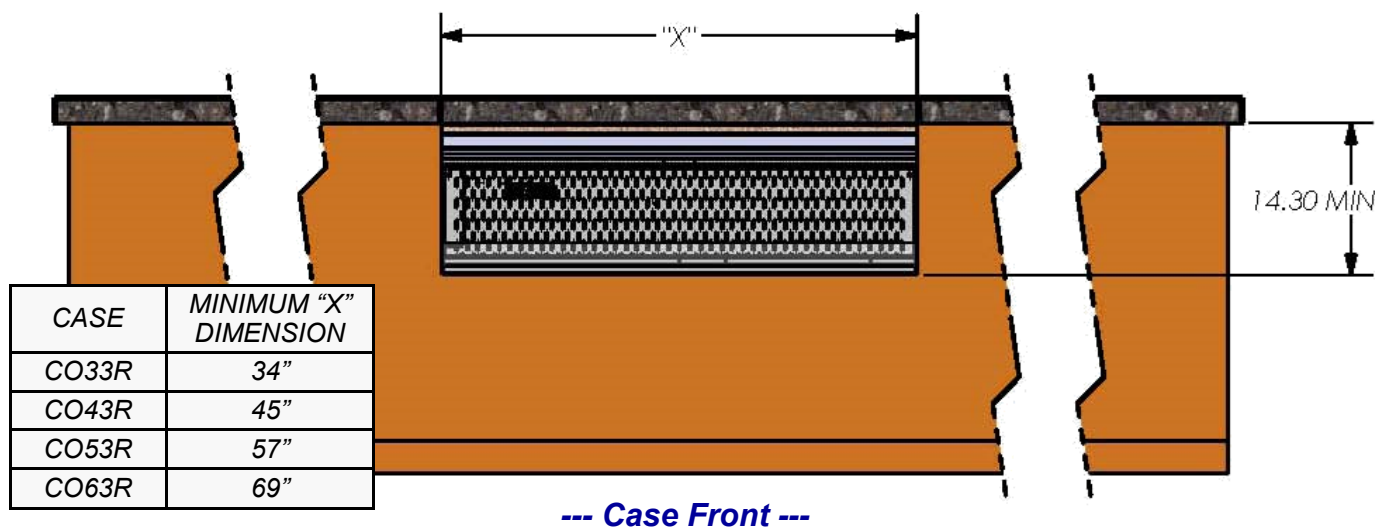
**THE FOLLOWING  
COUNTER INSTALLATION  
INFORMATION IS ONLY  
APPLICABLE TO  
MODELS CO33R, CO43R,  
CO53R and CO63R  
“UNDER-COUNTER”  
UNITS**

-----

**NOTE: ANY REVISIONS  
TO THIS INFORMATION  
MUST ALSO MADE TO  
SCC P/N 20-50848**

## CASE FRONT AND REAR DIMENSIONAL FEATURES

**NOTE:** THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO33R, CO43R, CO53R and CO63R "UNDER-COUNTER" UNITS



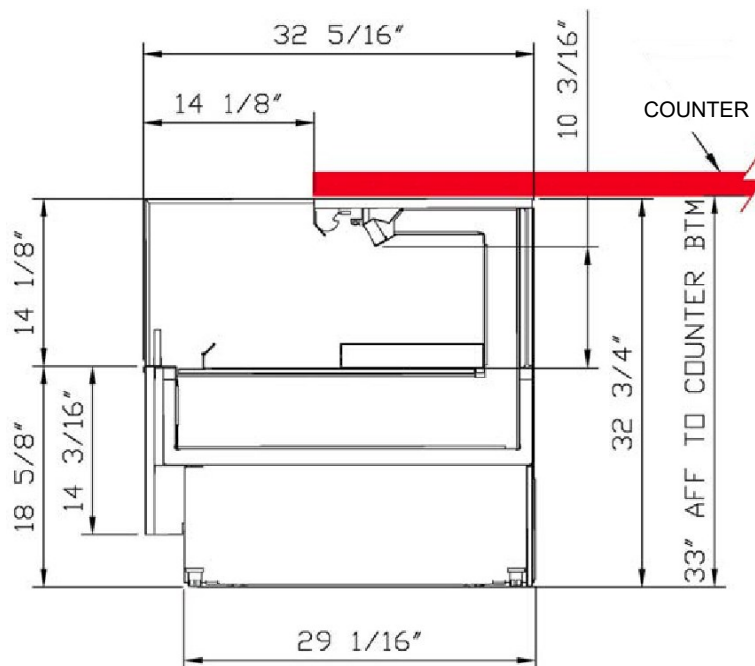
\* **Note:** A 6-foot power cord is supplied and exits the display through the lower rear panel (as shown immediately above). Refer to your particular model's specification sheet for electrical requirements and plug configuration.

## SIDE SECTION DIMENSIONAL AND LAYOUT FEATURES

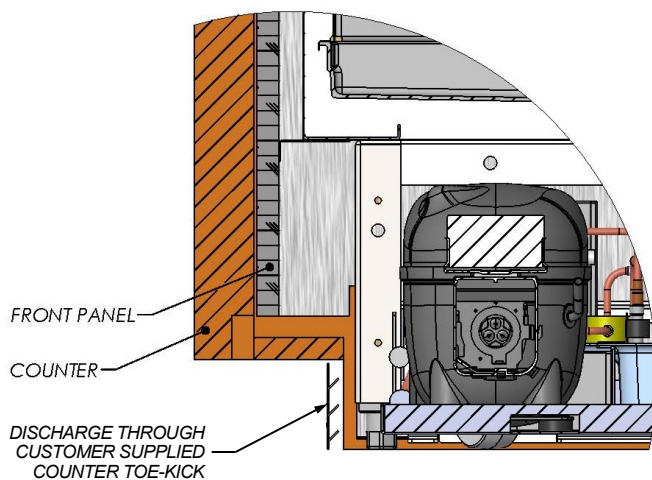
**NOTE:** THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO33R, CO43R, CO53R and CO63R "UNDER-COUNTER" UNITS



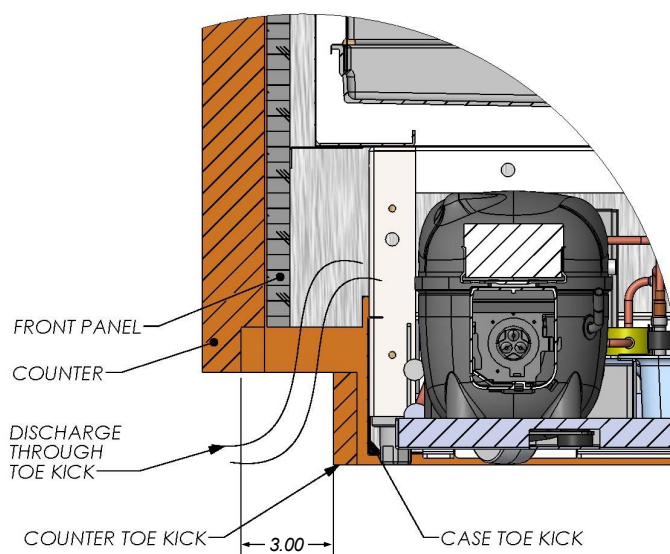
--- Side Section ---



--- Side Section With Full Dimensions ---



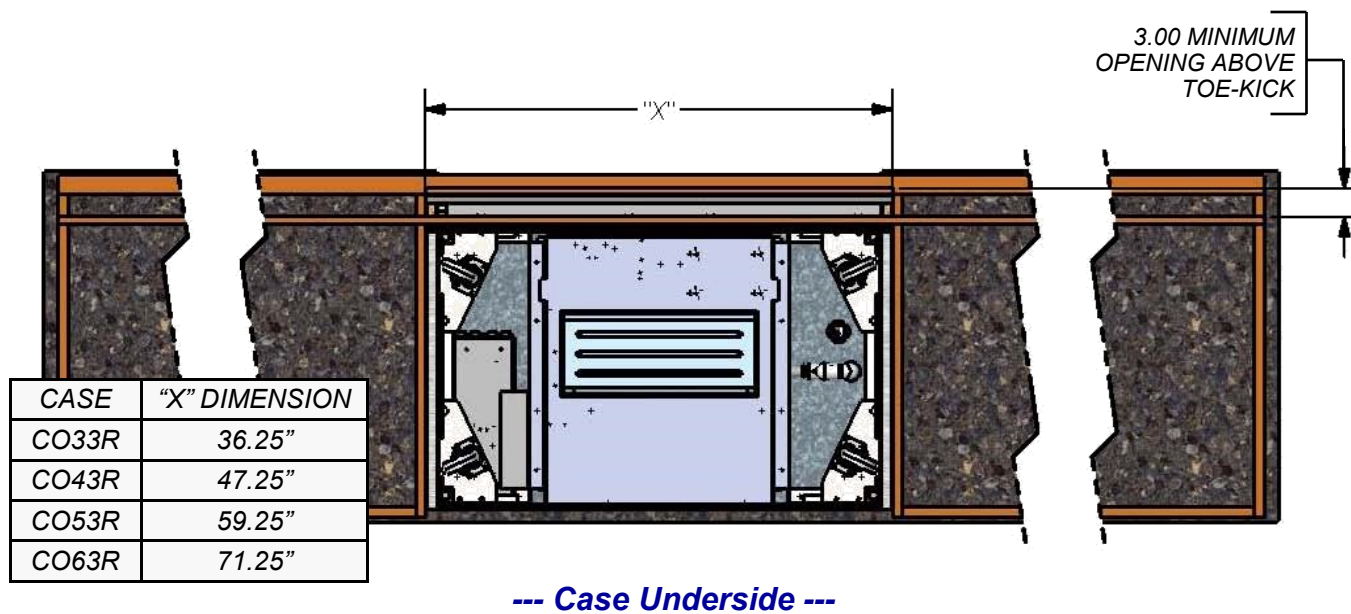
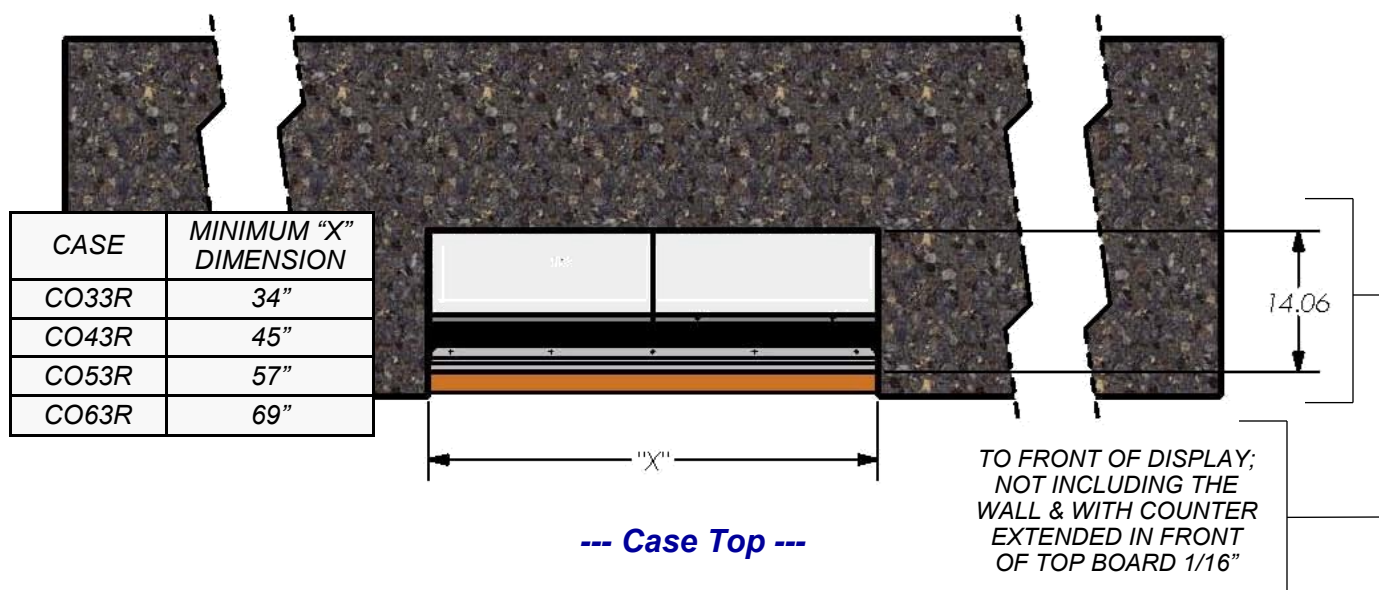
--- Side Section Without O.E.M. Toe-Kick ---



--- Side Section With O.E.M. Toe-Kick ---

## CASE TOP AND UNDERSIDE DIMENSIONAL AND LAYOUT FEATURES

**NOTE:** THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO33R, CO43R, CO53R and CO63R "UNDER-COUNTER" UNITS

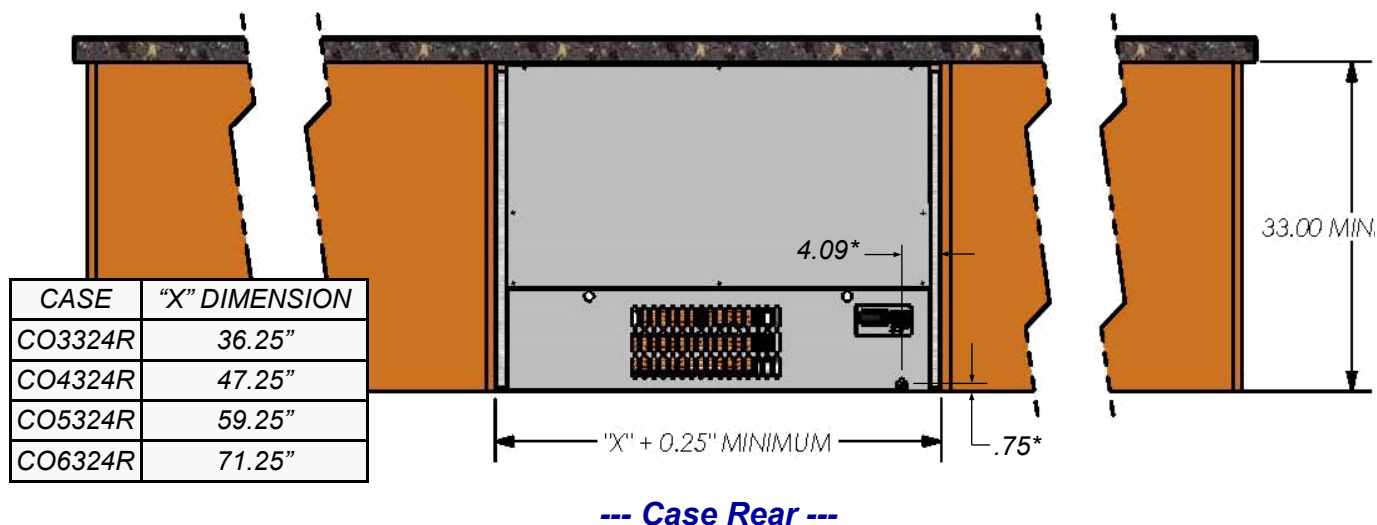
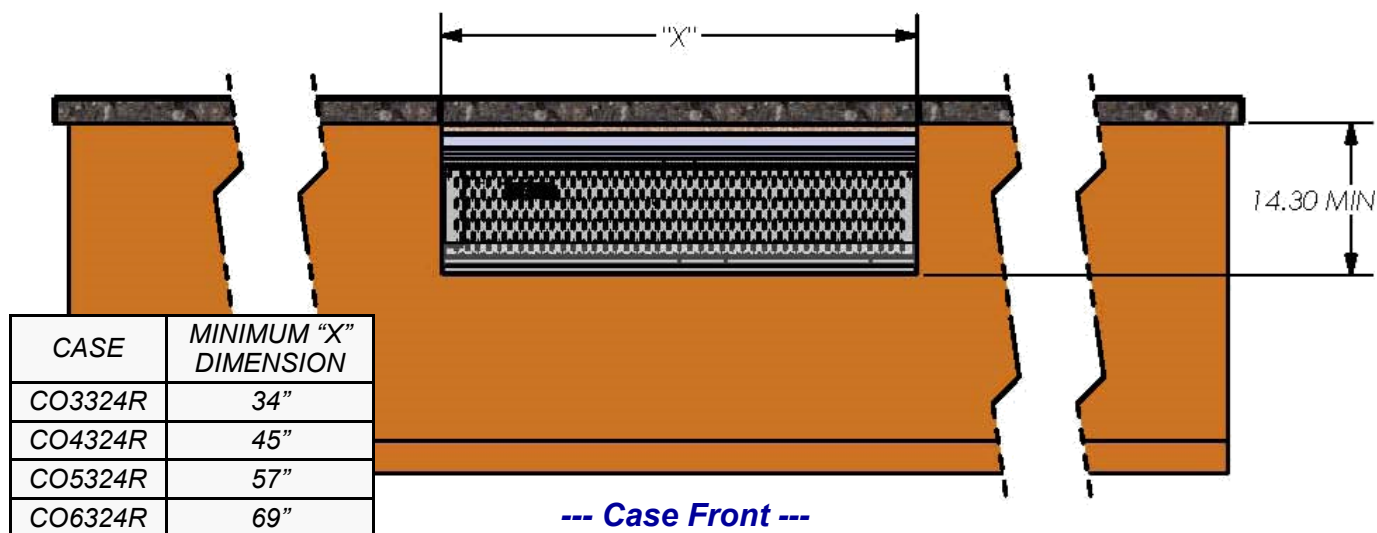


**THE FOLLOWING  
COUNTER INSTALLATION  
INFORMATION IS ONLY  
APPLICABLE TO  
MODELS CO3324R,  
CO4324R, CO5324R and  
CO6324R**

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**NOTE: ANY REVISIONS  
TO THIS INFORMATION  
MUST ALSO MADE TO  
SCC P/N 20-50862**

## CASE FRONT AND REAR DIMENSIONAL FEATURES

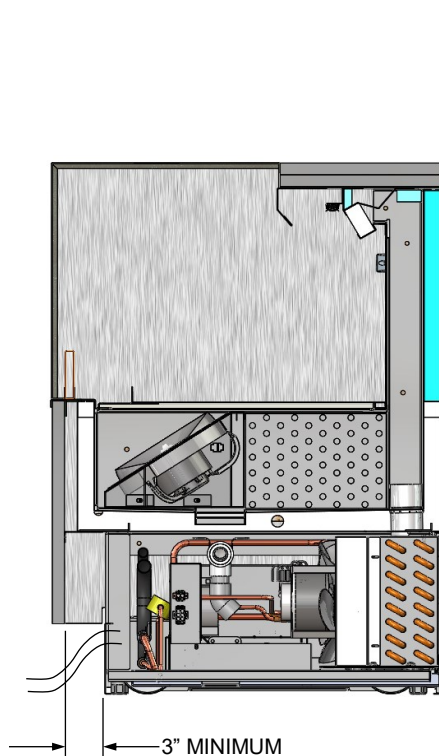
**NOTE:** THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO3324R, CO4324R, CO5324R and CO6324R



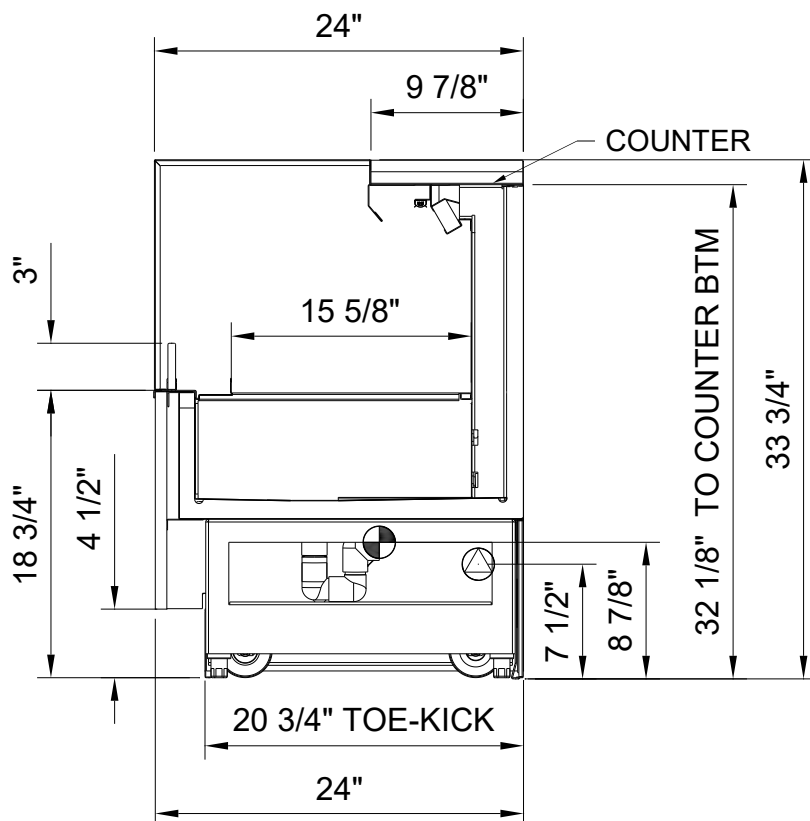
\* **Note:** A 6-foot power cord is supplied and exits the display through the lower rear panel (as shown immediately above). Refer to your particular model's specification sheet for electrical requirements and plug configuration.

## SIDE SECTION DIMENSIONAL AND LAYOUT FEATURES

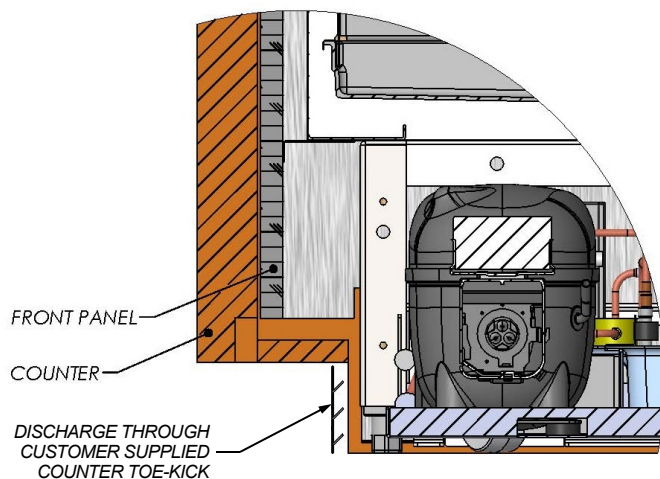
**NOTE: THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO3324R, CO4324R, CO5324R and CO6324R**



--- Side Section ---

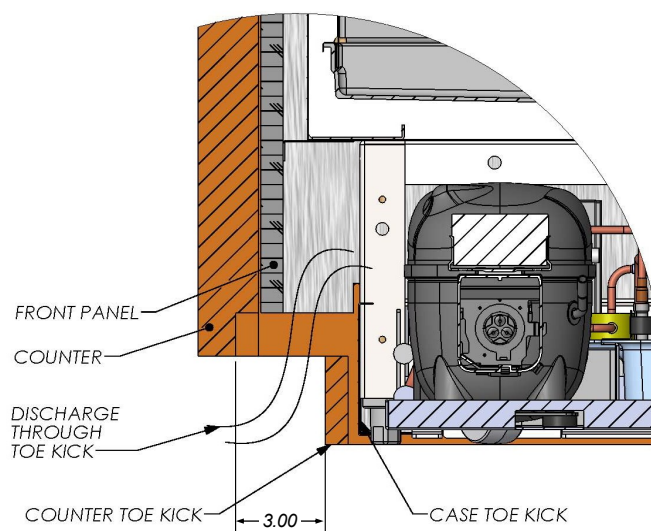


--- Side Section With Full Dimensions ---



*Note: Above Illustration May Not Exactly Reflect Every Feature or Option of Your Particular Case*

--- Side Section Without O.E.M. Toe-Kick ---

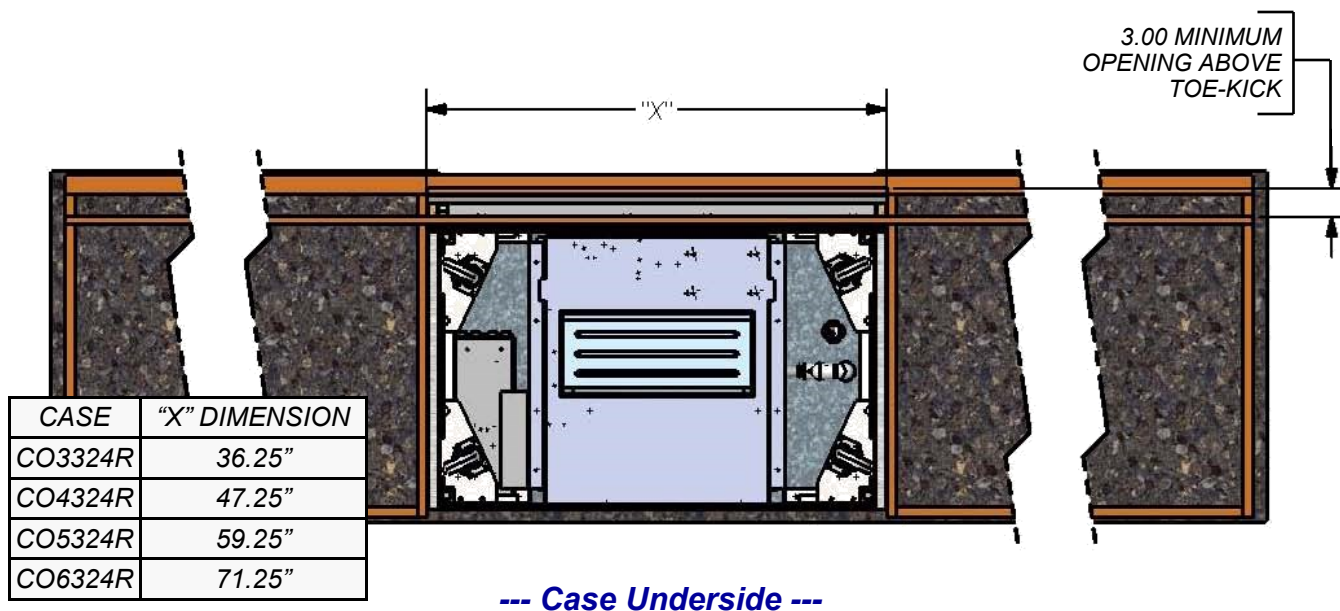
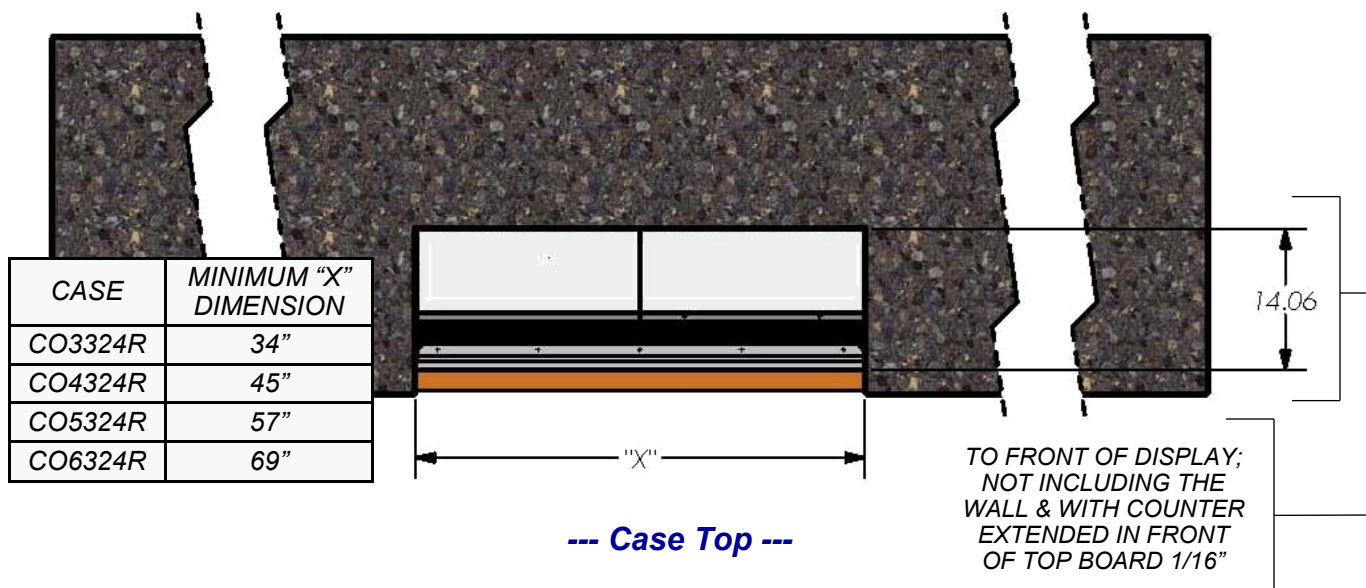


*Note: Above Illustration May Not Exactly Reflect Every Feature or Option of Your Particular Case*

--- Side Section With O.E.M. Toe-Kick ---

## CASE TOP AND UNDERSIDE DIMENSIONAL AND LAYOUT FEATURES

**NOTE:** THE FOLLOWING COUNTER INSTALLATION INFORMATION PERTAINS ONLY TO MODELS CO3324R, CO4324R, CO5324R and CO6324R



## 1. Merchandiser Start-Up

- Do not use an extension cord with this appliance.
- Do not operate this equipment with a damaged cord, plug or outlet.
- Insure that the main power switch is off.
- Plug cord into a certified 110V electrical outlet with ground.
- Turn main power switch on (see location at rear of case in illustration below)
- Coil fans should turn on.
  - From inside of the case, check for discharge air from front baffle, to confirm that the fans are functioning properly.
- When the case is in a start-up mode or has been idle for a long period of time, unit may require 75 minutes running time to pull-down temperature.
- Turn lights on.
  - Light switch is next to main power switch.
  - The lights should come on at the same time.
- Always maintain front and rear airflow clearance of twelve inches.

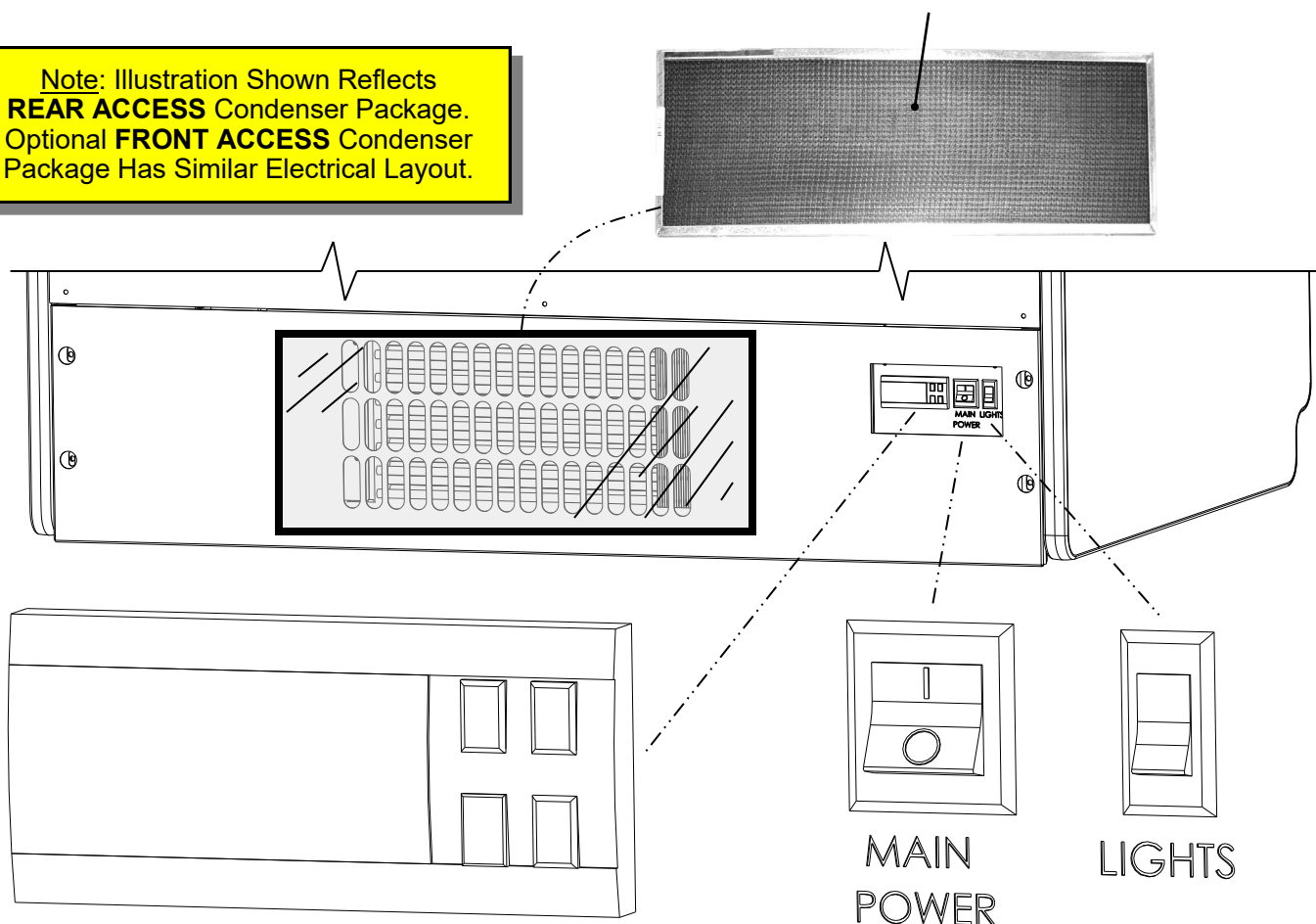
- Obstruction or restriction of air can void warranty.
- Thermometer is also at case rear (as shown below), and controls internal case temperature.
- Interior case temperature is to be 35 °F to 41 °F.
- **Note:** Case temperature is determined by case size. Temperature is controlled by a thermostat. If a temperature setting change is required, refer to instructions in **PROGRAMMABLE CONTROLLER** sections of this manual.

## 2. Removable, Condenser Coil Filter

- A removable filter prevents impurities (dust, dirt and debris) from entering condenser coil.
- Filter must be removed weekly and cleaned.
- See **GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL) - EXTERIOR** in this operating manual for cleaning instructions.

Removable, Magnetized Condenser Coil Filter (Optional). **Note:** Filter is Placed over Condenser Coil Grille.

**Note:** Illustration Shown Reflects **REAR ACCESS** Condenser Package. Optional **FRONT ACCESS** Condenser Package Has Similar Electrical Layout.



### 1. Product Placement

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

### 2. Honeycomb Airflow Consideration

- Airflow from honeycomb air diffuser is designed to flow over (and around) product to return air grille at case front.
- Caution! You must keep the honeycomb air diffuser unblocked by product for airflow to reach return air grille.
- Caution! You must ALSO keep product OFF return air grill at case front.
- See illustration below.

### 3. Load Lines

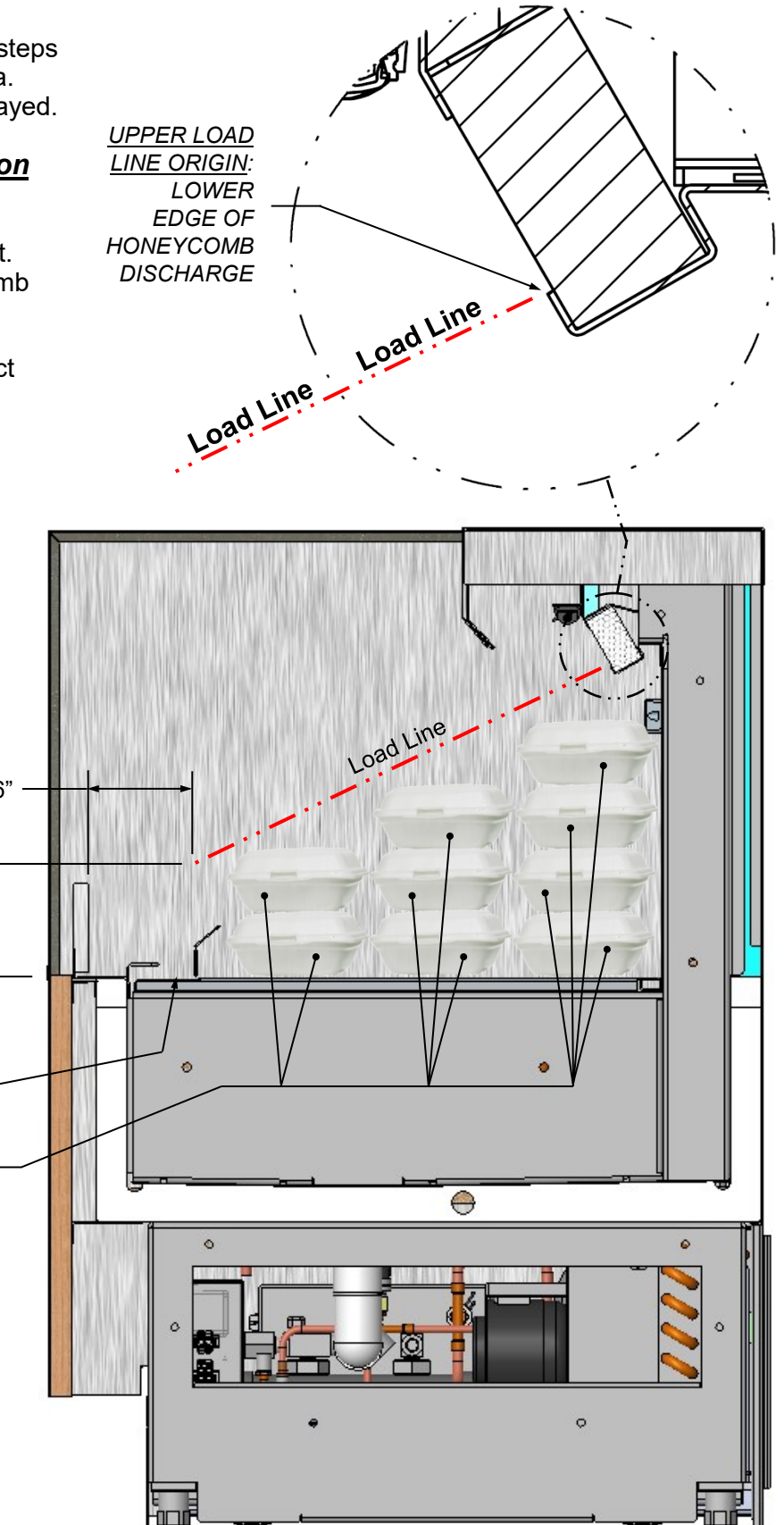
- Load lines represent the maximum height that product can be placed and/or stacked in case.
- Keep product at or under load lines to assure that refrigerated airflow is properly cycled from honeycomb air diffuser through the return air grille.
- Proper product placement will maintain acceptable product temperature.
- See illustration below.

LOWER LOAD LINE  
ORIGIN: FRONT ACRYLIC  
AND DECK SURFACE  
DIMENSIONAL  
INTERSECTION.

Return Air Grille Must Not  
Be Blocked By Product!

Sample Product

UPPER LOAD  
LINE ORIGIN:  
LOWER  
EDGE OF  
HONEYCOMB  
DISCHARGE



Note: Perspective View of Model CO5324R Is Shown At Right. It May Not Exactly Reflect Every Feature or Option of Your Particular Case.

### **1. Adjustable Front Toe-Kick (Models CO33R, CO43R, CO53R, CO63R, Etc.)**

- Front toe-kick is adjustable.
- Loosen screws holding front toe-kick in place.
- Lower front toe-kick to floor.
- After case is in desired position, use silicone sealant to seal toe-kick to floor.
- See next page for removable front panel (without screws) for models CO3434RG.5716, CO3034RG.5718 and CO3034RG.5718A

### **2. Light Fixture**

LED light fixture is at upper section of case as shown in illustration below.

- LEDs light fixtures rarely require change-out.

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

- See **MAINTENANCE - LED LIGHT FIXTURES** section in this manual for more specifics.

### **3. Night Curtain**

Optional night air curtain is near honeycomb.

- See **OPTIONAL NIGHT AIR CURTAIN OPERATING INSTRUCTIONS** section in this manual for more specific illustrations.

### **4. Honeycomb Air Diffuser**

- See **PREVENTIVE MAINTENANCE - HONEYCOMB (BY TRAINED SERVICE PROVIDERS ONLY)** section in this manual for complete information.

### **5. Thermometer**

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

Optional Product Step (Not on All Cases) Shown For Illustrative Purposes Only

Thermometer

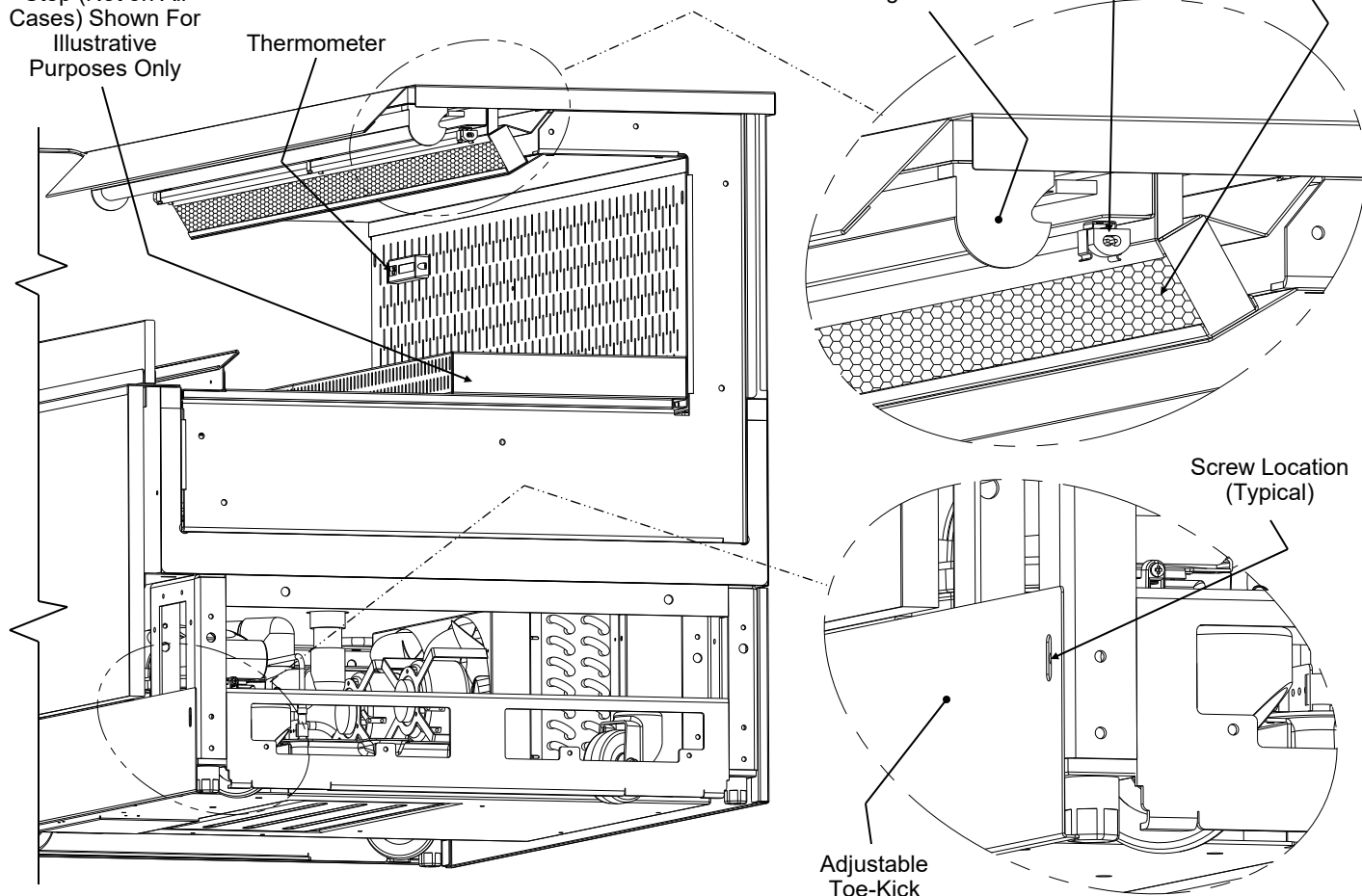
Night Curtain

LED Light

Honeycomb Air Diffuser

Screw Location (Typical)

Adjustable Toe-Kick

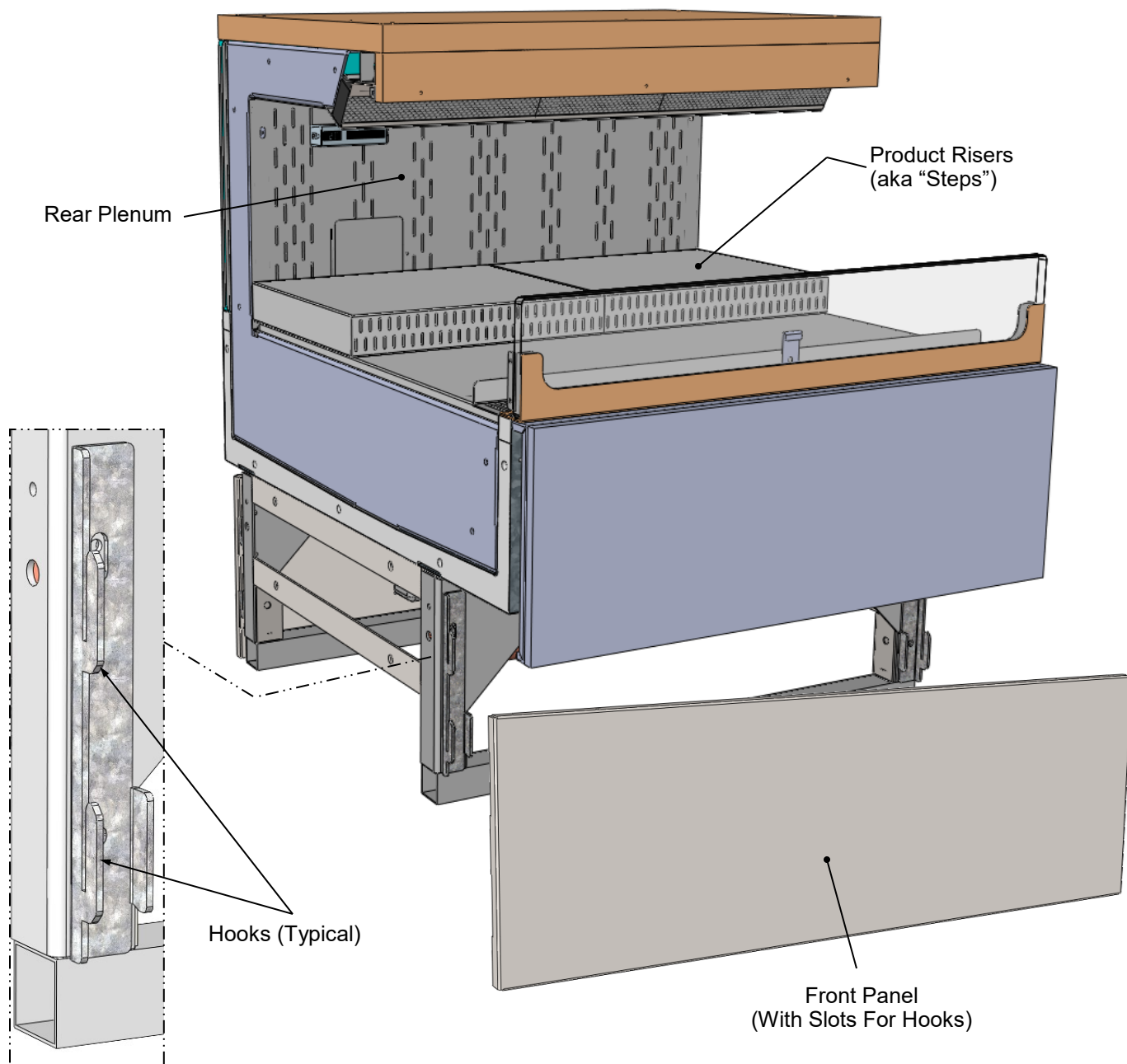


### 1. Removable Toe-Kicks

- Front toe-kick is removable.
- Simply lift up and off.
- After case is in desired position, use silicone sealant to seal toe-kick to floor.
- See previous page for adjustable front toe-kicks (with screws) on models CO33R, CO43R, CO53R, CO63R, etc.
- See next page for magnetic removable front panels.

### 2. Product Risers (aka "Steps")

- Risers ("steps") allow product to be more prominently displayed.
- Risers are to rest on decks and be placed as far back as possible (up against rear plenum) as shown in illustration below.
- See **GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL) - INTERIOR** in manual for instructions on cleaning risers/steps.



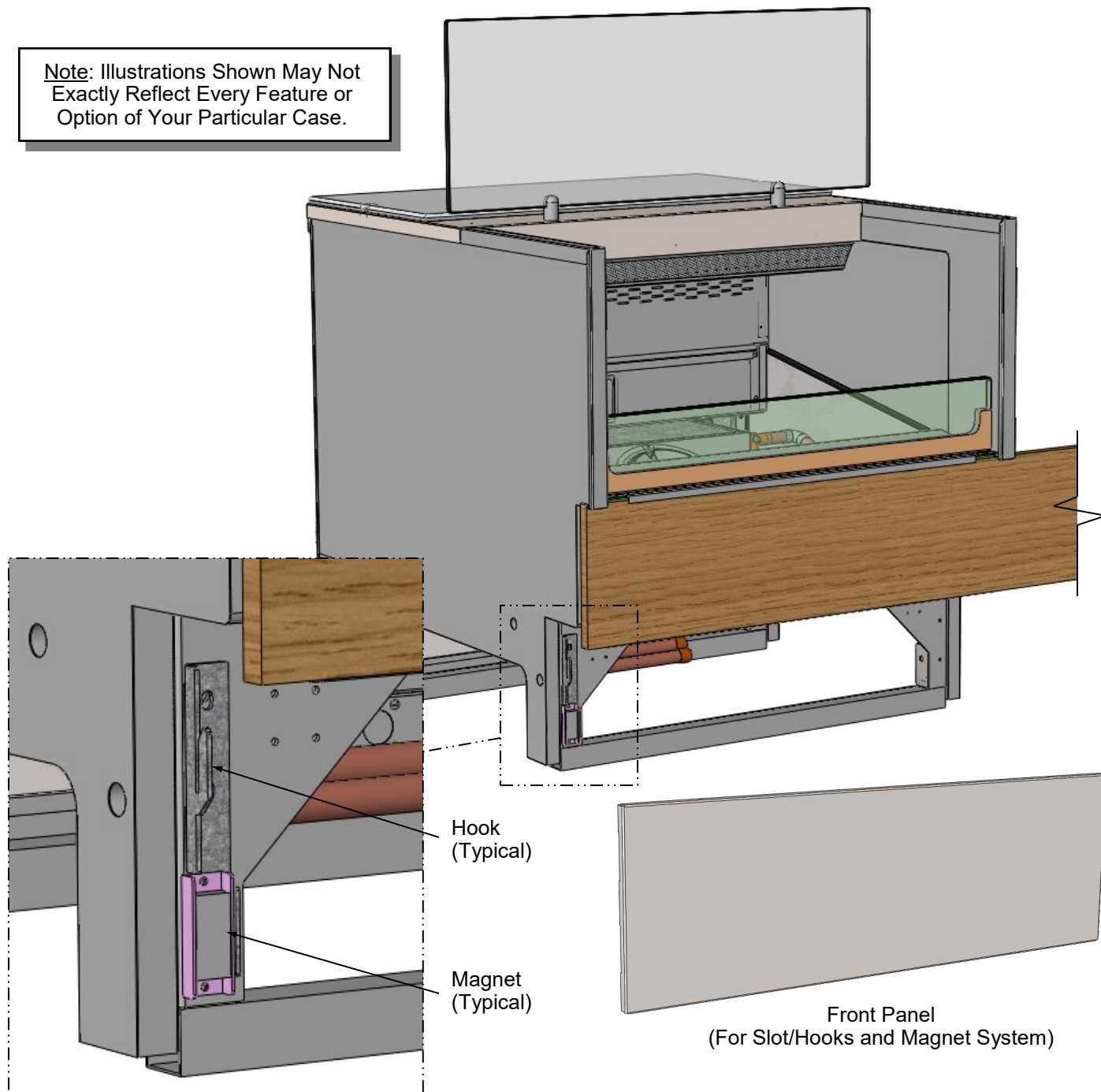
## MAINTENANCE - REMOVABLE FRONT TOE-KICKS (MAGNETIC SYSTEM)

### **Removable Magnetized Front Panels**

- These panels are found on models CO3434RG.5716, CO3436RG.5716, CO3034RG.5718 and CO3034RG.5718A
- Toe-kicks are shipped separately.
- Toe-kicks are to be placed on case via slot/magnet attachment method.

- Remove toe-kick by pulling away from lower magnet and lifting up and off hooks.
- No screw removal is required.
- See illustrations below
- See previous page for slot/hook removable front panels.

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



## 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.

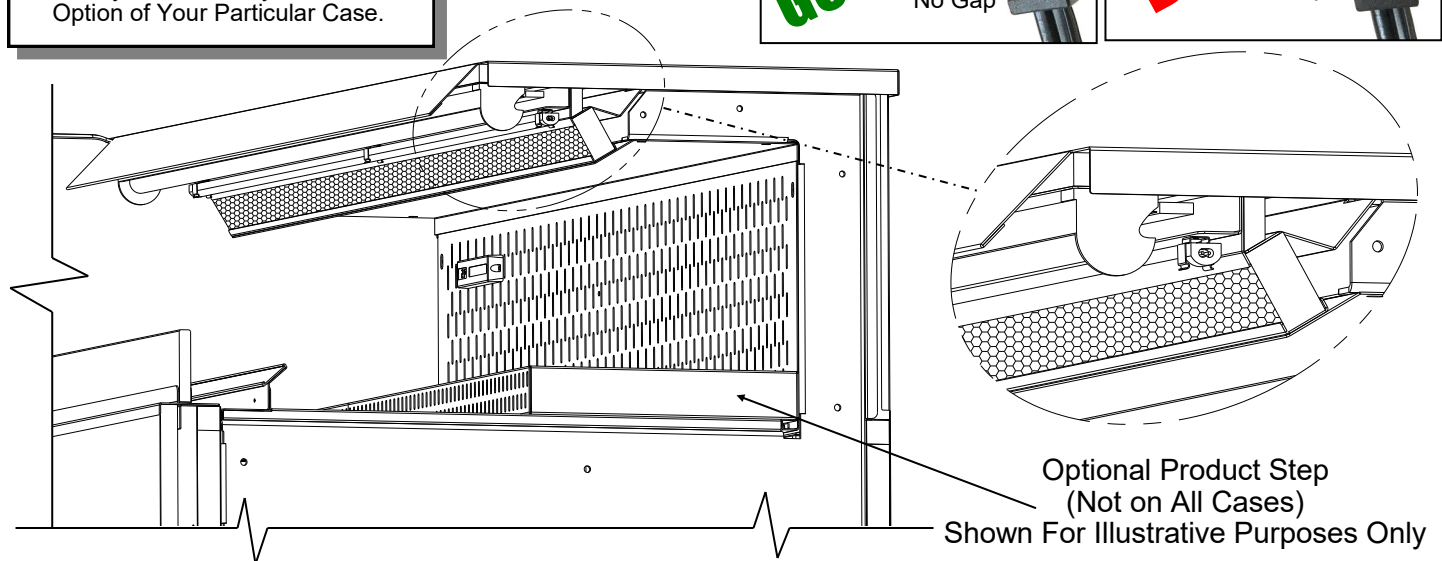
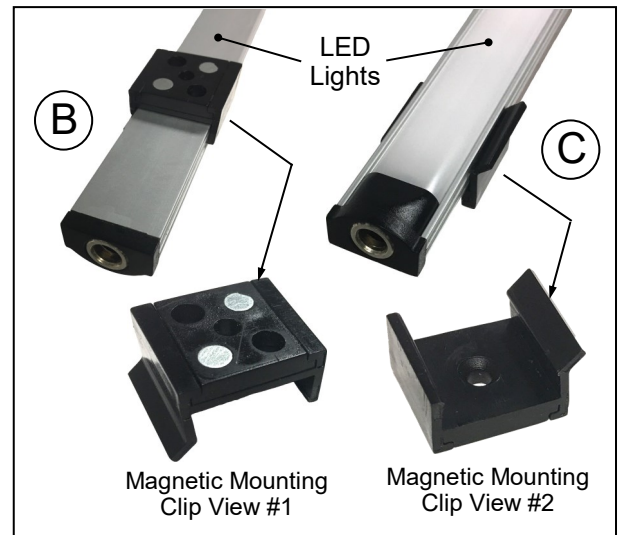
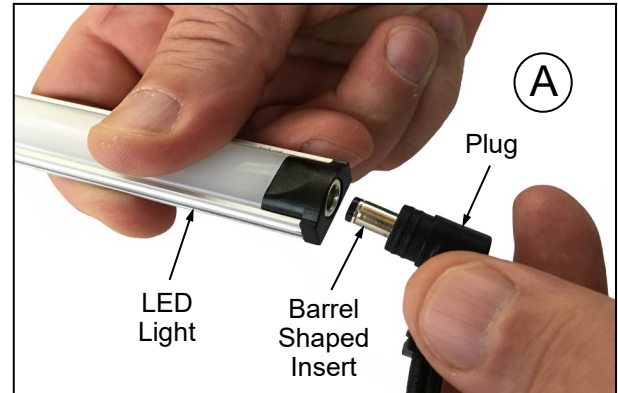
### Replacement of LED lights:

- 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 below-right.
- Turn LED light switch back on.

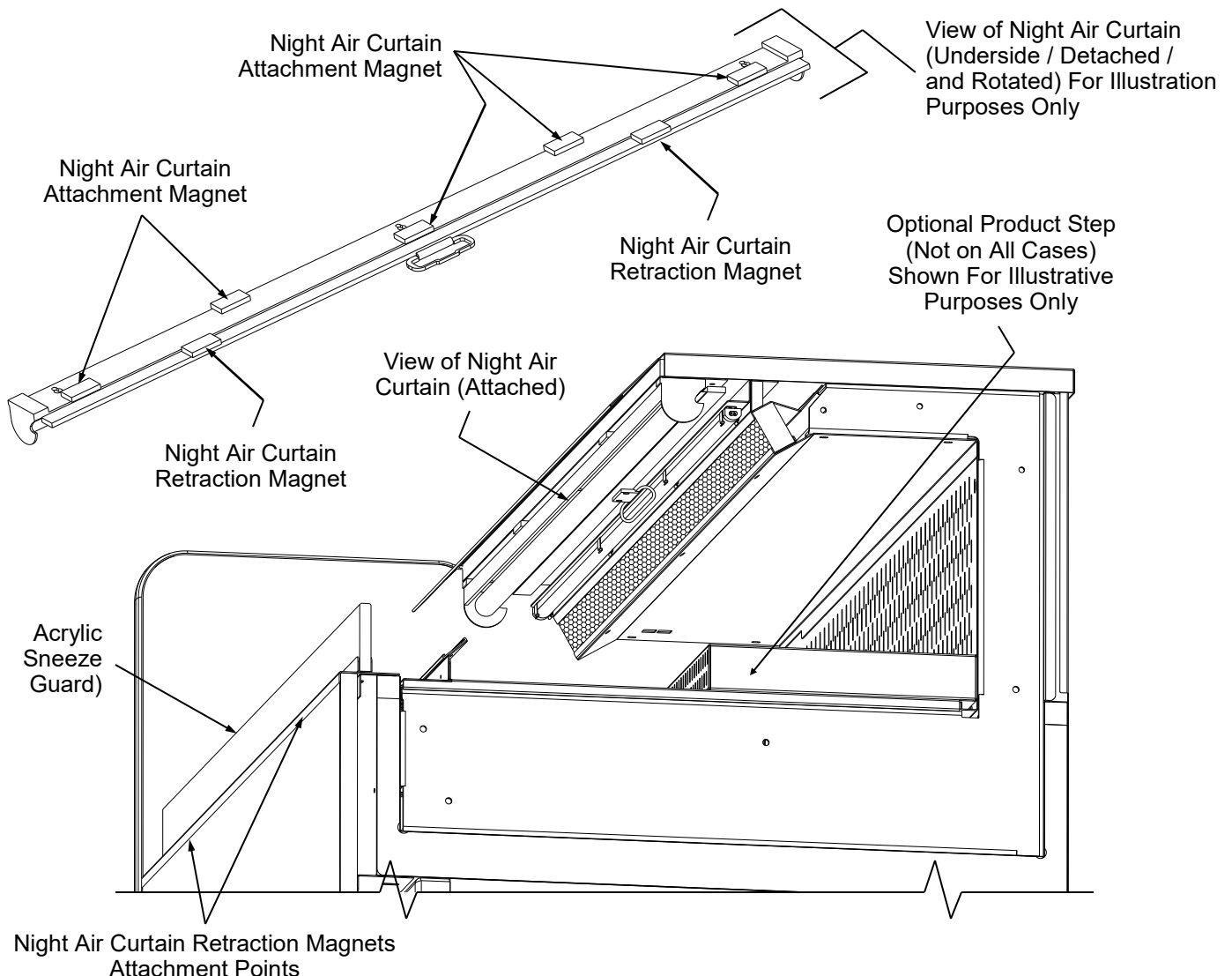
**Note:** Illustrations Shown May Not Exactly Reflect Every Feature or Option of Your Particular Case.



## Night Air Curtain Installation & Operating Instructions

1. Use caution when handling night air curtain.
2. Display case may come with night curtain already attached. If not, a retrofit kit will be provided. If using SCC-supplied retrofit kit, attach to display case by centering night curtain along top-front of case as shown in illustration below. Attachment magnets will hold night air curtain firmly in place.
3. Grasp the handle and pull downward to desired location in front of case (as shown in illustration below).
4. To return night air curtain to its retracted position, grasp handle, lift up and away from its magnetic attachment and carefully wind night air curtain back into roll.
5. Caution! Do not allow spring-loaded night air curtain to freely snap back into roll. Doing so can eventually destroy night air curtain's tension and retractability.
6. To entirely detach night air curtain from case, simply pull it downward and away from case. Caution! Do NOT drag night air curtain along top (underside) of case or magnets may scratch or mar surface. Simply lift night air curtain downward and away from case. Store in safe place away from foot-traffic.
7. Store in a safe and secure space until needed again.

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



### Electrical: Access and Components

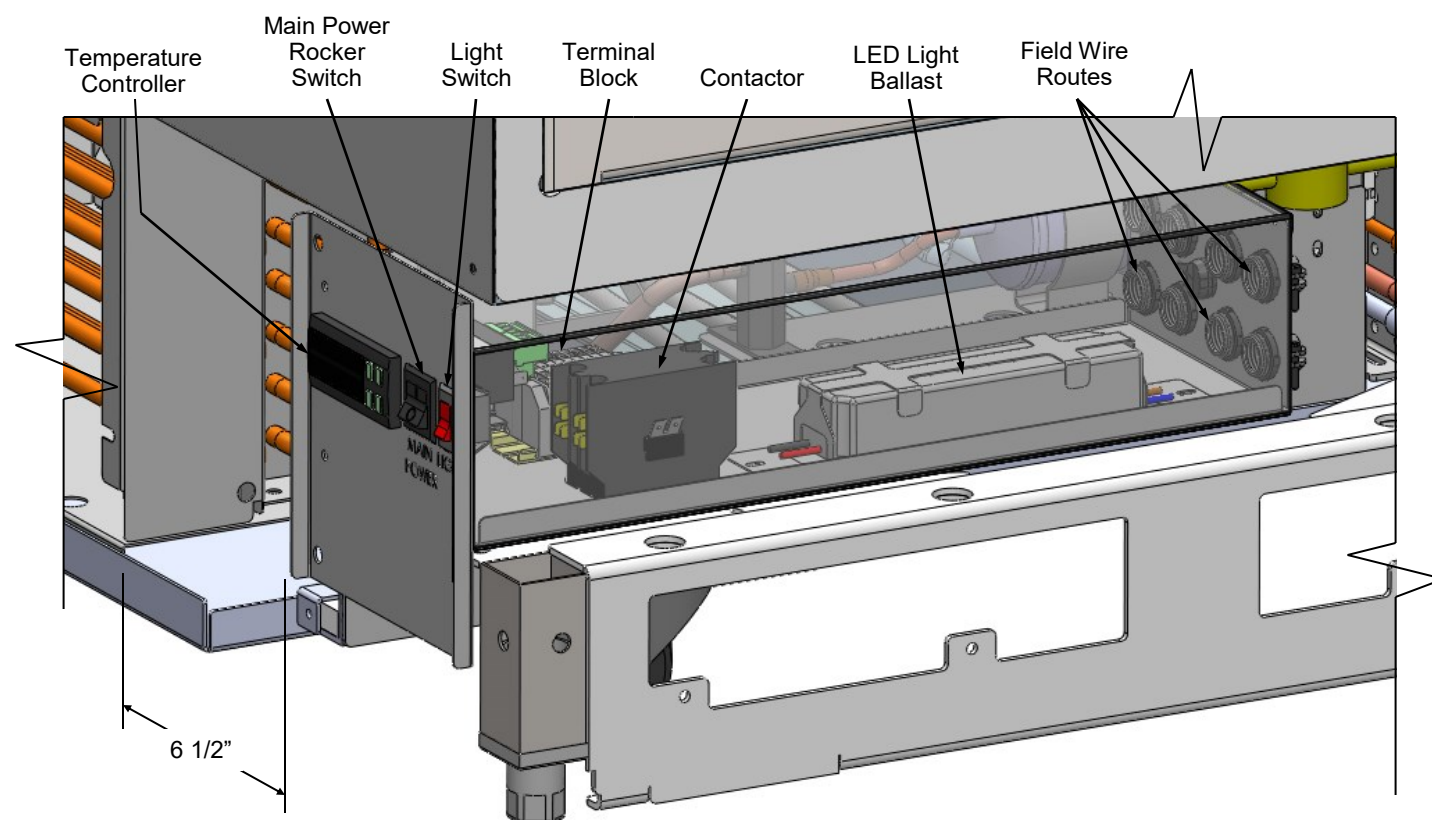
**Warning, disconnect power before providing maintenance and service to unit.**

#### 1. Ballast Access

- A 6 1/2" space is provided at case rear to access electrical components (between refrigeration package and temperature controller plate).
- Electrical components such as terminal block, contactor, and ballast are in main electrical box.

#### 2. Temperature & Defrost Control

- The case temperature is set at the factory, as determined by the case size. The temperature is controlled by a thermostat. If a temperature setting change is required, follow the instructions in the Temperature Controller section of manual.
- If service is required to the temperature control unit, call Structural Concepts. This maintenance should be performed by a certified technician.



**Note:** Above Illustration Reflects **REAR ACCESS** Condenser Package. Optional **FRONT ACCESS** Condenser Package Has Similar Electrical Layout.

## MAINTENANCE - REAR COMPONENT LAYOUT (MODEL CO3436RG.5716 ONLY)

### **1. Vertical Glass Divider / Sneeze Guard**

- Vertical glass divider/sneeze guard is held securely with mounts. **DO NOT** lean against or strike glass or it could snap off mounts or break.

### **2. Removable 18" Sanalite® Wrapping Board**

- Sanalite® wrapping board is at case rear.

### **3. Salad Tissue Box Holder**

- Salad tissue box holder is at rear-right.

### **4. Sandwich Wrap Holder**

- Sandwich wrap holder is at rear-center.

### **5. Removable Writing Instrument Cup**

- Pens and markers are used for writing on wrapped products.
- Note:** Writing instruments are to be wiped off with sanitary wipes **AFTER EACH USE**.

### **6. Removable Sanitary Wipe Bucket**

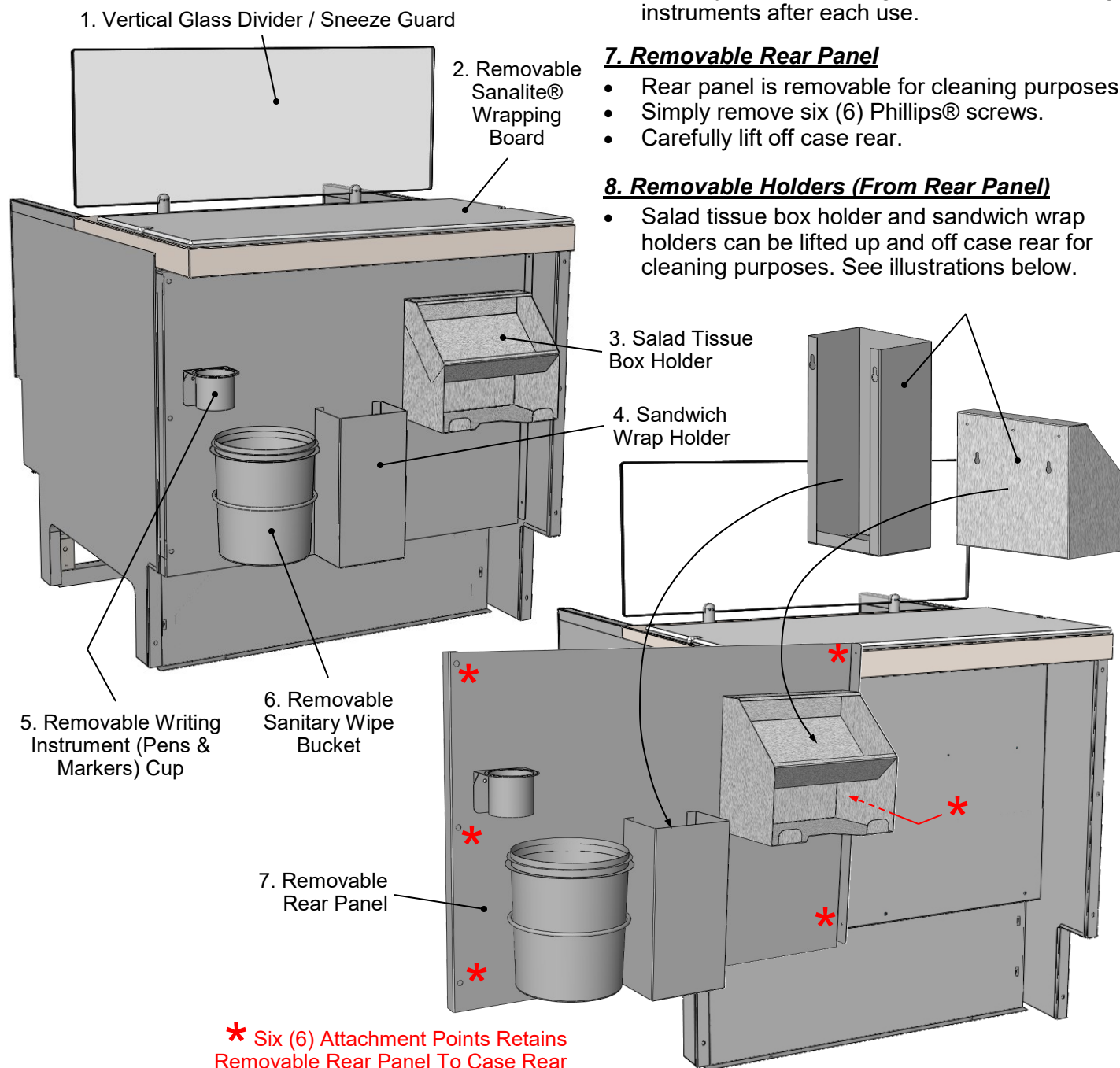
- Sanitary wipes are designed to wipe off writing instruments after each use.

### **7. Removable Rear Panel**

- Rear panel is removable for cleaning purposes.
- Simply remove six (6) Phillips® screws.
- Carefully lift off case rear.

### **8. Removable Holders (From Rear Panel)**

- Salad tissue box holder and sandwich wrap holders can be lifted up and off case rear for cleaning purposes. See illustrations below.



### **1. Security Covers (Optional) - Models COXXRM**

- Security covers are designed to prevent access to merchandiser.
- Security cover is to be placed **OVER** upper latch retaining clip and **UNDER** lower latch retaining clip.
- Lift security cover up and off with handles.

### **2. Locking Mechanism**

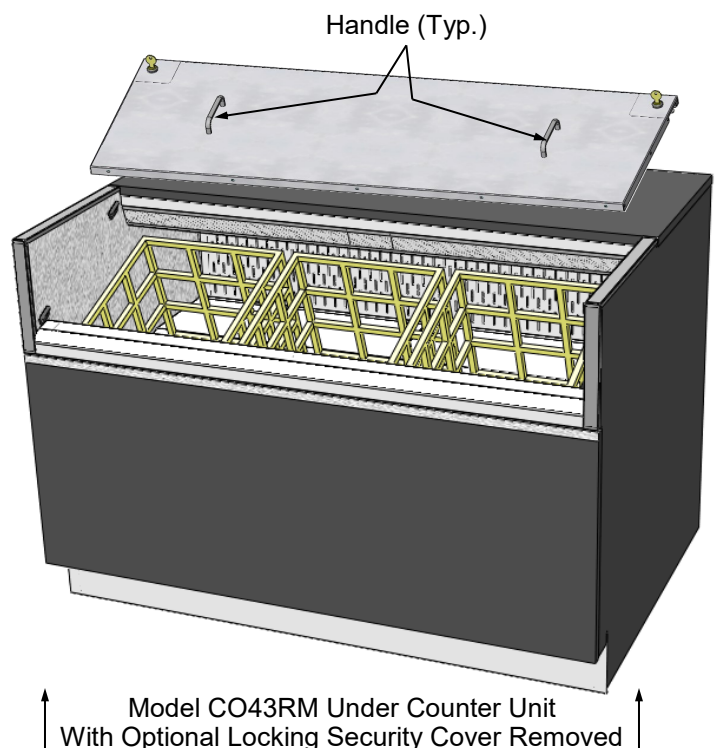
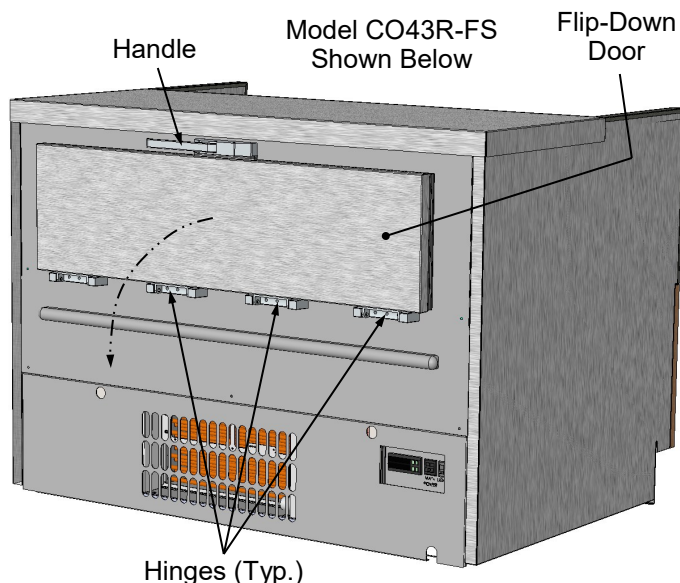
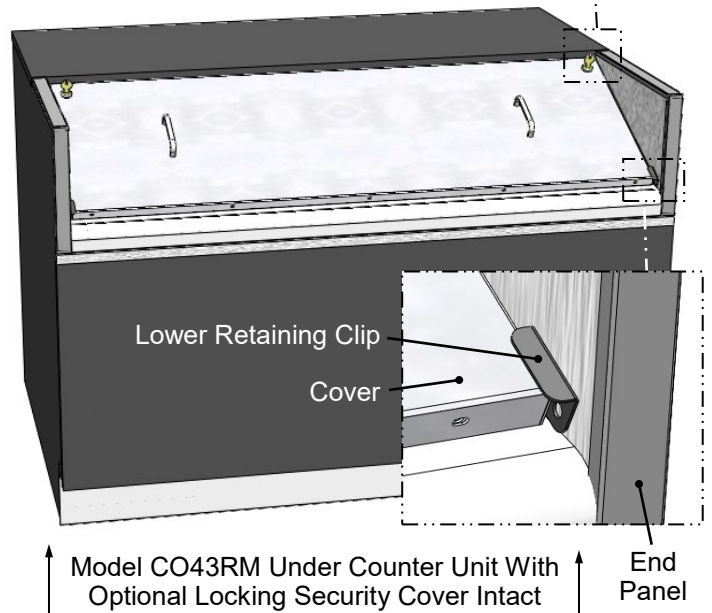
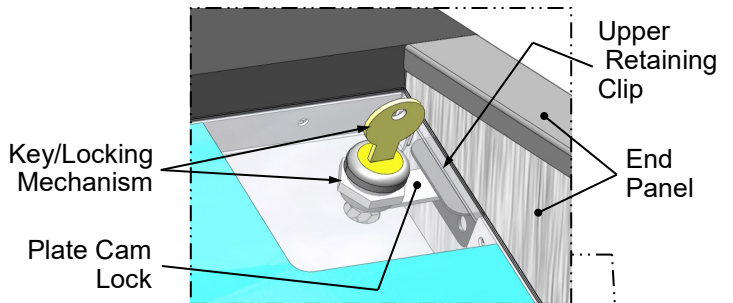
- Locking mechanism key allows plate cam lock to be rotated under upper retaining clip.
- Proper rotation of plate cam lock prevents cover from being removed.

### **3. Key Storage / Cover Storage**

- When security cover is attached to case, remove keys and store in easy-to-remember, yet secure location.
- When security cover is removed from case, store in safe, secure location away from foot traffic.

### **4. Rear Flip-Down Hinged Door (Optional)**

- Certain models have a rear, flip-down hinged door with perforated panel (to maintain proper airflow).
- Handle is to be pulled outward to open door.
- **Caution! Hold door securely while lowering it against hinges.**
- **If door is allowed to fall downward onto its own weight, it can damage hinges.**
- Models include CO43R-FS as well as others.
- See illustration below.



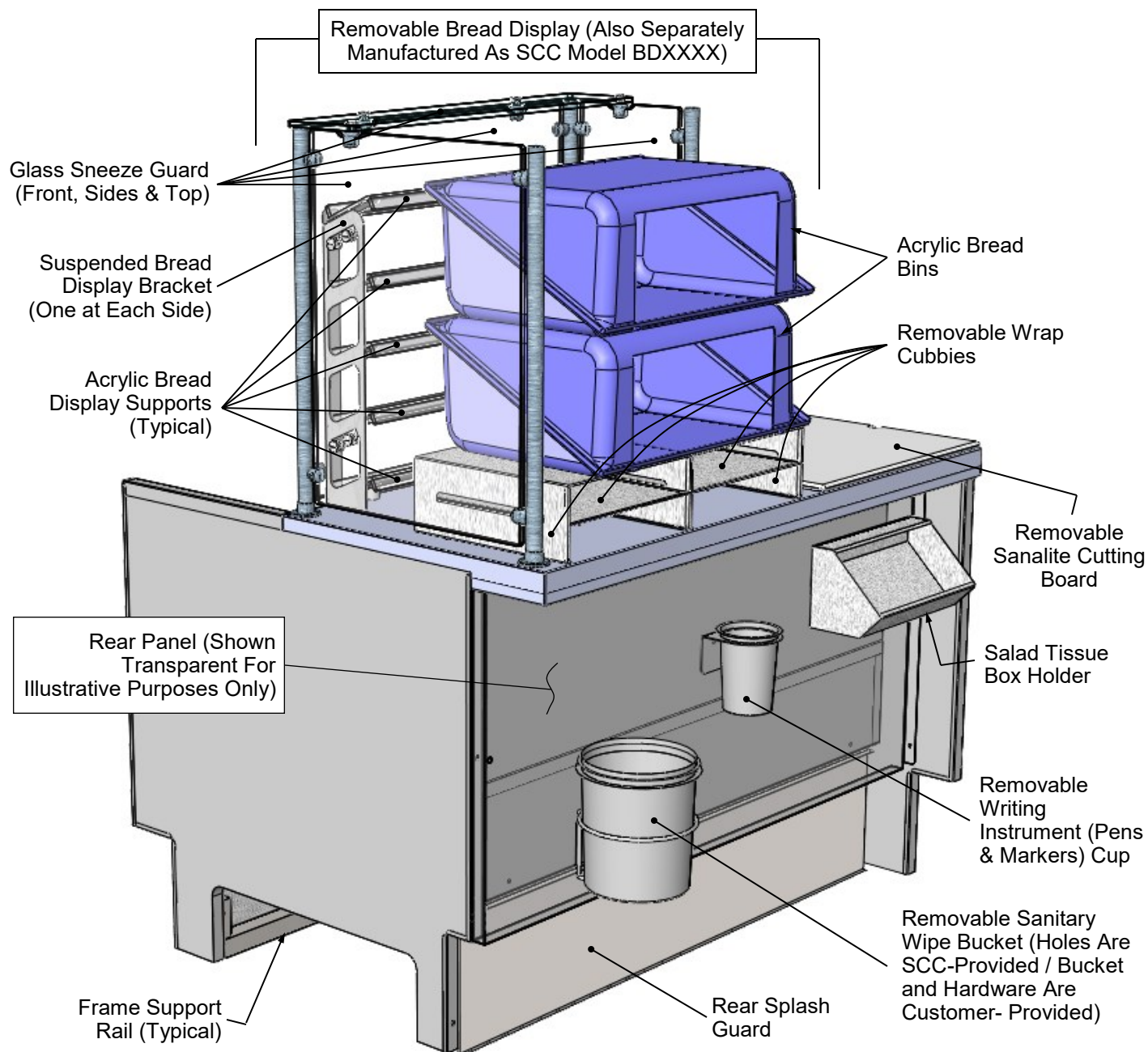
### **1. Merchandiser Overview**

- Model CO4836R.5716 and CO4836RG.5716 also have a bread display unit that sits atop counter and is protected by a glass sneeze guard. This bread display unit is also separately manufactured by SCC as Model BDXXXX.
- Stainless steel posts hold sneeze guards in position.
- Sneeze guards are glass (sides and top).
- Acrylic bread bins and bread display supports are removable.
- Stainless steel brackets suspend bread display.

- Stainless steel removable wrap cubbies are accessible at case rear.
- See illustration below.

### **2. Rear Panel Removal (For Cleaning Purposes)**

- See **MAINTENANCE - REAR COMPONENT LAYOUT (MODEL CO3436RG.5716 ONLY)** section in this manual for location of the six (6) rear panel attachment points.
- Removing screws at these attachment points will allow entire rear panel to be removed from case.



**1. Evaporator Fan Access**

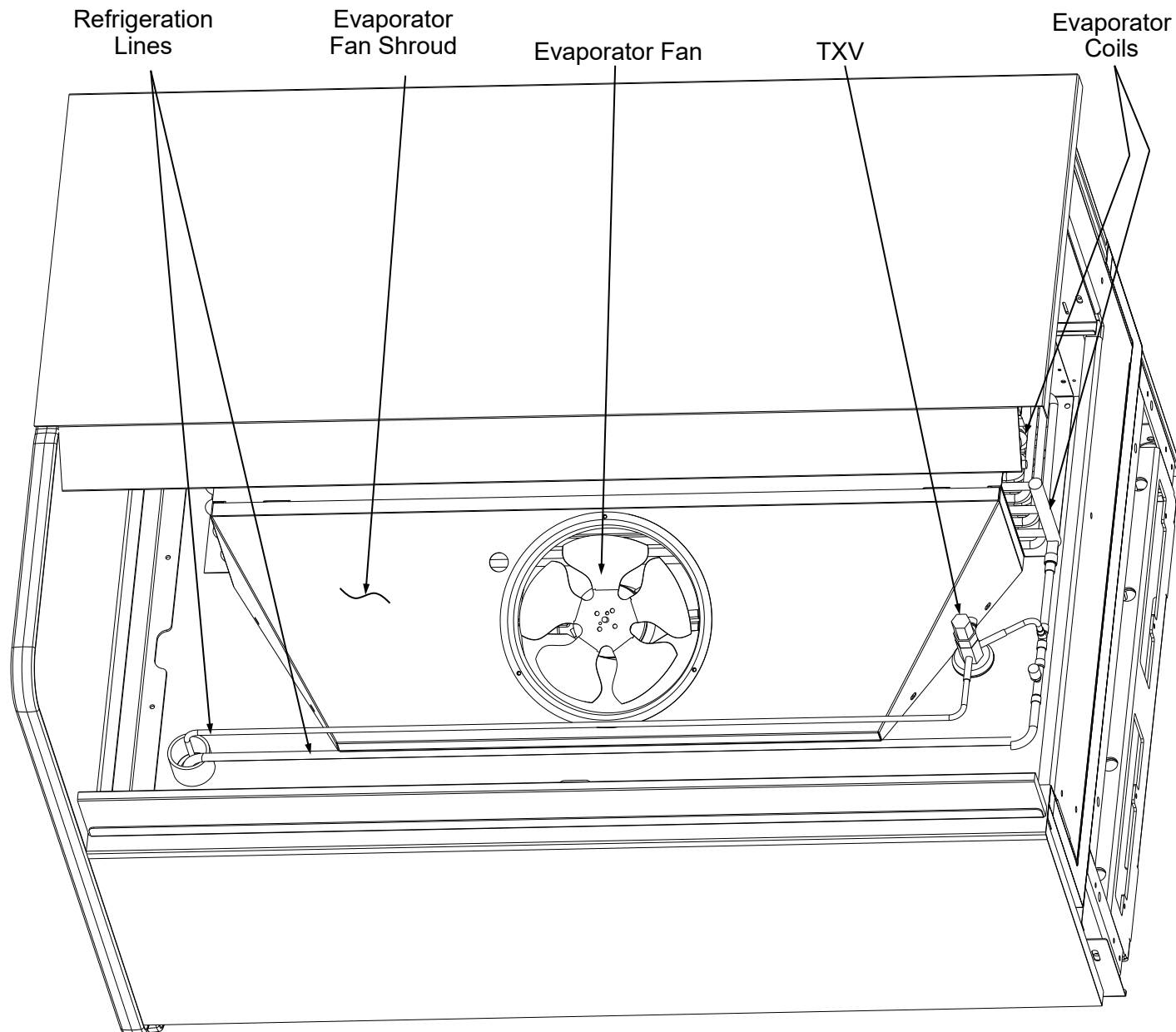
- Remove lower decking.
- Lift decks straight up and out to avoid scratching insides of case while removing decks.

**2. Thermostatic Expansion Valve Access**

- TXV also becomes accessible upon removal of decking.

**3. Drain**

- Drain is located at center of tub (under evap. fan).
- Access to drain may also be gained by removing evaporator fan shroud.



Above Illustration Shown With End Panel and Decking Removed For Illustrative Purposes

### 1. Evaporator Fan Access

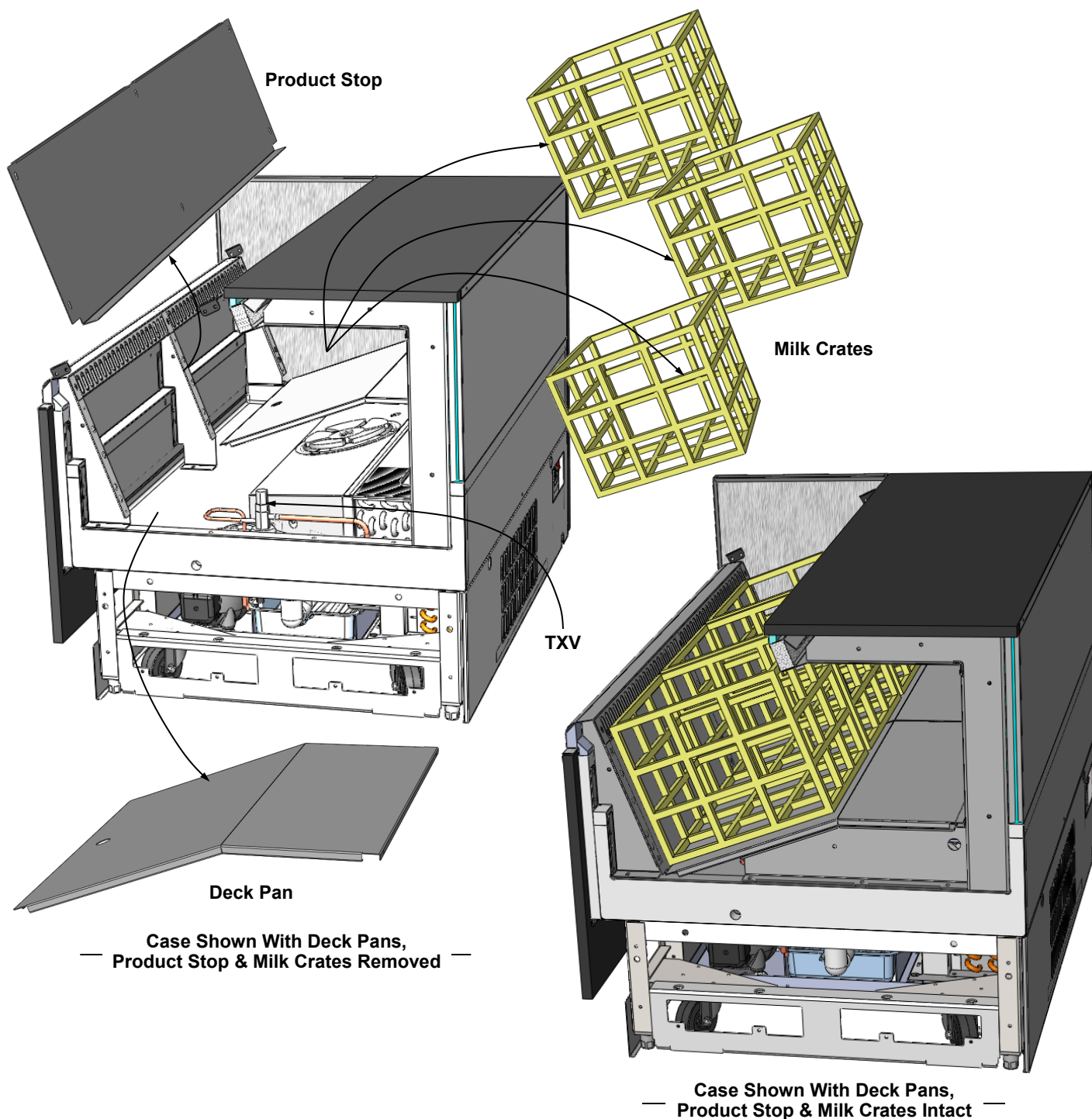
- Remove milk crates and lower decking.
- Lift decks straight up and out to avoid scratching insides of case while removing decks.

### 2. Thermostatic Expansion Valve Access

- TXV is accessible upon removal of decking.
- See illustration below.

### 3. Drain

- Drain is located at center of tub (under TXV).
- Access trough by removing evaporator fan shroud.



**1. Evaporator Fan Access**

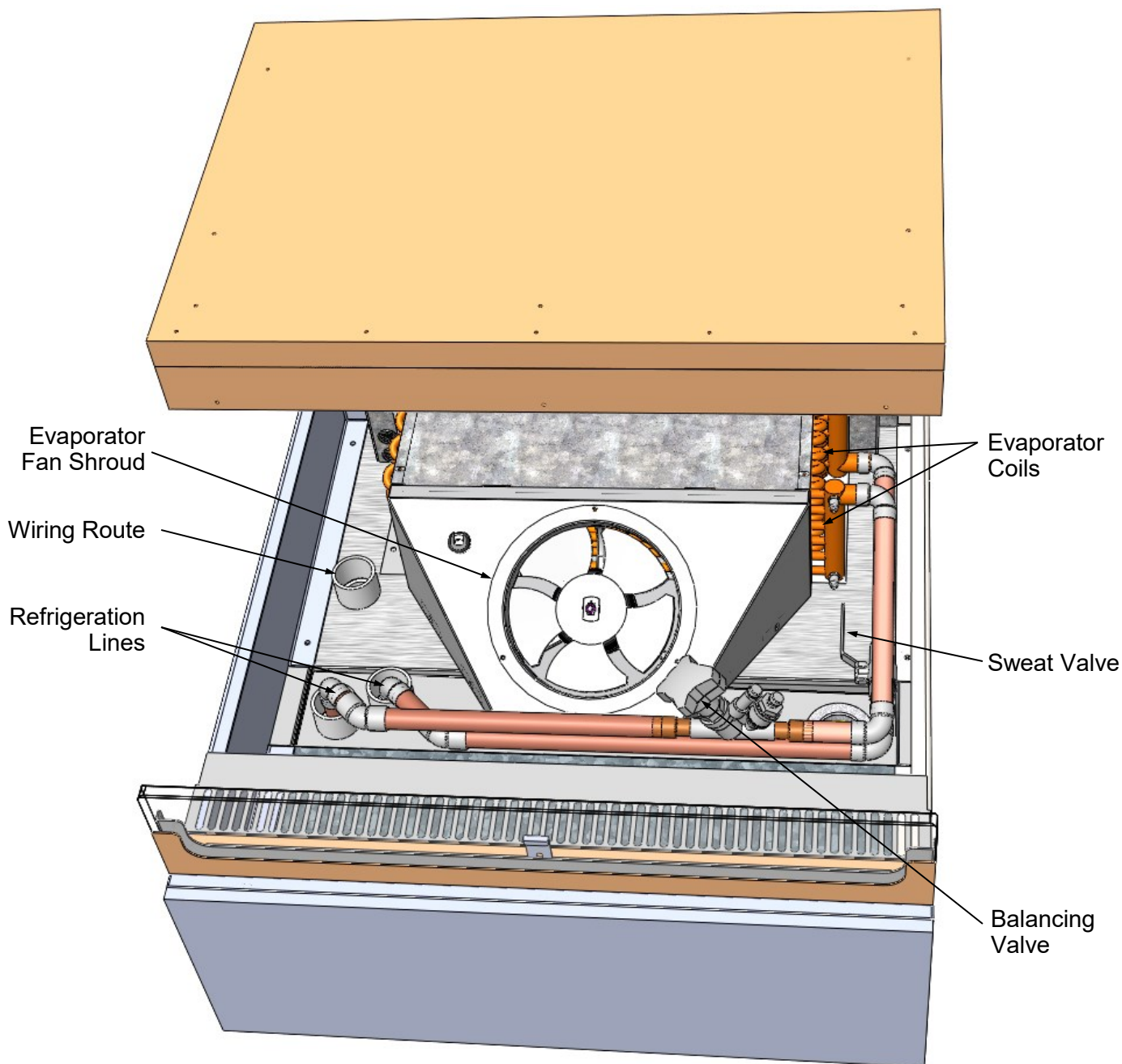
- Remove lower decking.
- Lift decks straight up and out to avoid scratching insides of case while removing decks.

**2. Balancing Valve / Sweat Valve Access**

- Balancing valve and sweat valve becomes accessible upon removal of decking.

**3. Drain**

- Drain is located at front right side of as shown below.
- Access to drain may also be gained by removing evaporator fan shroud.



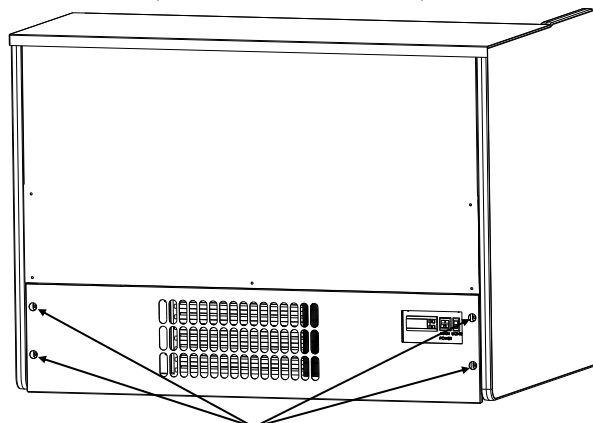
Above Illustration Shown With End Panel and Decking Removed For Illustrative Purposes

### Refrigeration Fundamentals

#### **1. Condensate Package Access With Screw Removal Required**

- ***Assembly or disassembly and servicing of condensate package is to be accomplished by a licensed refrigeration contractor.***
- Refer to maintenance fundamentals for access.
- Remove rear grille (by removing 4 screws) as shown in illustration at right and below.
- See next page for units with rear grilles requiring NO screw removal.

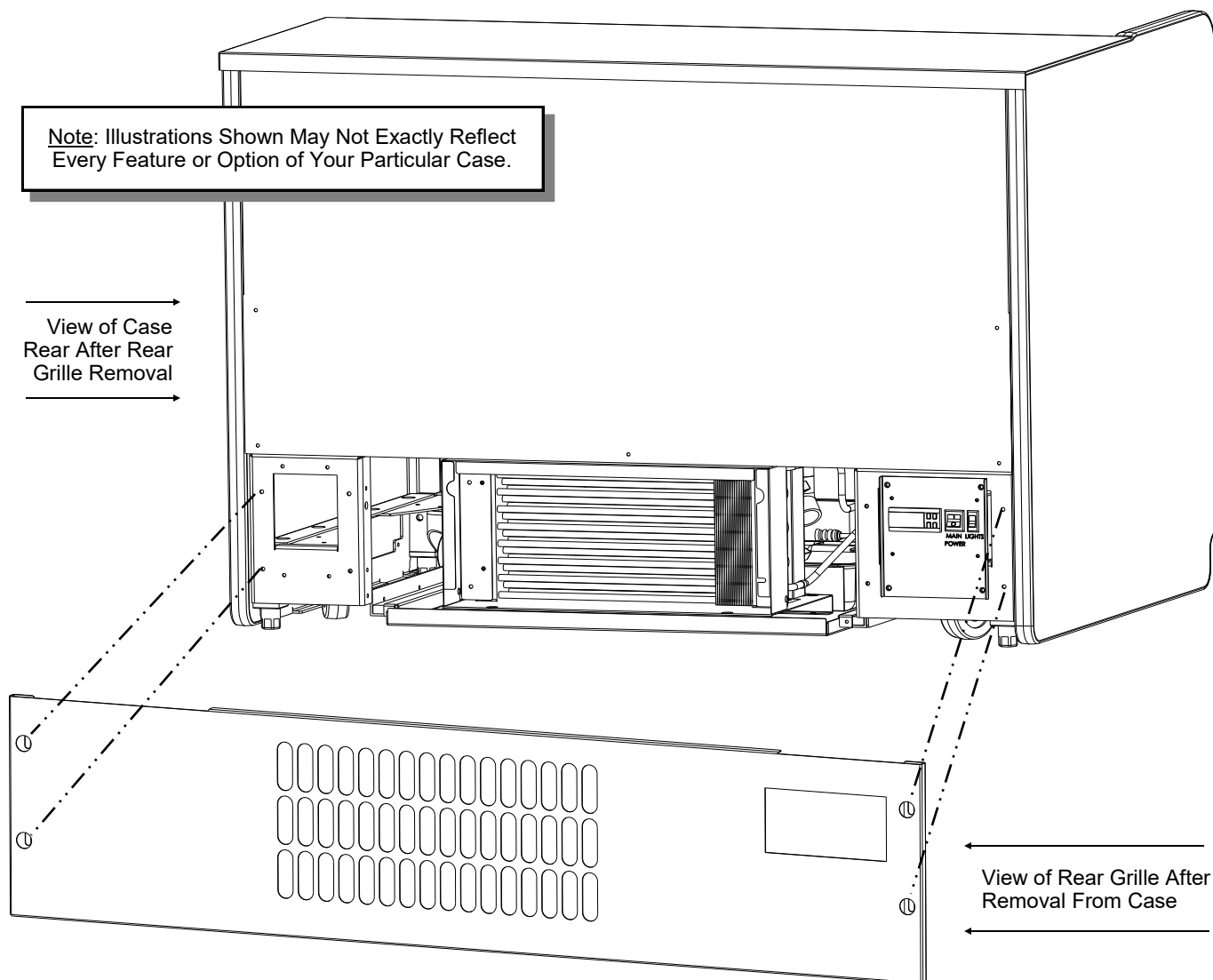
View of Case Prior To  
Rear Grille Removal



Screw Removal Required  
To Remove Rear Grille

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

View of Case  
Rear After Rear  
Grille Removal



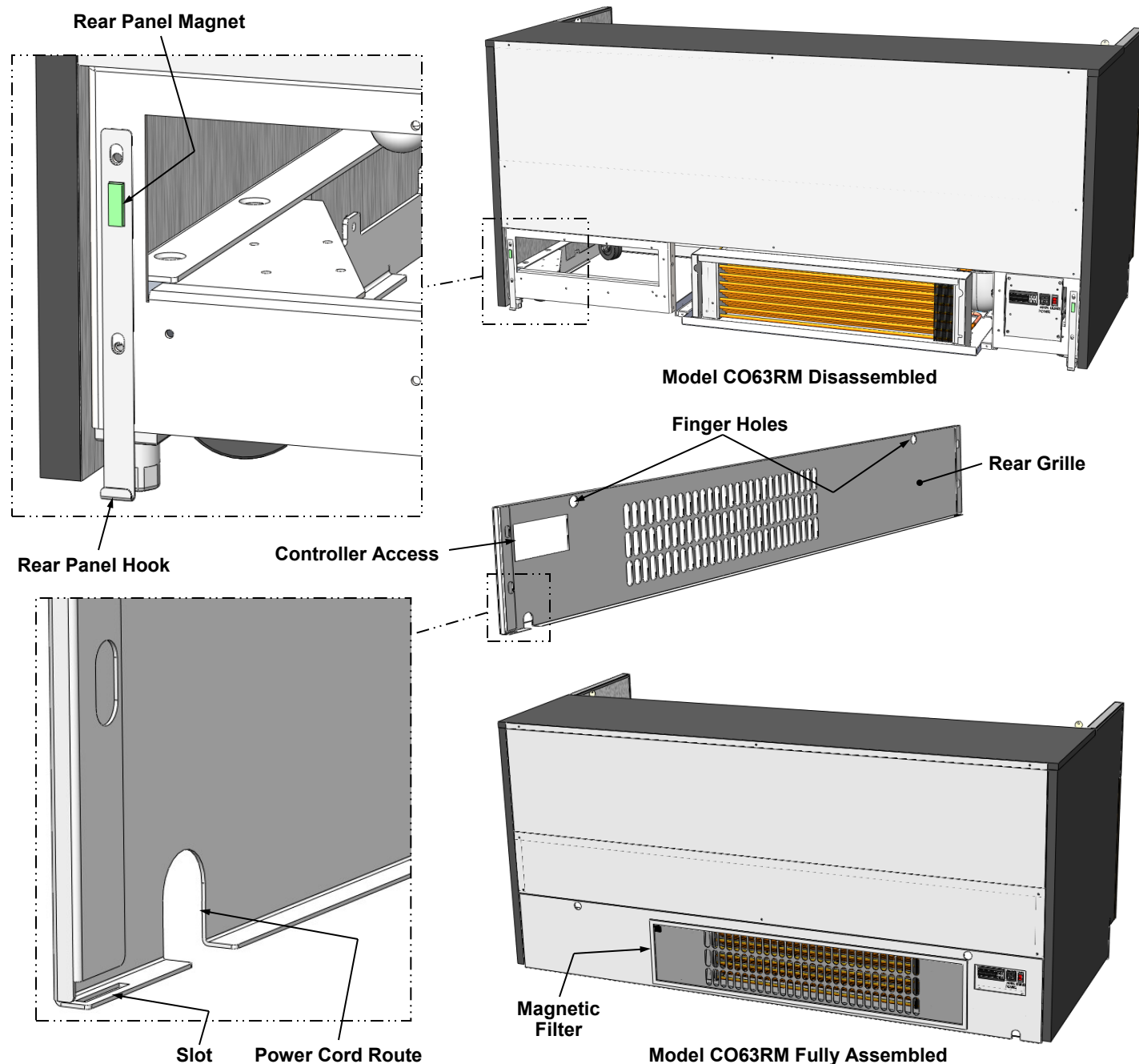
View of Rear Grille After  
Removal From Case

## Refrigeration Fundamentals, Continued

### 2. Rear Condensate Package Access - No Screw Removal Required

- **Assembly or disassembly and servicing of condensate package is to be accomplished by a licensed refrigeration contractor.**
- Remove rear grille by grasping two (2) finger holes and pulling outward.

- Rear grille will then be free from rear panel magnets (one at each end).
- Slots of rear grille (one at each end) grille may then be lifted up and off rear panel hooks (one at each end).
- See previous page for rear grilles that require screw removal.



## REFRIGERATION - FRONT CONDENSATE PACKAGE ACCESS (NO SCREW REMOVAL REQUIRED)

### Refrigeration Fundamentals, Continued

#### **3. Front Condensate Package Access - No Screw Removal Required**

- Assembly or disassembly and servicing of condensate package is to be accomplished by a licensed refrigeration contractor.**

1. View of fully attached front panel and toe-kick/front grille. **Note:** Model CO3324R.7654 is shown for illustrative purposes only; your model may vary.

2A. Upper front panel bracket (for top of front panel to be placed).

2B. Lower front panel's slot (that rests on hooks at both ends of case).

2C. View of hook that lower front panel rests on (typ.).

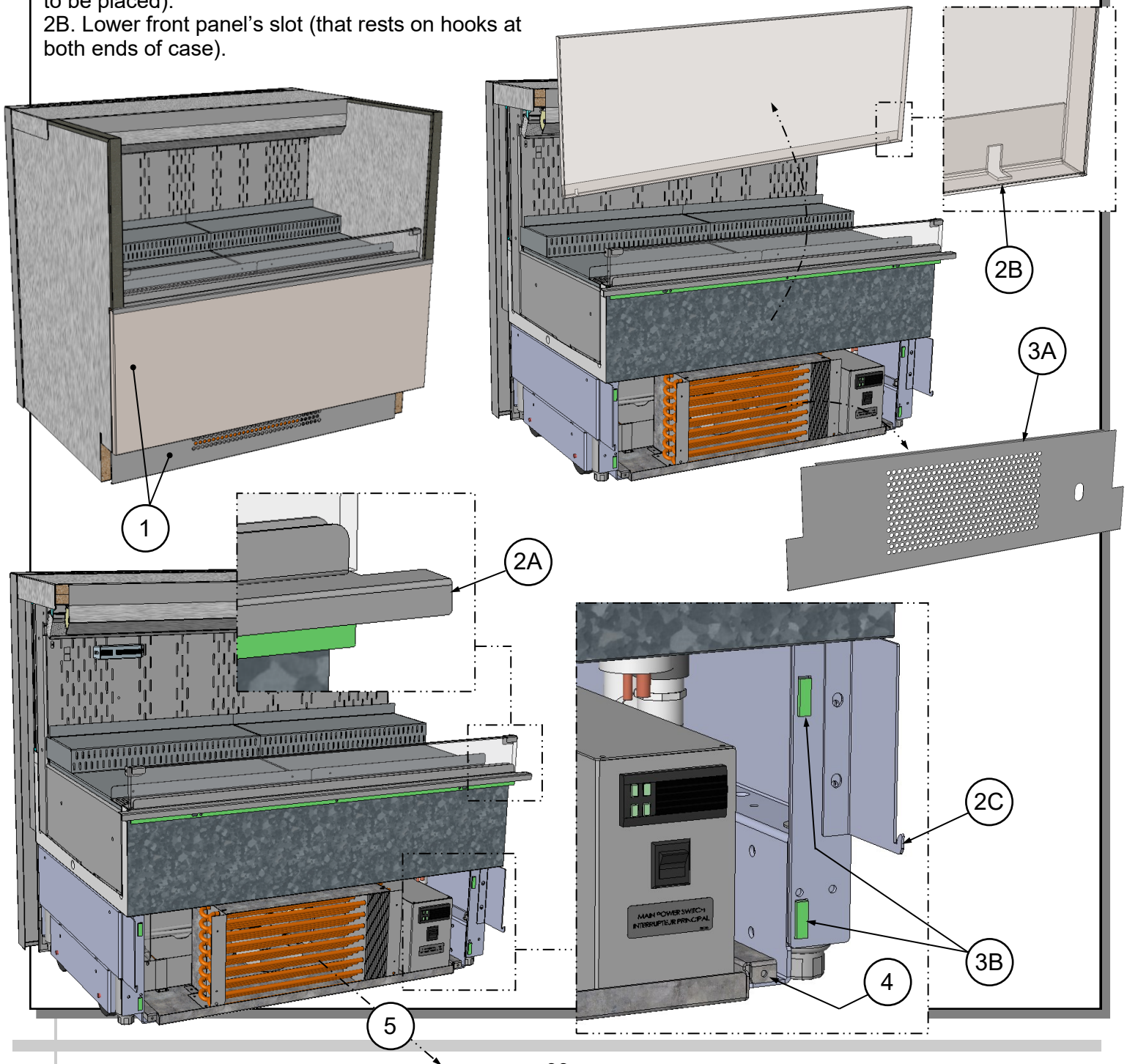
3A. Toe kick/front grille shown removed from case.

3B. View of magnets that toe-kick/front grille attaches to. **Note:** Magnets are at both ends of case.

4. If shipment damage-prevention screws are intact, they must be removed to slide condenser package out from under case.

5. Carefully slide condenser package pan out from under case to access various components.

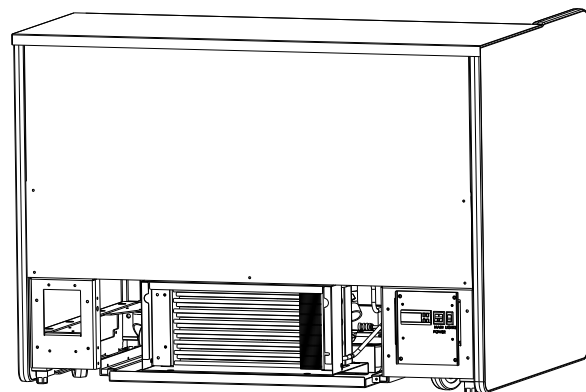
>> Return all components to case in reverse order they were removed.



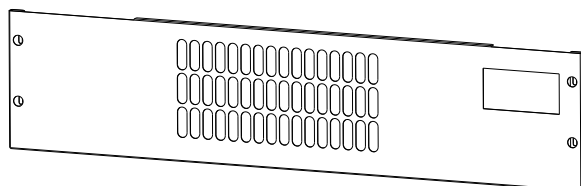
## Refrigeration Fundamentals, Continued

### 4. Condensate Package Illustrated Parts Breakdown

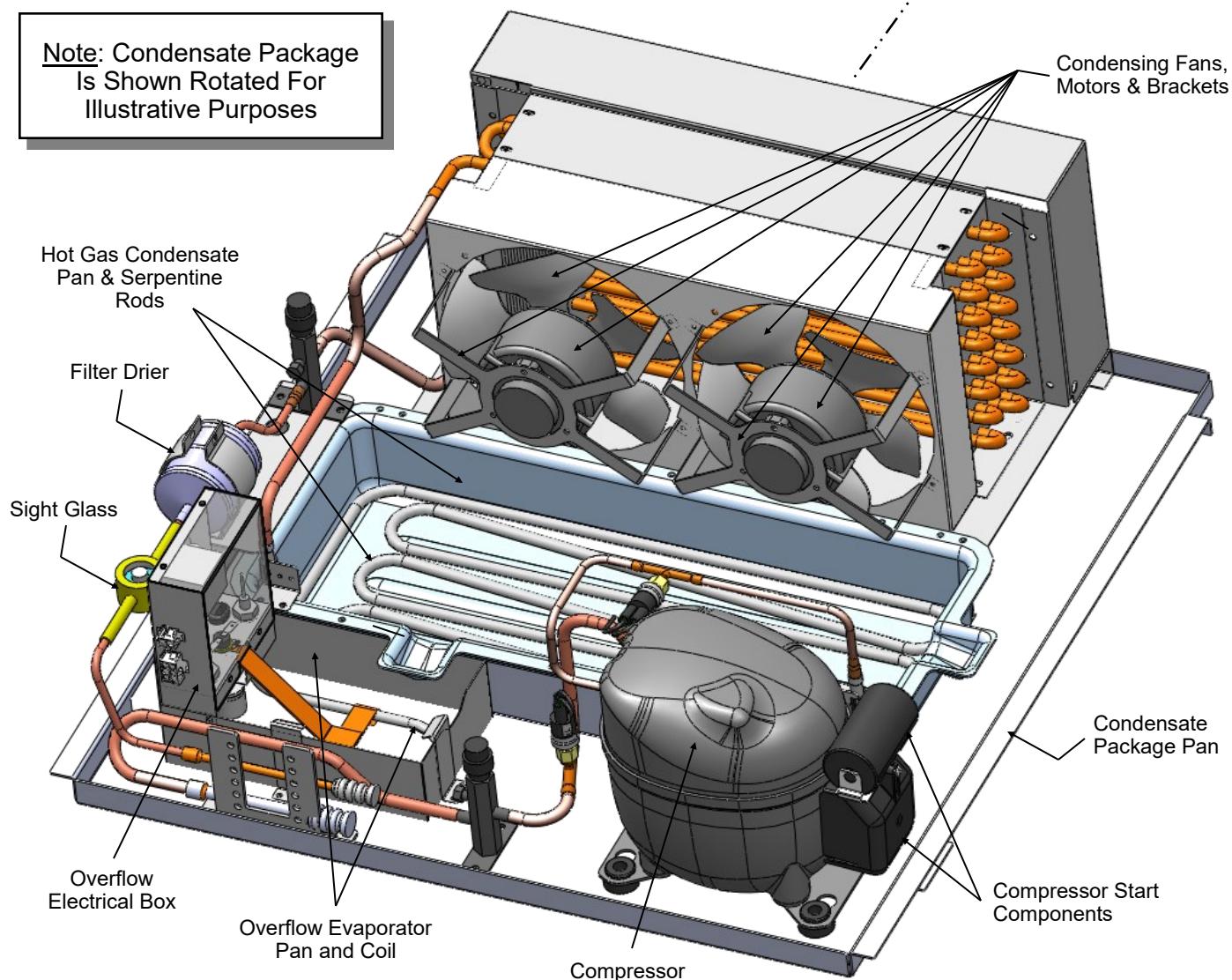
- **Assembly or disassembly and servicing to be accomplished by licensed refrigeration contractor.**
- After rear grille has been removed, slide condensate package out slowly and carefully.
- After service, slide back under case. Return rear grille to case and attach with four (4) retaining screws.
- See previous page for screw removal illustration.



Rear Grille



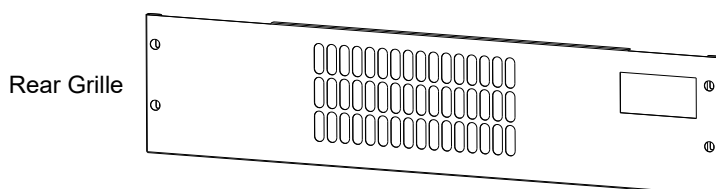
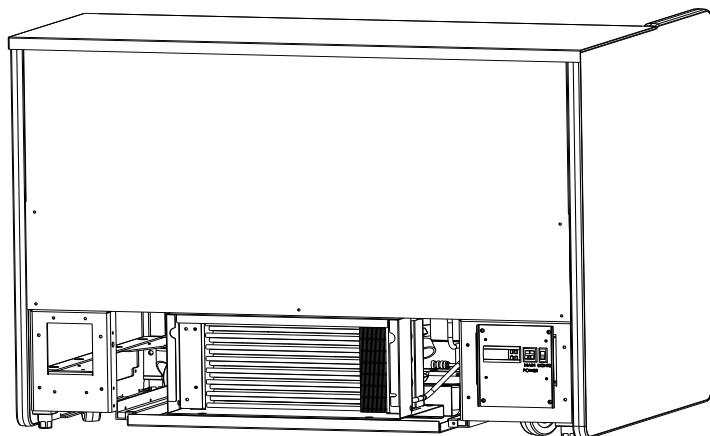
**Note:** Condensate Package Is Shown Rotated For Illustrative Purposes



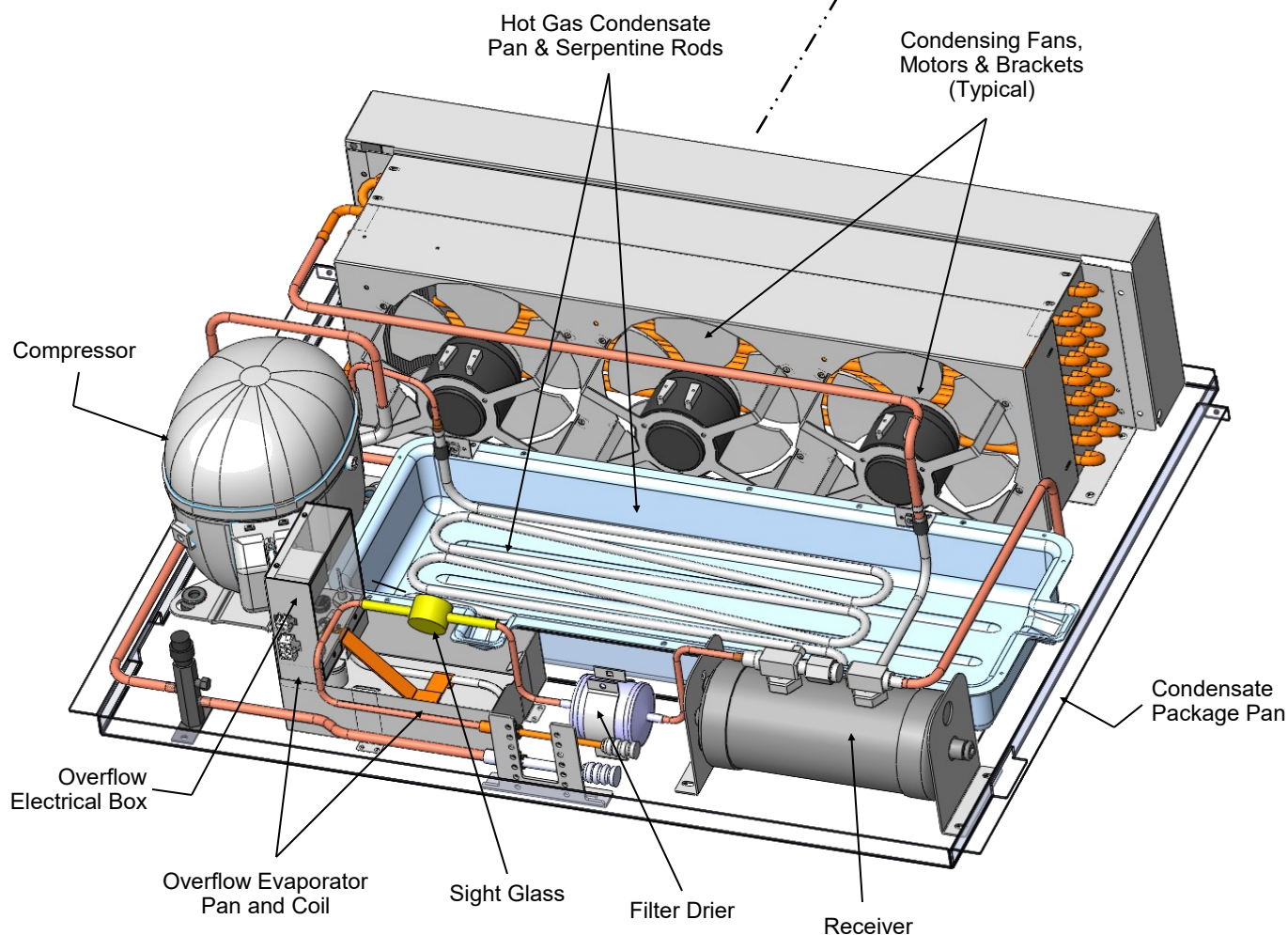
## Refrigeration Fundamentals, Continued

### 5. Condensate Package Illustrated Parts Breakdown

- **Assembly or disassembly and servicing to be accomplished by licensed refrigeration contractor.**
- After rear grille has been removed, slide condensate package out slowly and carefully.
- After service, slide back under case and attach with four (4) retaining screws.



**Note:** Condensate Package Shown Rotated For Illustrative Purposes



## GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL)

FREQ.	INSTRUCTIONS
Daily	<b><u>Sides/Top/Front Panel:</u></b> Clean with mild all-purpose cleaner and soft cloth.
Daily	<b><u>Acrylic Air Deflector, Bread Bins, Bread Display Supports:</u></b> <ul style="list-style-type: none"> <li>• Clean with mild all-purpose cleaner and soft cloth.</li> <li>• Never use ammonia-based cleaners (nor household or commercial window cleaner) on acrylic.</li> </ul>
Daily	<b><u>Decks, Air Return Grilles, Product Display Risers &amp; Shelving (If Any):</u></b> <ul style="list-style-type: none"> <li>• Clean with mild all-purpose cleaner and soft cloth.</li> <li>• For more thorough cleaning, remove from case rear (by lifting up and off). Submerge in warm soapy water and use a nylon brush to remove hardened residue. Rinse thoroughly. Dry with soft cloth. Return to case.</li> </ul>
Daily	<b><u>Glass Surfaces:</u></b> Clean with household or commercial glass cleaner and soft cloth.
Daily	<b><u>Sanalite® Cutting Board (Model CO3434RG.5716, CO4836R.5716, etc.):</u></b> Clean with mild all-purpose cleaner and soft cloth. Rinse with clean water; dry with soft cloth.
Weekly	<b><u>Magnetic Condenser Coil Filter (Self-Contained Units Only):</u></b> <ul style="list-style-type: none"> <li>• Magnetic coil filter helps prevent dust particles from entering condenser coil.</li> <li>• Access by removing rear panel from case.</li> <li>• Clean magnetic condenser coil filter by following these steps: <ol style="list-style-type: none"> <li>1. To clean by hand, (without using dishwasher), remove magnetic condenser coil filter from case. Use a rag or soft-bristled brush to wipe off excess dust particles from filter. Submerge in warm, soapy water. Use soft-bristled brush to remove dust, dirt, grease and grime that may collect on filter. Rinse thoroughly. Skip to step #3.</li> <li>2. As magnetic condenser coil filter is dishwasher safe, remove from case (no screw removal required) and use a rag or soft-bristled brush to wipe off excess dust particles from filter. Run in normal dishwasher cycle. Remove from dishwasher. Go to next step.</li> <li>3. Dry with soft cloth or paper towel or allow to air dry. Replace.</li> </ol> </li> </ul>
Weekly	<b><u>Rear Perforated Plenum:</u></b> <ul style="list-style-type: none"> <li>• Clean with mild all-purpose cleaner and soft cloth.</li> </ul>
Weekly	<b><u>Salad Tissue Box Holder / Sandwich Wrap Holder (Model CO3434RG.5716):</u></b> <ul style="list-style-type: none"> <li>• Clean with mild all-purpose cleaner and soft cloth. Dry with soft cloth.</li> <li>• For more thorough cleaning, remove from case rear (by lifting up and off). Submerge in warm soapy water and use a nylon brush to remove hardened residue. Rinse thoroughly. Dry with soft cloth. Return to case.</li> </ul>
Weekly	<b><u>Writing Instrument Cup and Sanitary Wipe Bucket (Model CO3434RG.5716):</u></b> <ul style="list-style-type: none"> <li>• See <b><i>MAINTENANCE - REAR COMPONENT LAYOUT (MODEL CO3436RG.5716 ONLY)</i></b> section in User Manual for illustration of merchandiser and components.</li> <li>• Remove from case rear (by lifting up and away from unit).</li> <li>• Submerge in warm soapy water and use nylon brush to remove hardened residue.</li> <li>• Rinse thoroughly. Dry with soft cloth. Return to case.</li> </ul>
Monthly	<b><u>Security Cover (Optional):</u></b> <ul style="list-style-type: none"> <li>• Wipe down with mild all-purpose cleaner and soft cloth.</li> <li>• Dry with soft cloth.</li> </ul>
Quarterly	<b><u>Under Case Cleaning:</u></b> Quarterly (or whenever condenser package is removed from under case, vacuum (or broom) under case to remove dust, debris and dirt that may collect.

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

**QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS**

**Tub, Coil, Drain, Fan Blades, Motors, Brackets:**

**Caution! Do Not Clean or Perform Service On Unit While It Is Energized!**

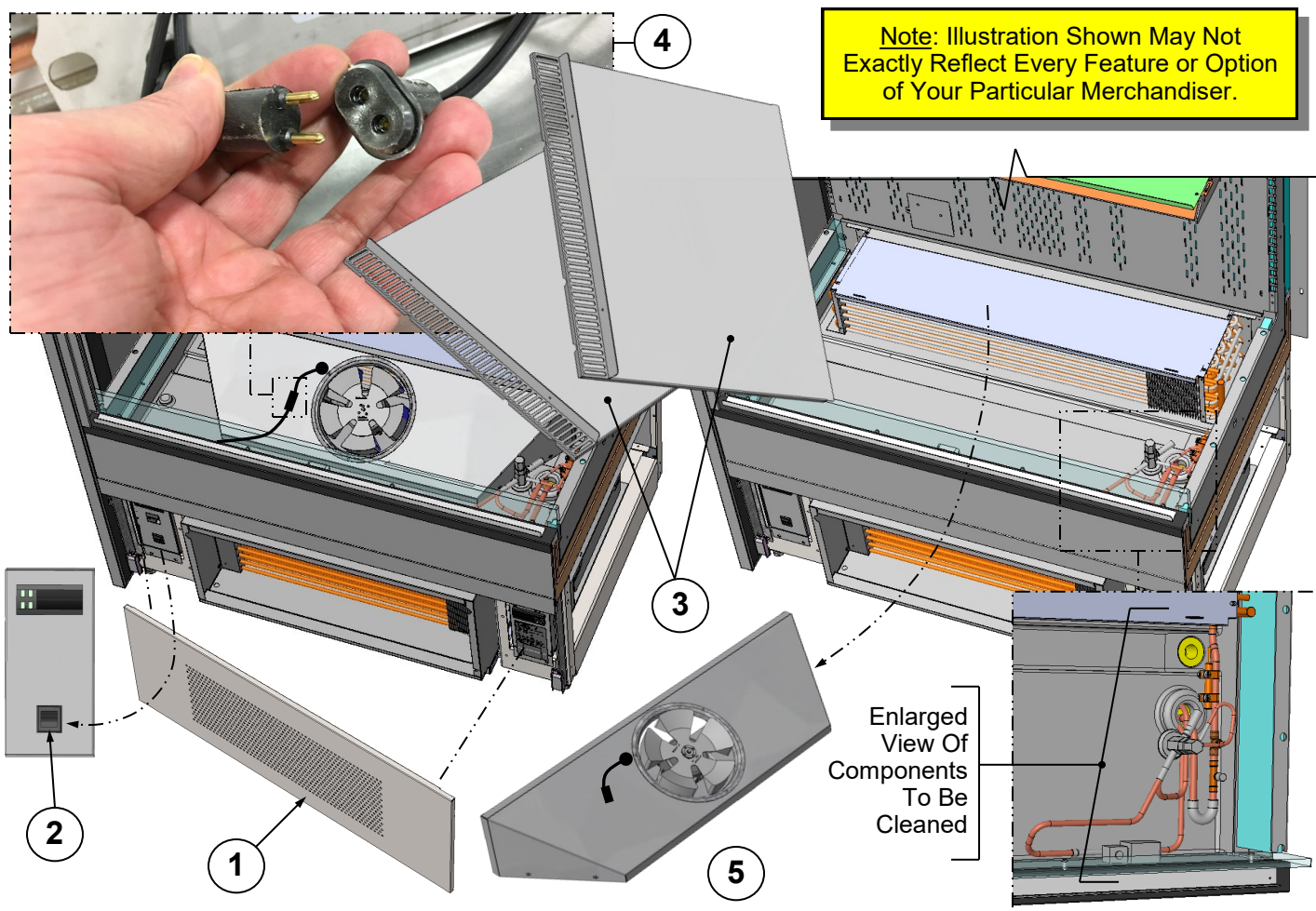
1. Remove front panel (to access controls). No screw removal is required. Place in safe place away from foot traffic.
2. Turn off main power switch (located near thermostat).
3. Remove both deck pans/sub-deck. Place in safe place away from foot traffic.
4. Remove electrical tape (if any) and disconnect power cord that energized fan panel.
5. Grasp underside of fan shroud assembly (above trough). Lift upward and away from case. Place in safe place away from foot traffic.

**Cleaning Process:**

- Use vacuum to remove excessive residue AND to remove dust in coil.
- Clean with mild all-purpose cleaner and soft cloth (with nylon brush as needed) to clean tub, drain, trough, TXV, lines, solenoid, coil & coil tubes.
- Clean fan blades, motors and brackets with mild all-purpose cleaner and soft cloth.
- Remove debris that may clog drain.

**Returning Components / Restoring Power To Case:**

- Replace/reconnect components in reverse order they were removed or disconnected.
- Turn main power switch back on. Check that fans are operational.



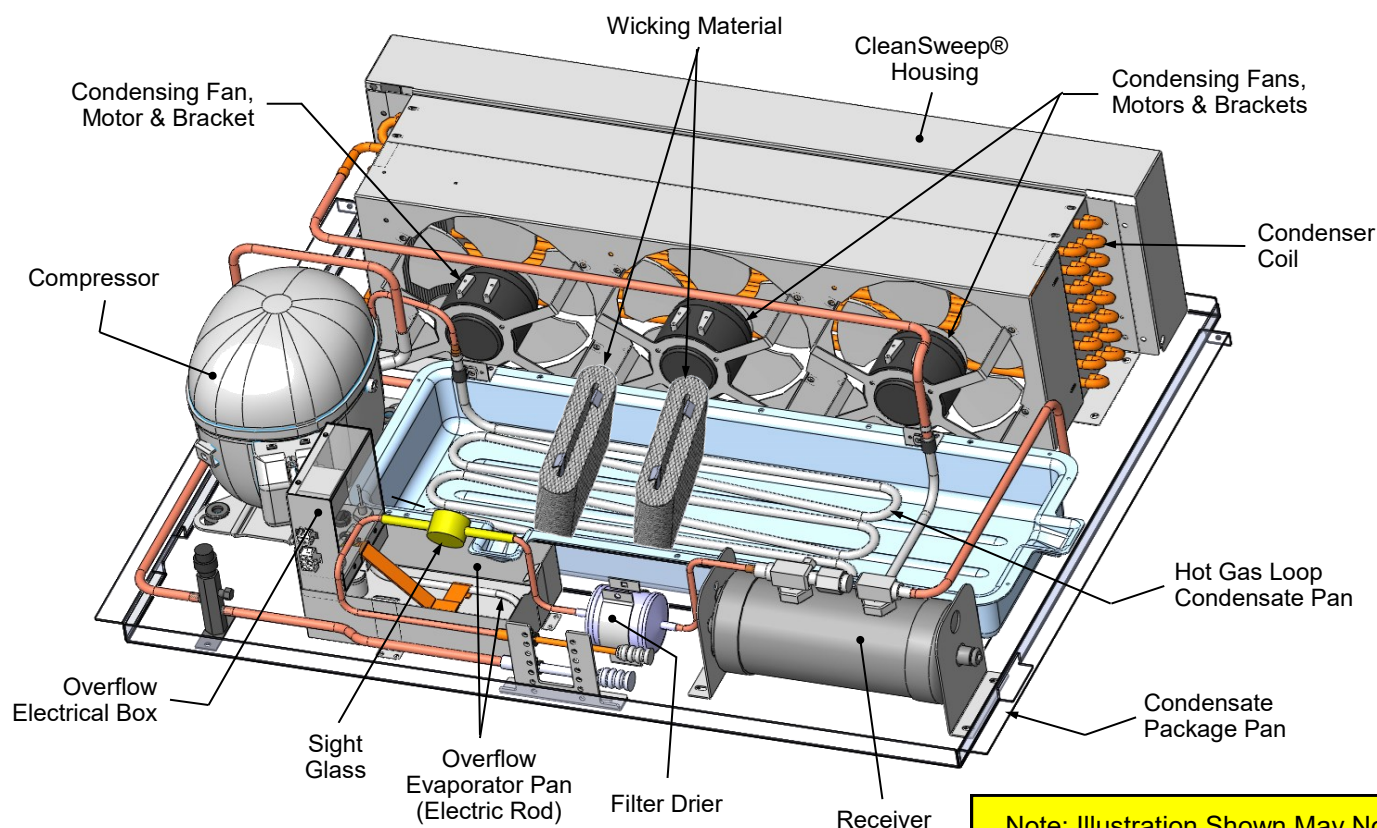
**WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!**

**QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS**

**Condensate Package (Including Overflow Condensate Pan):**

**Caution! You must turn main power switch off before cleaning!**

- Remove front (or rear) grille (by removing thumbscrews or disconnecting from magnets).
- Carefully slide out refrigeration assembly (taking care to not damage coil)!
- Remove wicking material (if any).
- Use vacuum (in suction mode) and brush to dislodge and remove dust both in and on coil fins.
- To remove dust/debris from inner fins, place damp rags around condensing fan motor brackets (to collect airborne dust). Then, switch vacuum to blow mode to blow air through condenser coils and into damp rags on fans. Blow entire surface of condensing coil to assure that all entrenched dust is removed. Caution! Coil fins are sharp!
- Use a scrub-brush and a non-corrosive de-scaling solution (to remove calcium, lime and rust) from condensate pan. Clean hot gas loop (for EnergyWise units) or electric coil (for standard units). Follow instructions as to proper dilution, safety precautions and scrubbing method.
- After thoroughly cleaning pan with scrub-brush and solution, rinse component with clean water and wipe dry with sponge or paper towel.
- Use mild all-purpose cleaner and soft cloth to clean fans, sight glass, overflow pan, etc.
- Return wicking material to mounting brackets. If wicking material is tattered, torn or disintegrating, replace with new. If wicking material is not available, contact Structural Concepts. See toll-free number at last page of operating manual.
- Slide condenser package back under case.
- Return front (or rear) grille to case.
- Turn power back on to case.



**Note:** Illustration Shown May Not Exactly Reflect Every Feature Or Option of Your Particular Condenser Package.

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

### ANNUAL (OR AS NEEDED) PREVENTIVE MAINTENANCE INSTRUCTIONS

#### **Honeycomb Air Diffuser:**

A. Wedge a non-metallic device of suitable strength (such as a ballpoint pen) between honeycomb and its housing. Caution! Use care not to dislodge the heating wire (that prevents condensation on the honeycomb retainer).

B. Apply pressure to collapse honeycomb to pull it out of honeycomb retainer.

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

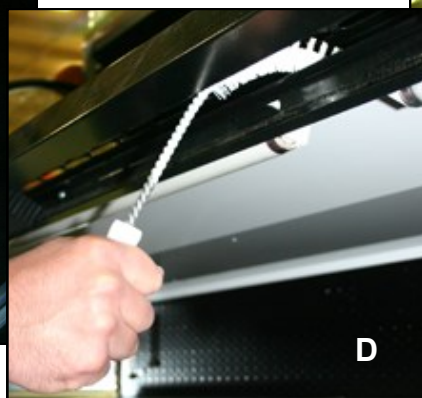
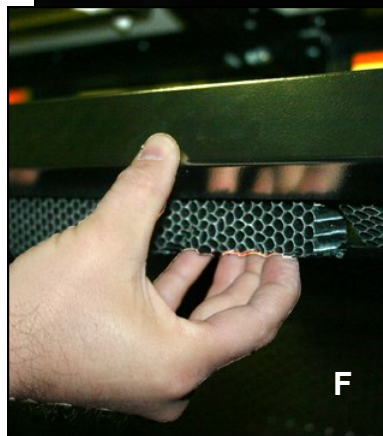
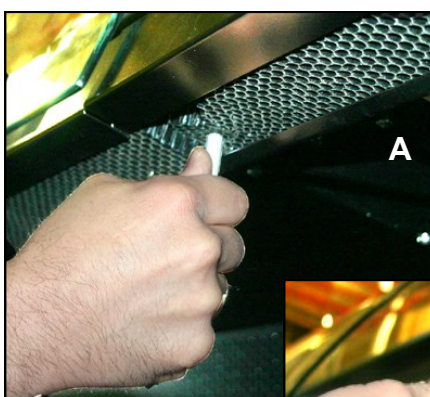
D. Use brush to reach in and, with outward sweeping motion, pull any crumbs or residue out of honeycomb area.

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

E. After honeycomb has been thoroughly cleaned and dried, squeeze honeycomb to allow it to fit into the honeycomb retainer.

F. Carefully slide honeycomb into place.

G. Adjust honeycomb so it fits flat against retainer (not be wavy or out of position).



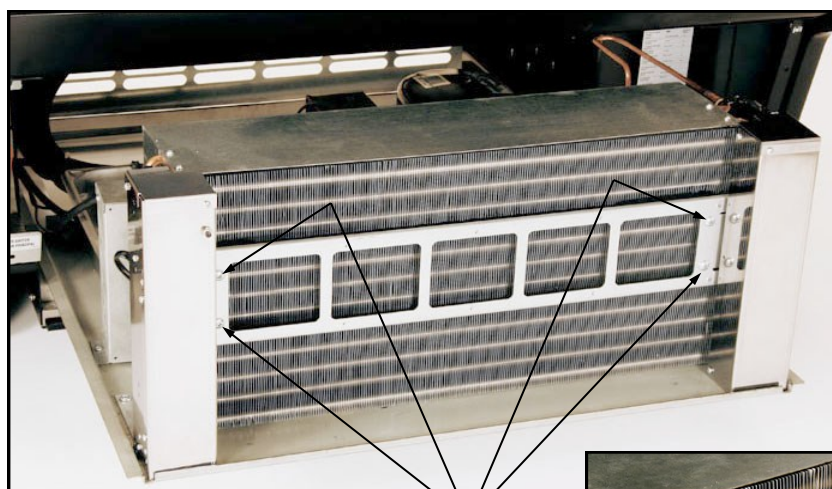
**WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!**

**ANNUAL PREVENTIVE MAINTENANCE INSTRUCTIONS**

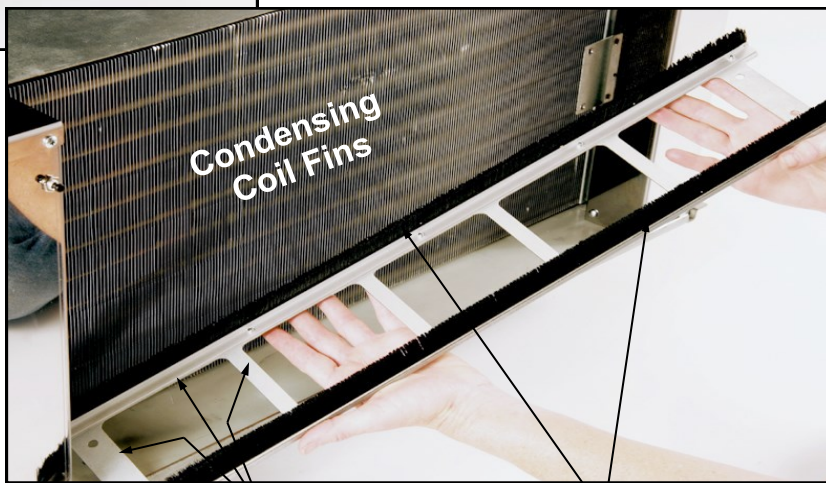
**Optional Clean Sweep® Condensing Coil Cleaner:**

*Important! Disconnect power from case before cleaning the Clean Sweep® Condenser Coil Cleaner!*

- Remove front grille (by removing 4 screws).
- Slide/roll out condensing unit assembly.
- Remove the four (4) screws holding Clean Sweep® rails intact.
- Remove the Clean Sweep® rail.
- Wash rail and 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.
- **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 front grille to case in same manner it was removed.
- See photos below.



(4) Screws



Rail

Brushes

--- Above photos are taken after front (or rear) grille has been removed from case ---

CONDITION	TROUBLESHOOTING
<b>Water Is On The Floor</b>	Call service provider.
<b>Fan Emits Excessive Noise</b>	Call service provider.
<b>No Case Lights Are Working</b>	Check that light switch is in the <i>on</i> position.
	Check that ALL of the light cords and plugs are properly connected. See <b>LED LIGHT FIXTURES: REPAIR / REMOVAL / REPLACEMENT</b> section in this manual for specifics.
	Check circuit breaker box for tripped circuit.
	If case lights still do not come on, call service provider.
<b>Case Light Is Not Working</b>	Check that ALL of the light cords and plugs are properly connected. This includes the following items: <ul style="list-style-type: none"> <li>• Oval form of plug must connect to oval form of LED light.</li> <li>• See <b>MAINTENANCE FUNDAMENTALS - LED LIGHT FIXTURE / LOCATION / REPAIR / REPLACEMENT</b> section in this manual for more specifics including illustrations.</li> </ul>
	If case light still does not come on, call service provider.
<b>Case is Not Holding Proper Temperature</b>	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Product must be pre-chilled before placing in case.
	Check that the case is not in the sun or near a heat or air-conditioning vent. See <b>OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS</b> section in manual for specifics.
	If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature. See <b>OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS</b> section in this manual for specifics.
	Check that filter and condenser coil has been cleaned. See <b>GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL)</b> section in this manual for specifics.
	Check air return grilles (area at front of decking) for obstructions. DO NOT set product on air grilles as this will prevent proper airflow!
	If case still is not holding proper temperature, call service provider.

### **LED Style Light Fixtures**

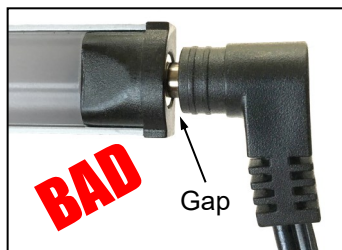
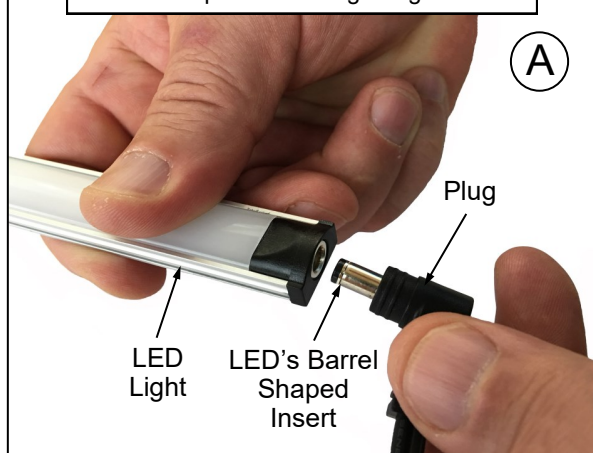
#### ***Removal of faulty LED light:***

- LED lights rarely require change-out.
- To remove faulty LED light, simply grasp light near retaining spring and carefully pull away from its spring. Disconnect plug from LED's socket.
- Contact Structural Concepts' Technical Service Department for replacement parts (see Technical Service section of this manual for information).

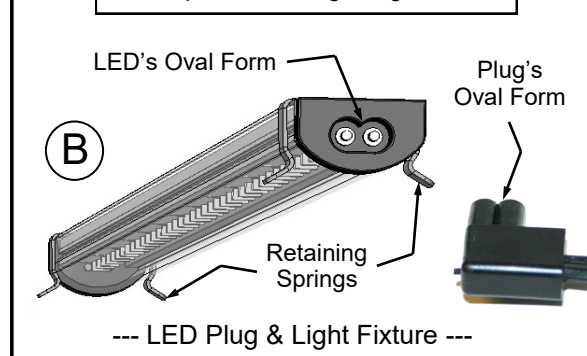
#### ***Replacement of LED light:***

- To replace LED light fixture, simply insert new LED light at proper position (socket must be near plug). Carefully snap into metal springs so LEDs are held firmly in place.
- **Note:** LED light and plug must be connected in a specific manner or they will not work.
  - A. Certain plug designs ("barrel type") merely require that plug be pushed all the way in.
  - B. Other plugs require "oval edge" of plug to connect to oval edge of LED light.
- See illustrations below.

"Barrel-Shaped" LED Plug & Light Fixture



"B-Shaped" LED Plug & Light Fixture



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

CONDITION	TROUBLESHOOTING
<b>Water Is On The Floor</b>	Check that the drain trap is free of debris.
	Check that the drain hose is correctly positioned over evaporator pan.
	Check store conditions. <ul style="list-style-type: none"> <li>To prevent condensation in NSF/ANSI Type I environments, maximum conditions are to be 55% relative humidity / 75° Fahrenheit.</li> <li>For NSF/ANSI Type II environments, maximum conditions are to be 55% relative humidity / 80° Fahrenheit.</li> <li>If you are unsure if your unit is classified as NSF/ANSI Type I or Type II, see tag next to serial label on your case.</li> </ul>
	Check that the hot gas condensate pan is properly connected and heating.
	Wicking material (optional) may be dirty or worn and need replacement (hot gas loop condensate system). <ul style="list-style-type: none"> <li>Slide refrigeration system out from under unit.</li> <li>After refrigeration system has been slid out from under unit, replace wicking material with new. If wicking material is not available, contact Structural Concepts. See toll-free number at last page of this manual.</li> </ul>
<b>Fan Emits Excessive Noise</b>	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motor. Check motor shaft for bearing wear.
	Check that fan motor is securely mounted in bracket.
	Verify that fan blades are securely mounted to fan motor.
	Check that nothing is preventing blade rotation.
	Check that the fan shroud is properly secured.
<b>Fan Is Not Working</b>	Check that the MAIN power switch is on.
	Check that fan motor is plugged in at the fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shroud.
	Check that power is going to fan.
	Check that fan wiring is connected on terminal blocks.
<b>Digital Control Display Is Blank</b>	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
<b>System Not Operating</b>	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.

# TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY), CONTINUED

CONDITION	TROUBLESHOOTING
<b>No Case Lights Are Working</b>	Follow previous page's <b>System Not Operating</b> instructions.
	Check voltage at LED driver. If voltage is entering but not exiting, LED driver may be faulty.
	Check connection at case rear (from field wiring box) for voltage.
<b>Case Light Is Not Working</b>	Follow previous page's <b>System Not Operating</b> instructions.
	If case light still do not come on, call <b>SCC Technical Service</b> phone number (listed on last page of this operating manual).
<b>Control Display Is Flashing</b>	See your case's thermostat label (near temperature controller) for your model's required settings.
<b>Case Is Not Holding Temperature</b>	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 (on temperature controller) will indicate defrost cycle in progress.
	Check that case is not in 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.
	Check sight glass for flashing and/or low charge.
	Check Set Point Temperature; it may be adjusted too high.
<b>Condensing Unit Is Not Operating</b>	Check that the power is turned on.
	Determine if temperature controller settings are properly set. <i>See your case's serial label for your model's specified settings. See <b>SERIAL LABEL LOCATION &amp; INFORMATION LISTED / TECH INFO &amp; SERVICE</b> section in manual for label location, etc.</i>

## TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - CONDENSING SYSTEM

CONDITION	TROUBLESHOOTING
<b>Head Pressure Too High</b>	Check that the condensing coil is not dirty or covered.
	Check that condensing fans are working.
	Check that refrigerant is not overcharged.
	Perform sub-cooling check and verify that no contaminants are in system.
	Check that liquid line filter dryer is not plugged.
	Check that close-offs are intact (around condensing coil) and that air is not recirculating.
	Check that store ambient temperature isn't above maximum allowed. See <b>OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS</b> section in this manual.
<b>Head Pressure Too Low</b>	Check if sight glass is flashing or showing low charge.
	Check that suction pressure isn't too low.
	Check that compressor reed valves aren't bad. Look for high suction/low head pressure. Perform pump down.

## TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - EVAPORATOR SYSTEM

CONDITION	TROUBLESHOOTING
<b>Low Suction Pressure</b>	Check if sight glass is flashing or showing low charge.
	Check that expansion valve (TXV) isn't restricted. Check element charge.
	Check that liquid line or filter isn't restricted. Check that refrigeration lines and/or hoses are not kinked on either high or low sides.
	Check that evaporator fan motors are working.
	Check superheat.
	Check that there is no air recirculation around evaporator coil.
	Check that evaporator coil is not iced up.
<b>High Suction Pressure</b>	Check for refrigerant overcharge.
	Check that compressor reed valves aren't bad. Look for high suction/low head pressure. Perform pump down.
	Check that the "cooling load" isn't high. Product must be pre-chilled before placing in refrigerated section of case.
	Check that case is at least <u>15-feet</u> from exterior doors, overhead HVAC vents or any air curtain disruption.
	Check that unit is not exposed to direct sunlight via windows or any other heat source (ovens, fryers, etc.).
	Check that superheat adjustment isn't low.
	Check TXV bulb installation <ul style="list-style-type: none"> <li>a. Poor thermal contact.</li> <li>b. Warm location.</li> </ul>


**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 is shown. A variety of models is displayed on serial label for illustration purposes only. Your case's serial label will reflect only one model.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.

**Structural Concepts®**  
888 E. Porter Rd - Muskegon, MI 49441

**Fusion**  
**Blend**  
**Addenda**  
**Harmony**  
**Grocerant**  
**Impulse**  
**Oasis**  
**Reveal**

MODEL NRS3648RXV-SAMPLE  
SERIAL NO. 12345X30DZ098765

  
 Intertek

  
 Intertek

**SAMPLE ONLY**

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

**SAMPLE ONLY**

6-8 °F  
6 defrosts per day, 45 °F


**SAMPLE ONLY**

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 ONLY**

**SAMPLE ONLY**

**SAMPLE ONLY**

**SAMPLE ONLY**

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



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



**Carel® PJEZ Platform**



**Carel® ir33 Platform**



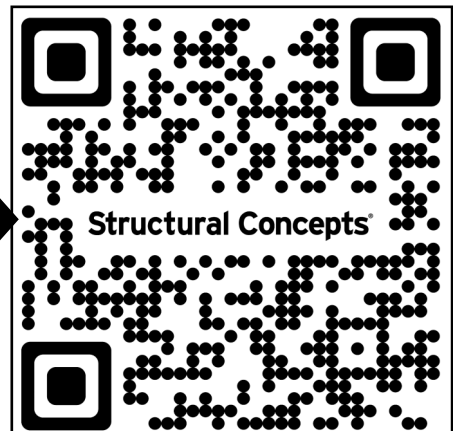
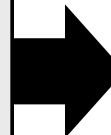
**Carel® iJF Platform**



**Dixell® XM670K-XM679K Platform**

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

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



## STRUCTURAL CONCEPTS TECHNICAL SERVICE CONTACT INFORMATION & LIMITED WARRANTY

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

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

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

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

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

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

