

Oasis[®] USER MANUAL

**SCC P/N
54110**

**OASIS REFRIGERATED “BOX CASES” /
SELF-CONTAINED & REMOTE /
OPTIONAL SECURITY COVERS /
TOP-MOUNTED CONDENSER
PACKAGES ON CERTAIN MODELS**

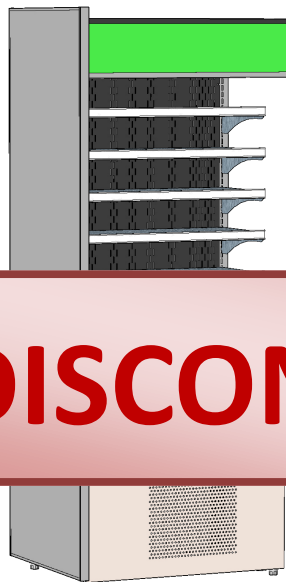
Important!

**> If Adjoining Cases, see Synchronous Defrost
Connection Instructions on page 8 and
Adjoinment Instructions on Page 9 of Manual.
> If your unit has Aftermarket Product Bins, See
Page 13 of Manual for Placement Instructions.**

DISCONTINUED



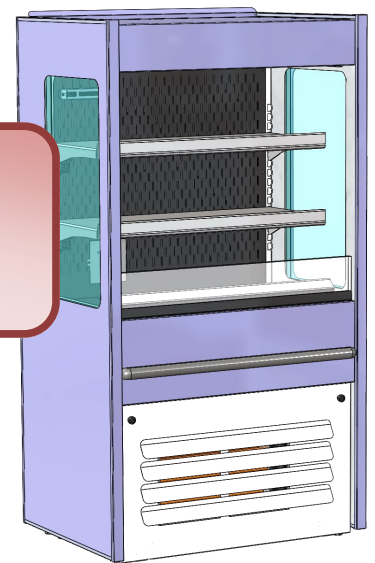
Model B32



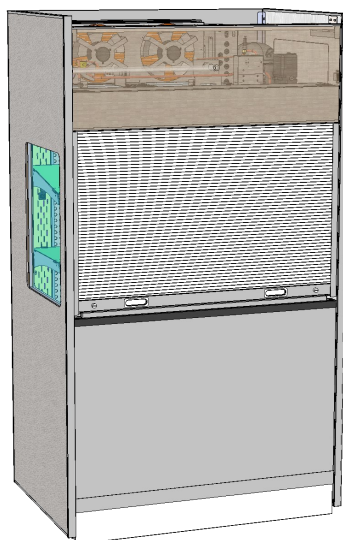
Model B32.7413
(End Panel Removed
As Part Of Lineup)



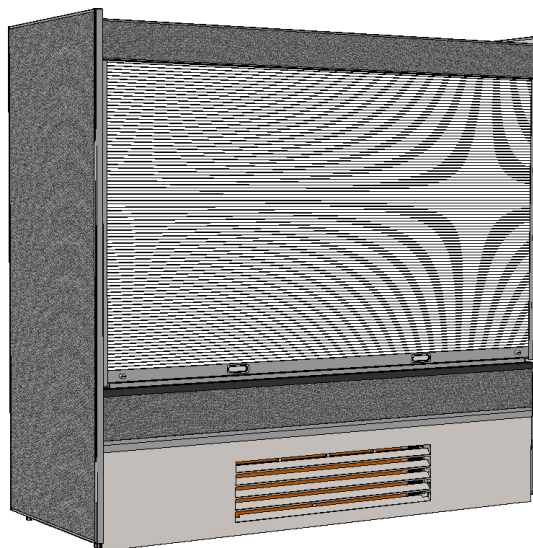
Model B4732 (With Optional
Roll-Down Security Cover)



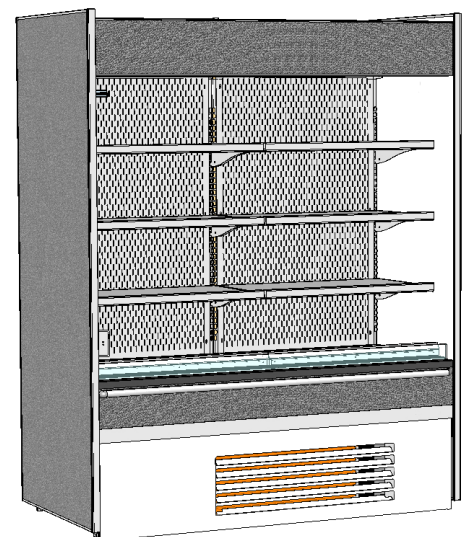
Model B22.6817



Model B5932TM.6785 (Similar To
B4732TM.6785) / (Top-Mounted
Condenser Pkg. / Underside
Pump) / Optional Rear Doors



Model B8832 (With Optional
Roll-Down Security Cover)



Model B6632SC.6241

Structural Concepts[®]

DELIVERING FRESH. ALWAYS.™

Structural Concepts Corp. · 888 E. Porter Rd · Muskegon, MI 49441 Phone: 231.798.8888 Fax: 231.798.4960 · www.structuralconcepts.com

TABLE OF CONTENTS / MODELS TO WHICH THIS MANUAL IS APPLICABLE

OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS	3-4
INSTALLATION: CASE REMOVAL (VIA LEVELERS & CASTERS)	5
INSTALLATION, CONTINUED: POSITIONING & ALIGNING CASE / ADJUSTING LEVELERS	6
INSTALLATION, CONTINUED: OPTIONAL SECURITY COVER INSTRUCTIONS	7
INSTALLATION, CONTINUED: SYNCHRONOUS DEFROST CONNECTION (OPTIONAL)	8
INSTALLATION, CONTINUED: ADJOINMENT INSTRUCTIONS	9
FRONT GRILLE REMOVAL / CONDENSER PACKAGE / OVERFLOW PAN / MAIN POWER SWITCH	10
EVAPORATOR COIL FAN DISCHARGE / TXV (THERMOSTATIC EXPANSION VALVE)	11
HONEYCOMB AIR DIFFUSER ACCESS	12
AFTERMARKET PRODUCT BIN - PLACEMENT	13
LED LIGHT FIXTURES	14
OPTIONAL ROLL-DOWN SECURITY COVER - MODEL B4732 ILLUSTRATED (YOUR MODEL MAY VARY) ..	15
OPTIONAL DUAL REAR DOORS (WITH PERFORATED PLENUM DOORS) / B5932TM SHOWN	16
OPTIONAL SINGLE REAR DOOR (WITH PERFORATED PLENUM AS PART OF DOORS) / B3632TM SHOWN	17
WALL SPACING / REAR GRILLE & VENTING PANEL (MAY NOT BE APPLICABLE TO YOUR MODEL)	18
CONDENSATE PAN ACCESS: STANDARD UNITS	19
CONDENSATE PAN ACCESS: REMOTE UNITS WITH CONDENSATE PANS ONLY	20
SELF-CONTAINED HOT GAS LOOP CONDENSATE PACKAGE LAYOUTS	21-22
SELF-CONTAINED HOT GAS LOOP CONDENSATE PACKAGE LAYOUTS - TOP MOUNTED	23
UNDERSIDE PUMP/DRAIN UNIT (FOR UNITS WITH TOP-MOUNTED SELF-CONTAINED COND. PKGS.)	24
LOAD LEVEL GUIDE / TEMPERATURE GUIDE (MODEL B42 SHOWN / APPLICABLE TO ALL OTHER MODELS IN MANUAL)	25
CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL	26
PREVENTIVE MAINTENANCE - TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY	27-30
TROUBLESHOOTING - TO BE PERFORMED BY TRAINED SERVICE PROVIDER ONLY)	31-33
TROUBLESHOOTING - TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY - CONDENSING SYSTEM	34
TROUBLESHOOTING - TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY) - EVAPORATOR SYSTEM	35
SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE	36
PROGRAMMABLE CONTROLLER INFORMATION.....	37
TECHNICAL SERVICE CONTACT INFORMATION / WARRANTY INFORMATION	38

Partial List of Models To Which This Manual Is Applicable

B22.6817 /	B42.5955	B4732SC.7773	B4736SC.7455	6032SC.6162	B7132.7367
B32.5955A	B42.6662	B4732TM	B4736SC.7785	B6032SC.6241	B7132TM, B7132TMRD
B3424	B42C	B4732TM.6785	B5932	B32.7413	B7132SC.6162, CDR7317
B3632	B43C	B4732SC.7383	B5932TM	B62.7611	B82, B8824, B8832
B3632TM	B4524	B4732TM.7565	B5932TMRD	B6624	B8832TM, B9232
B3632TMRD	B4732	B4732TMRD	B5932TM.6785	B6632SC.6241	CDR7317, (B42/B62
B3632Z	B4732SC.6162	B4732SC.7773	B5932.7367	B7132	ADJOINMENT)
B42					

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 product temperatures prior to placing 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!

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.



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



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



WARNING
Hazardous moving parts. Do not operate unit with covers removed.
Fan blades may be exposed when deck panel is removed.
Disconnect power before removing deck panel.



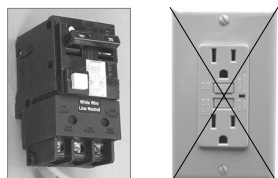
WARNING
Condensate Pan is Hot!
Disconnect and allow to cool before cleaning or removing from case.



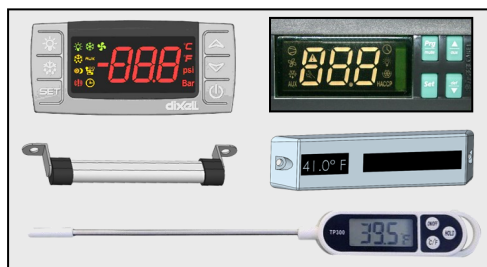
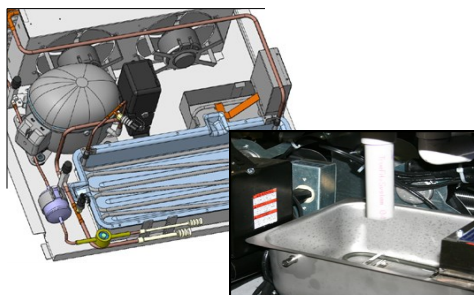
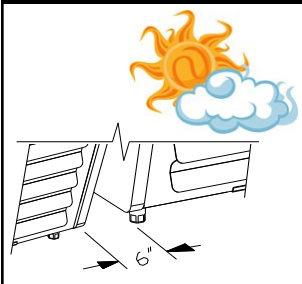
WARNING: This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to P65Warnings.ca.gov.

PRECAUTIONS

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



CAUTION



WIRING DIAGRAM

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

CAUTION! LAMP REPLACEMENT GUIDELINES
LED lamps reflect specific size, shape and design.
Any replacements must meet factory specifications, resist breakage and reflect similar appearance as lamps from factory.

CAUTION! GFCI BREAKER USE REQUIREMENT
If N.E.C. (National Electric Code) or local code requires GFCI (Ground Fault Circuit Interrupter), 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.

CAUTION! CHECK CONDENSATE PAN POSITION & PLUG

Water on flooring can cause extensive damage!

Before powering up unit, check and confirm the following:

- 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.

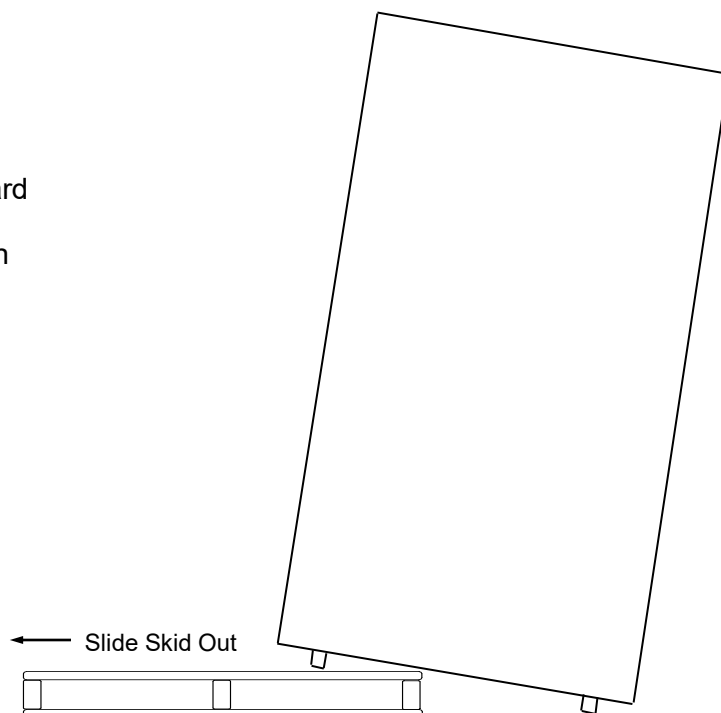
CAUTION! DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR PRODUCT (FOOD) TEMPERATURES.

- 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.

INSTALLATION: CASE REMOVAL (VIA LEVELERS & CASTERS)

1. Remove Case From Skid (Levelers)

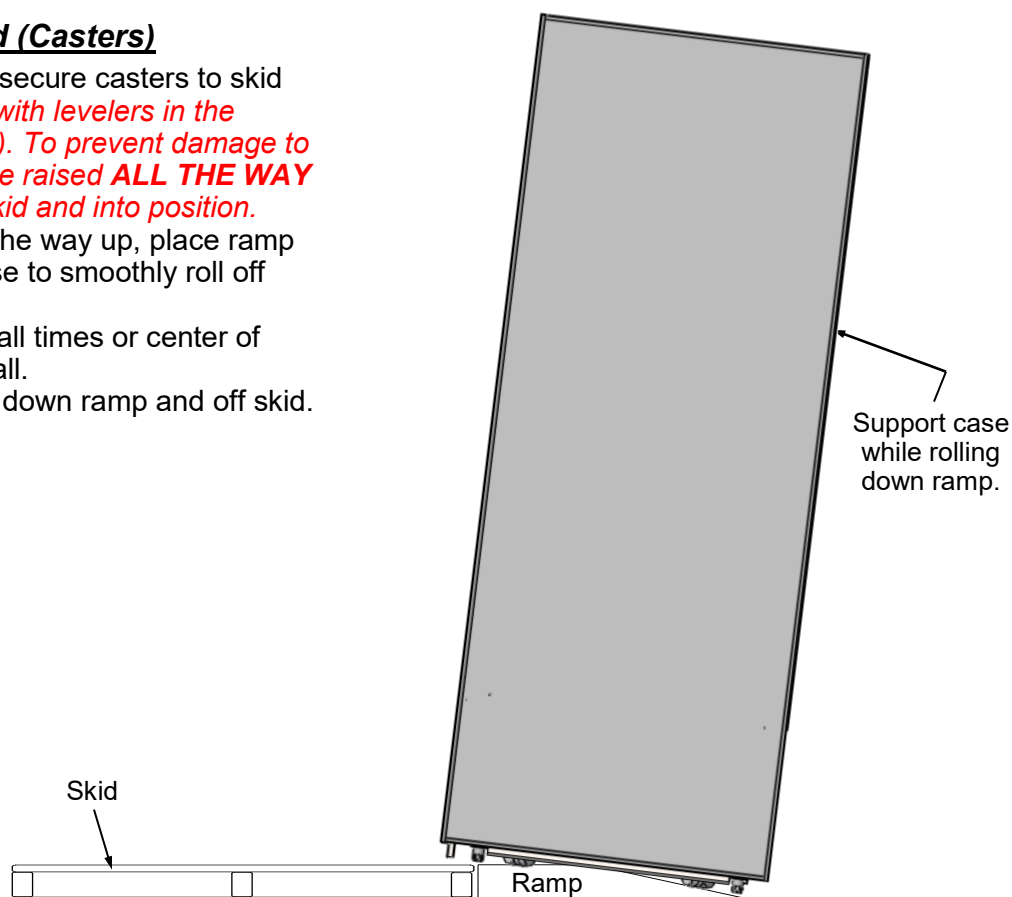
- Remove shipping brace that may be securing case to skid.
- Support case to prevent tipping.
- *Caution! Levelers can be damaged if case hits floor with heavy force!*
- Carefully slide unit to rear of skid and tip backward off skid.
- Illustration may not reflect every feature or option of your particular case.
- Case can be repositioned with pallet truck when front lower panel is removed. Blocking may be necessary to obtain adequate height.



2. Remove Case From Skid (Casters)

Remove shipping brackets that secure casters to skid

- *Important! Case is shipped with levelers 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.*
- After levelers are raised all the way up, place ramp up against skid (to allow case to smoothly roll off from skid).
- Maintain support of case at all times or center of gravity may cause case to fall.
- Roll unit to rear of skid. Roll down ramp and off skid.

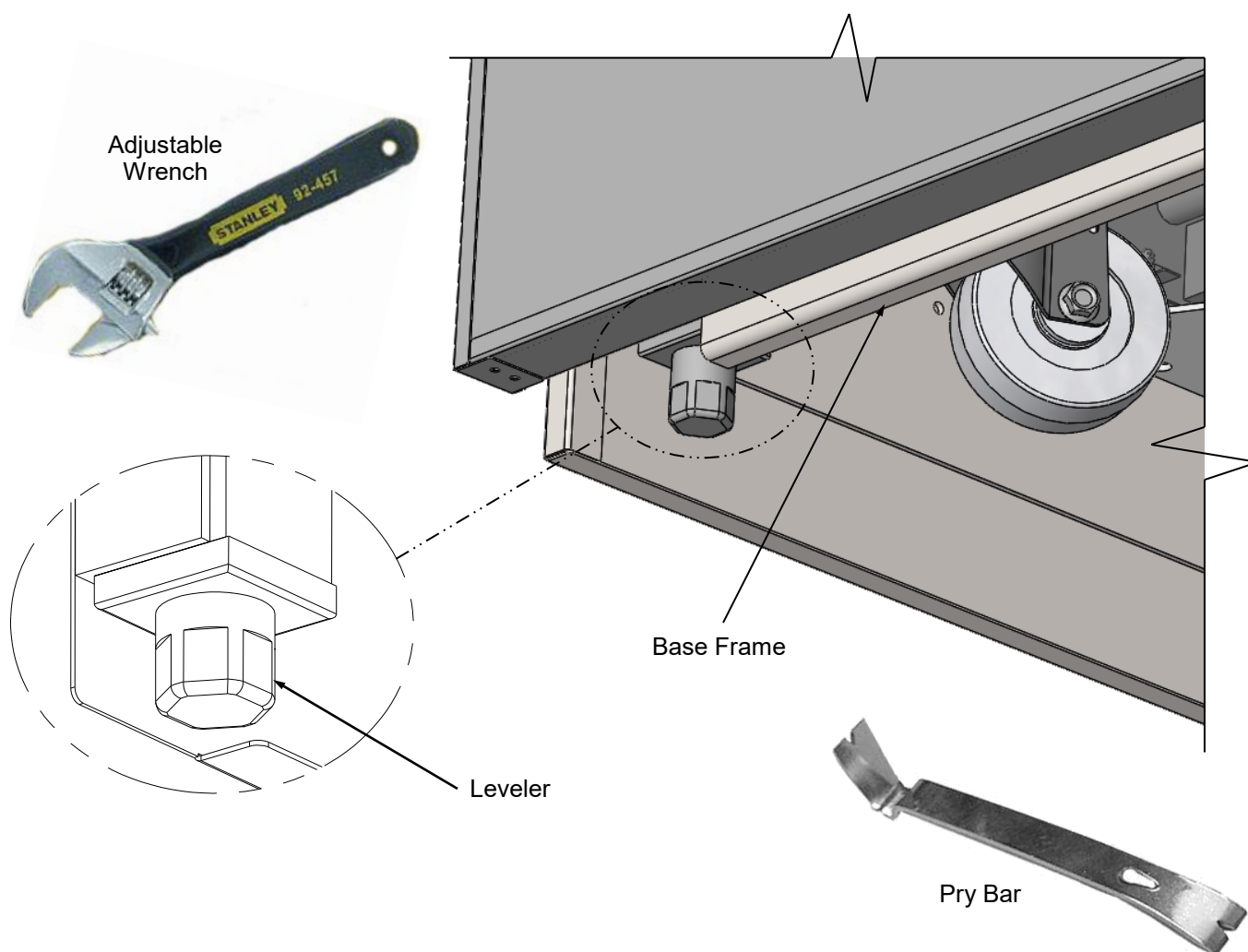


3. Position & Align Alongside Other Cases

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

4. Adjusting Levelers

- **Important! After case is in proper position, levelers must then be **LOWERED** to floor.**
- Adjust levelers so the case is level and plumb.
- You may need to remove front and/or rear toe-kick to access levelers.
- Use adjustable wrench to adjust leveler.
- Depending upon case weight it may be necessary to use a pry bar to accomplish this task.
- Do not use pry bar on toe-kick as it may buckle.
- Do not use pry bar on end panel as it may chip.
- Use pry bar **ONLY** on base frame to avoid damaging case.
- See illustrations below.



5. Optional Security Cover Instructions

Caution! Security Cover MUST Be Placed On OUTSIDE of Acrylic Air Deflector and INSIDE Lower Security Bracket To Fit Properly.

> Steps A, B and C correspond to this sheet's illustrations A, B and C. Follow these step-by-step instructions for proper security cover placement.

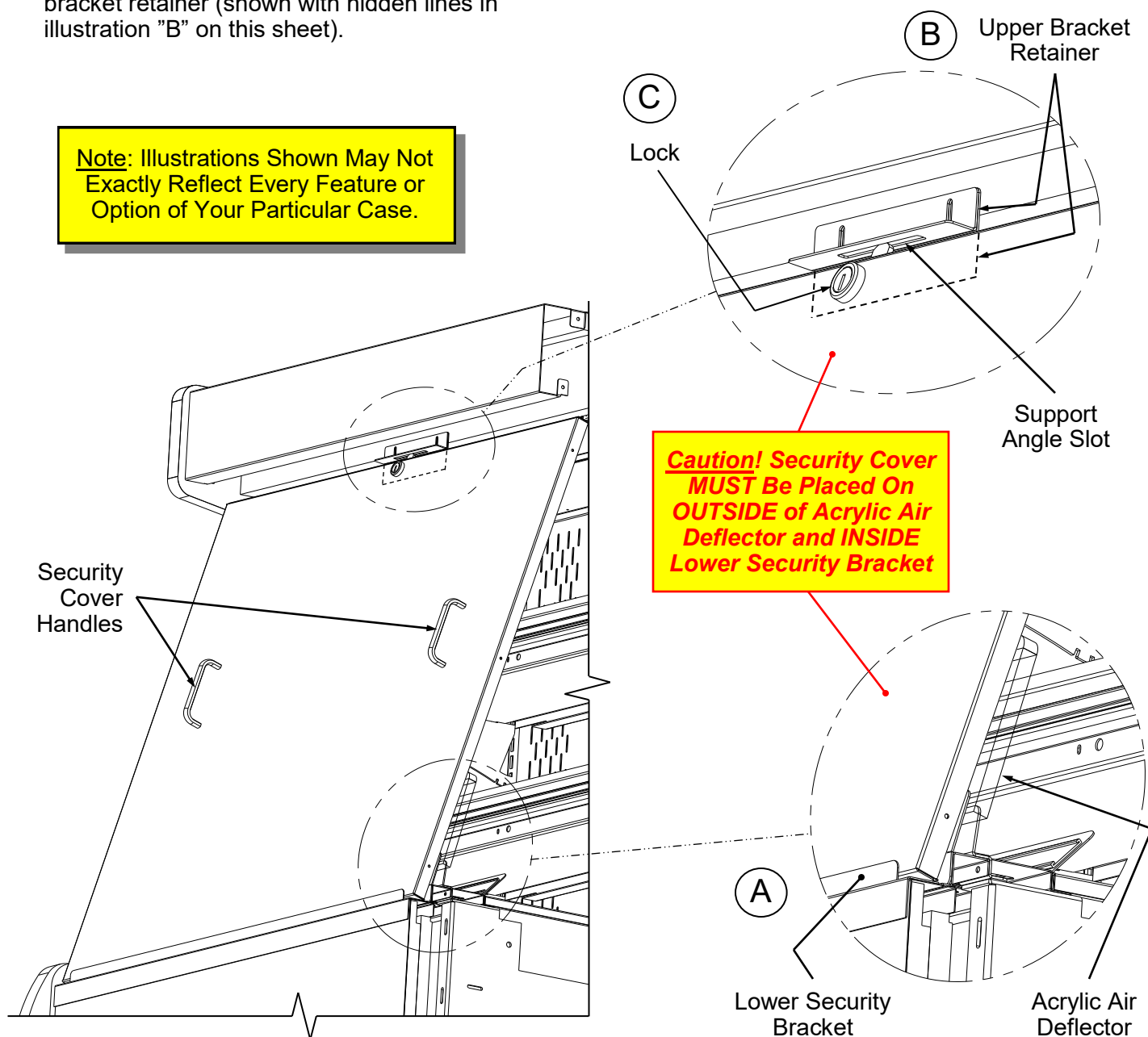
- A. Firmly hold security cover handles, and place the bottom of the security cover on the OUTSIDE of the acrylic air deflector and INSIDE of lower security bracket.
- B. Lean upper edge of security cover against upper bracket retainer (shown with hidden lines in illustration "B" on this sheet).

- C. Check that the lock properly rotates its locking mechanism into support angle slot (at upper area).

> When removing security cover from case, store in safe location away from foot traffic.

> Manufacturing note: if your case DOES NOT HAVE the hardware shown on this sheet for proper placement of security cover, contact Structural Concepts Corporation Technical Service. Toll-free number is listed on the last page of this document.

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

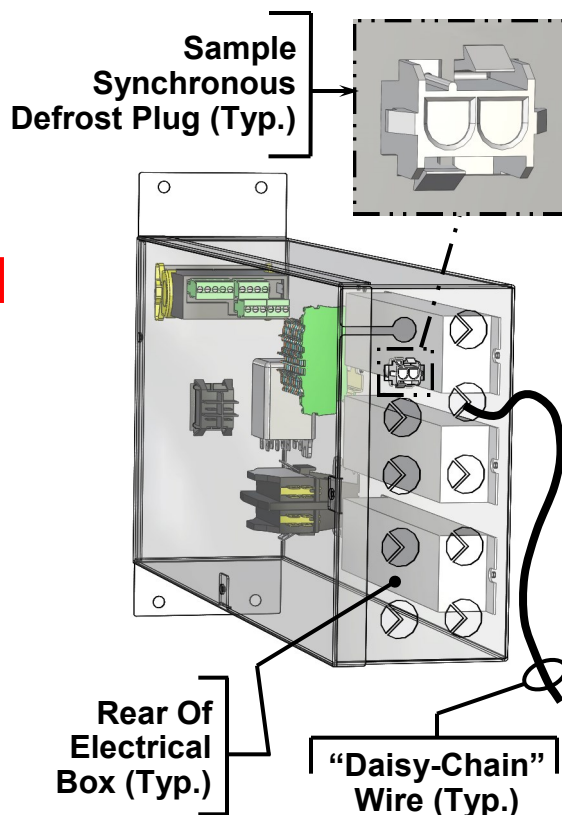


6. Synchronous Defrost Connection (Optional)

- Adjoined cases MUST HAVE its synchronous defrost plugs connected.
- See wiring diagram accompanying case.

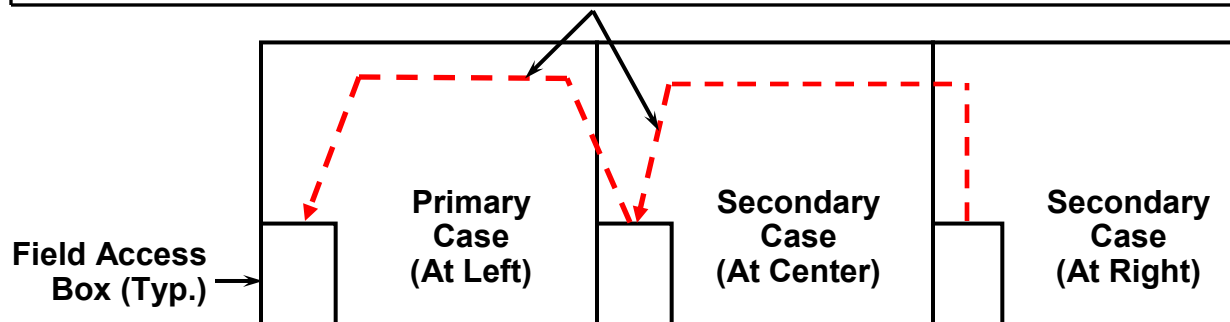
Attention!

- Adjoined cases have synchronous defrosts.
- Synchronous Defrost Plugs Must Be Connected At Rear of Electrical Box During Case Adjoinment.
- See Your Case's Wiring Diagram For Instructions.



SCC Internal Note: Any Changes To This Sheet Must Also Be Made To SCC P/N 20-61248.

Note: "Daisy-Chain" Synchronous Wiring Must Route To Primary Case (At Left)



Sample Case Adjoinment / Case Front View

INSTALLATION, CONTINUED: ADJOINMENT INSTRUCTIONS

7. Overview / Silicone and Buty Application

Sealant Overview:

- Warranty is void if improper sealant is used.
- Sealing tub prevents air from escaping through seams between cases (causing condensation problems and reducing refrigeration efficiency).
- Sealing also prevents water from seeping between cases to the floor.

Silicone and Urethane Application:

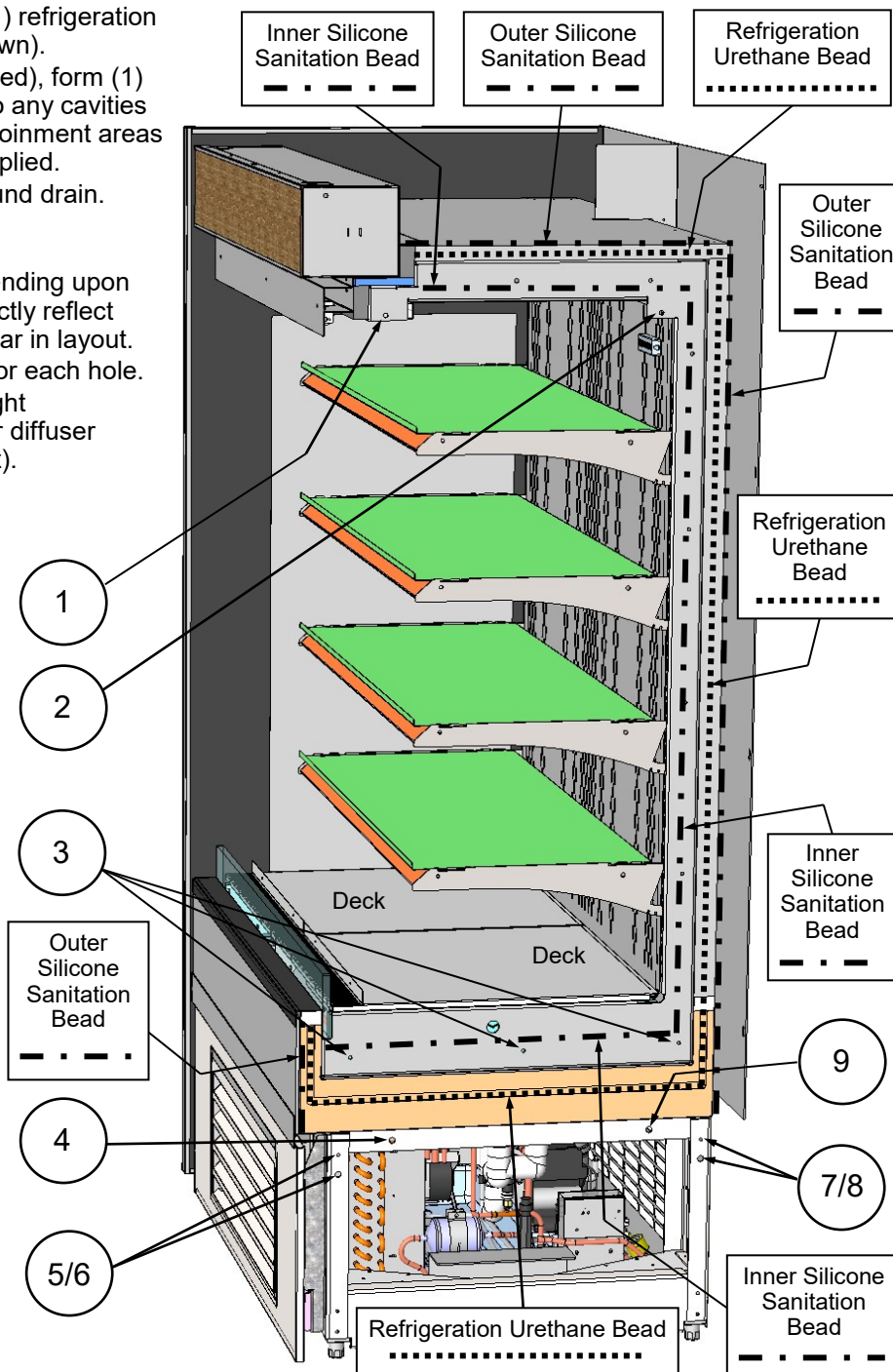
- Form (1) INNER sanitation bead AND (1) refrigeration bead BEFORE case is adjoined (as shown).
- Then, AFTER case is adjoined (and bolted), form (1) OUTER sanitation bead (as shown) into any cavities or gaps that may remain along outer adjoinment areas where urethane has ALREADY been applied.
- Also place a thick bead of urethane around drain.

8. Bolting Adjoined Units

- Bolt holes are at various locations (depending upon model). Model illustrated MAY NOT exactly reflect your particular unit but will likely be similar in layout.
- Use appropriately sized nuts and bolts for each hole.
- #1 hole is accessible at honeycomb (slight adjustment or removal of honeycomb air diffuser may be necessary for attachment of bolt).
- #2 hole is accessible near rear plenum.

- #3 holes are accessible after removing decking.
 - #4-6 holes are accessible after removing front panel.
 - #7-9 holes are accessible after removing rear panel.
- >> Be sure to reattach components to case after the adjoinment process is complete.

Note: Any changes to this document must also be made to P/N 20-76683



Note: Model B4732 (Unit Shown) May Not Exactly Reflect Every Feature or Option of Your Particular Case.

1. Removable Front Grille

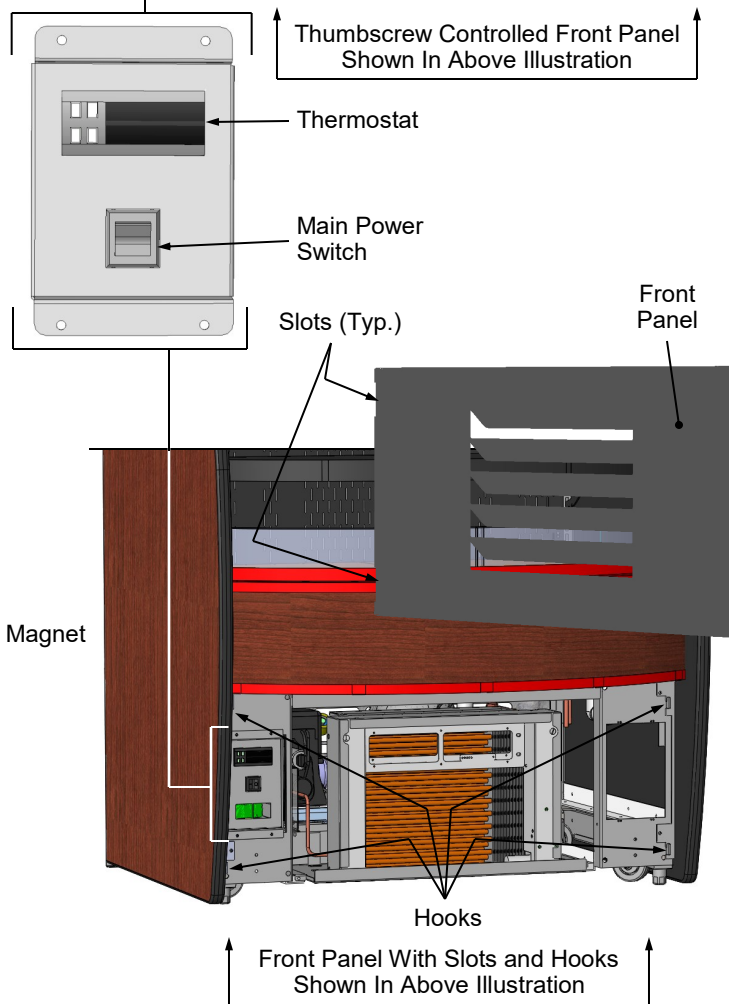
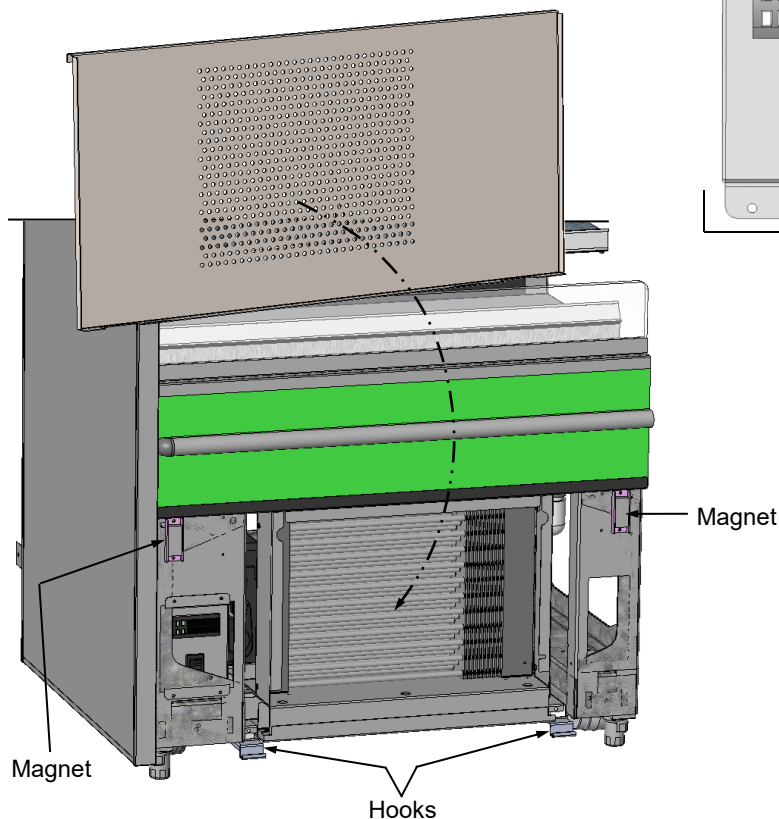
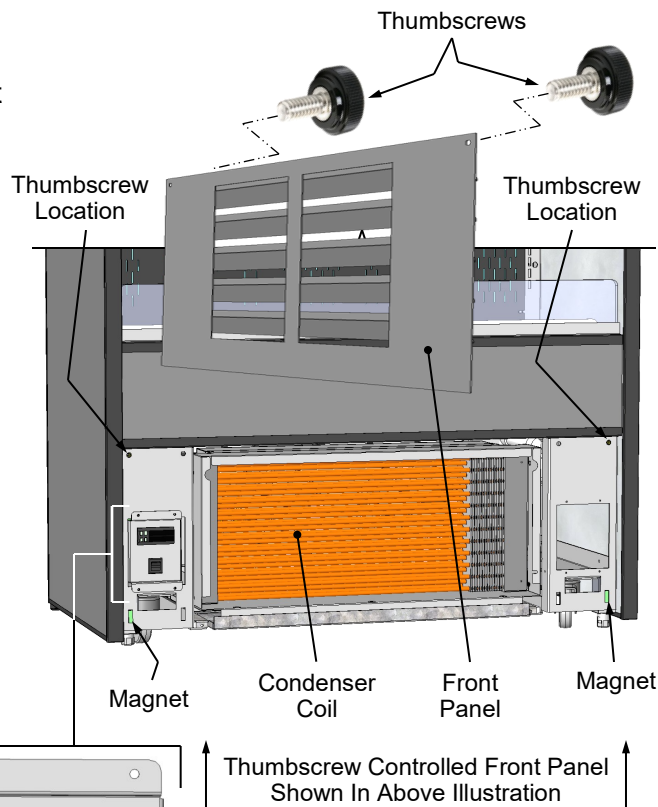
- Front grille can be removed/replaced via thumbscrew and magnet removal method (shown top-right) OR slot and hook method (shown lower-right).
- Also, hook/magnet method (shown lower-left).

2. Check That Overflow Condensate Pan is Properly Connected To Outlet

- **Caution! Condensate pan can come unplugged from its electrical outlet during shipment!**
- If case runs without proper connection, water will overflow pan and drain onto floor causing damage!
- Before turning case on, check that power cord from condensate pan is properly plugged in.
- See **TROUBLESHOOTING** section in operating manual for additional information.

3. Turning On Power To Case

- Plug in power cord.
- Main power switch may be turned on by reaching through front grille; however, removal of front grille will allow unhindered access.
- Main power switch is located on main ballast box, below controller. See illustration at right.



EVAPORATOR COIL FAN DISCHARGE / TXV (THERMOSTATIC EXPANSION VALVE)

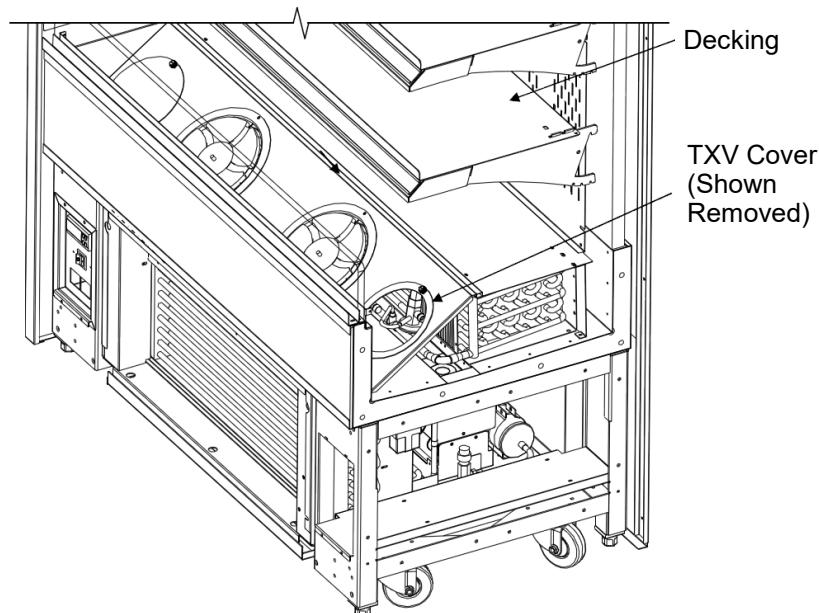
1. Evaporator Coil Fan Discharge

- When Main Power Switch is turned on, refrigeration assembly will energize (see **CASE START-UP & REFRIGERATION ASSEMBLY ACCESS** section).
- Evaporator 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, the unit will require 75 minutes of run time to pull-down temperature.
- See below illustration.

2. TXV (Thermostatic Expansion Valve)

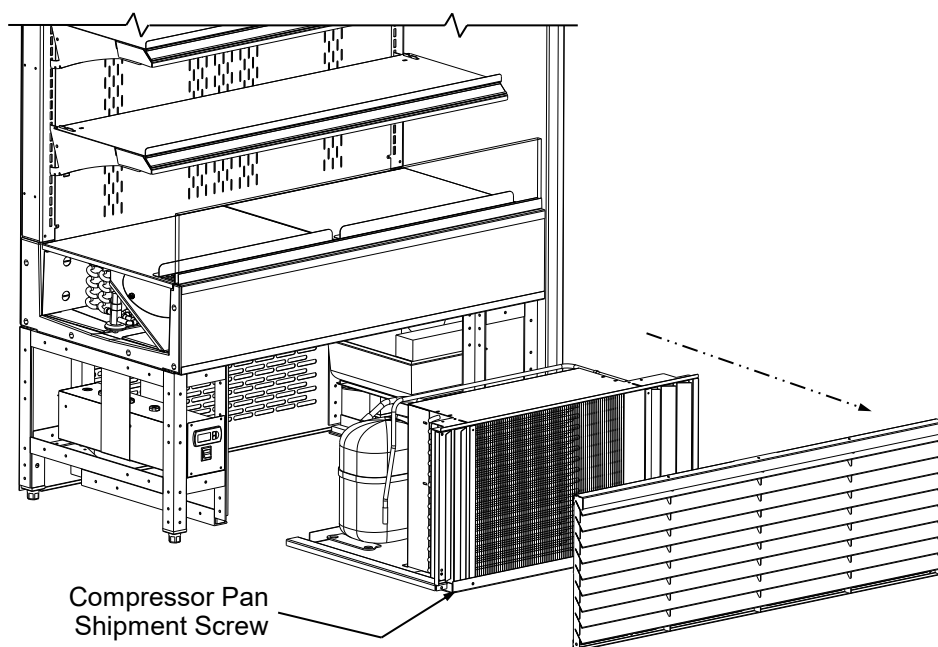
- TXV is under TXV access panel.
- Decking must be removed for access.
- TXV cover must also be removed for access (remove two thumb screws).
- See illustration below.
- Note: Standard cases have TXV at customer-left. For cases with EnergyWise, TXV is at customer-right.

Case Shown with End Panel, Decking, and TXV Cover Removed. Note: Illustration Above Has TXV at Customer Right. Your Case (If Standard / Non-EnergyWise Refrigeration Package) Will Have TXV Accessible at Customer-Left.



3. Sliding Condenser Package Out From Underside Of Case

- At shipment, removal of compressor pan shipment screws may be necessary to access condenser package. See illustration below-left.
- Refrigeration assembly base rests on plastic glides.
- Slide condenser package out from under case.

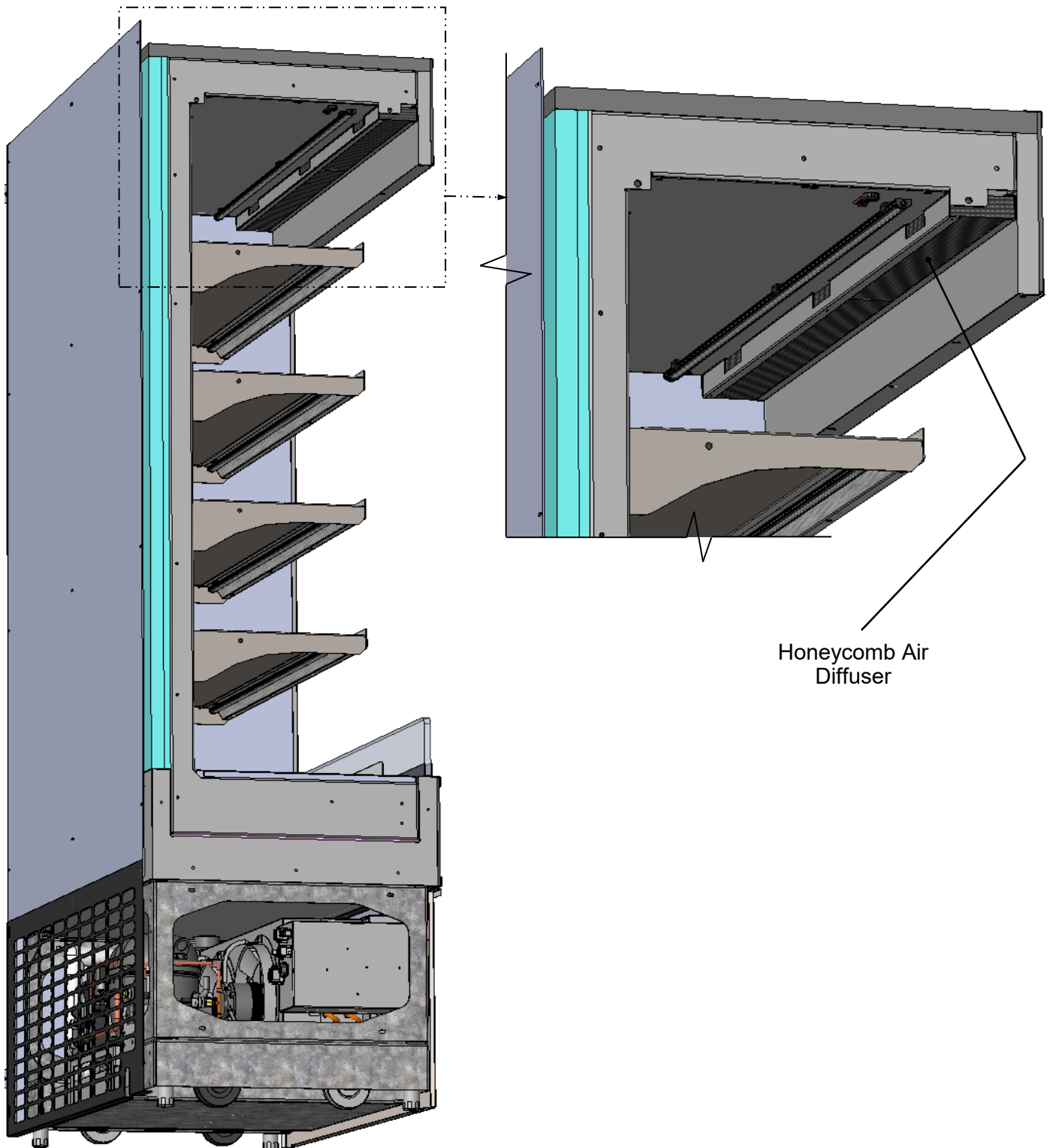


Above View Shows Condenser Package Slid Out From Under Case. Note: Illustration Shown May Not Reflect Every Feature Or Option of Your Particular Case.

HONEYCOMB AIR DIFFUSER

Honeycomb Air Diffuser

- Honeycomb is located in discharge air duct.
- See illustration below.
- Note: Illustration shown below is partially disassembled for illustrative purposes only.

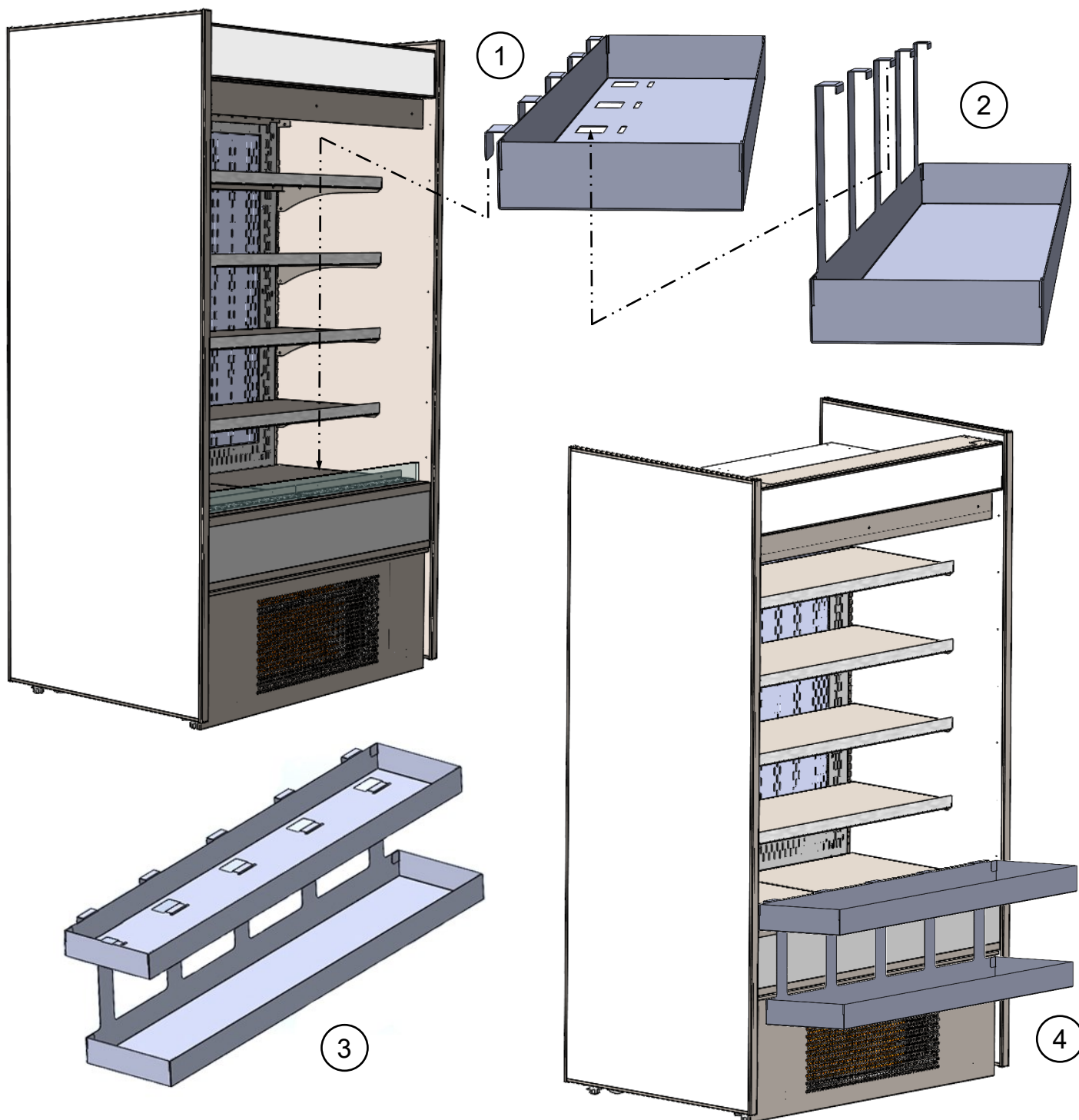


AFTERMARKET PRODUCT BIN - PLACEMENT

Aftermarket Product Bin - Placement

- Model B4732 (Shown Below) May Not Reflect Every Feature Or Option Of Your Particular Case.
- Product bin is for placing bagged product such as potato chips, pretzels, crackers, etc.
- Product bin is made of stainless steel.
- Remove product bin (to clean or replace).

1. Upper product bin is to hang on acrylic shield at front of case.
2. Lower product bin prongs are to be inserted into upper bin's cutouts (in base) and hang securely.
3. View of assembled upper and lower product bins.
4. View of assembled upper and lower product bins after being attached to case's acrylic shield at front of case.



LED LIGHT FIXTURES

LED Style Light Fixtures

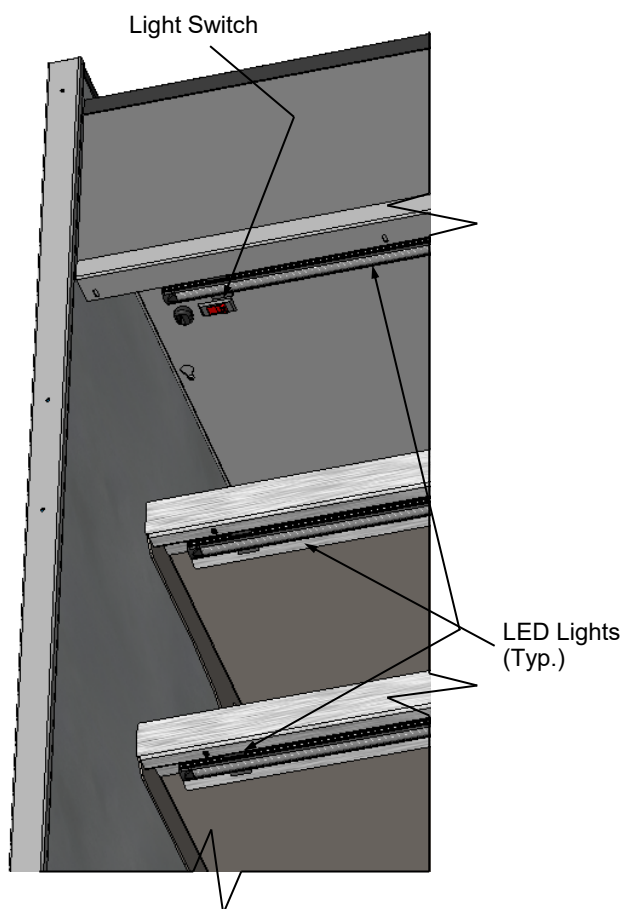
Removal of Faulty LED Lights:

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

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

Replacement of LED lights:

- Attach magnetic mounting clips onto LED light.
- Adjust magnetic mounting clips so they are equally spaced on LED light.

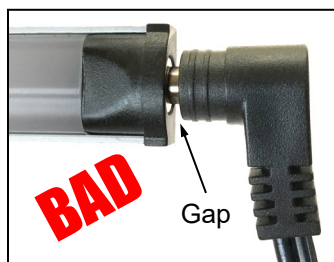
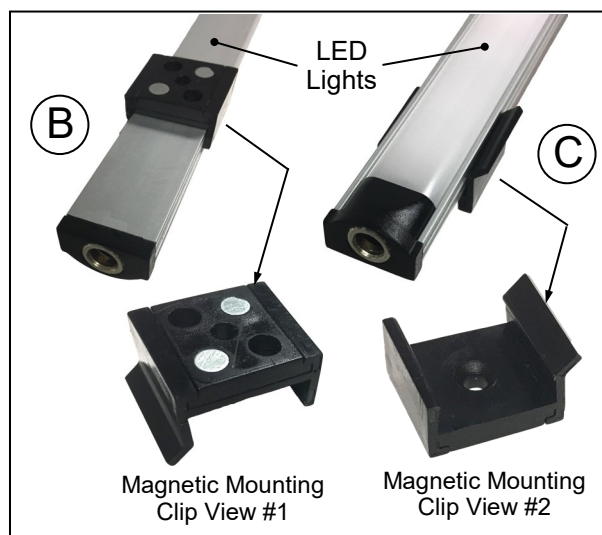
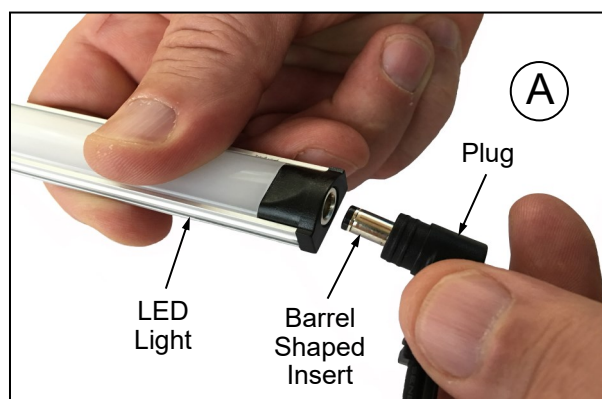


--- Case Front of Model B43C ---

- Reattach LED light assembly to its shelf/header.
- Position properly in shelf/header.

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

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



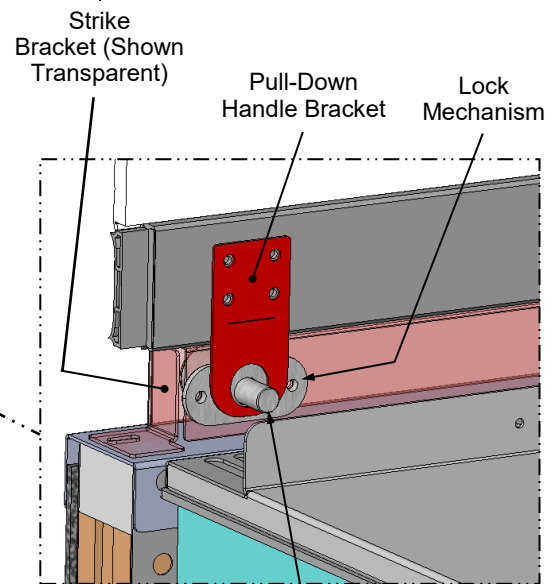
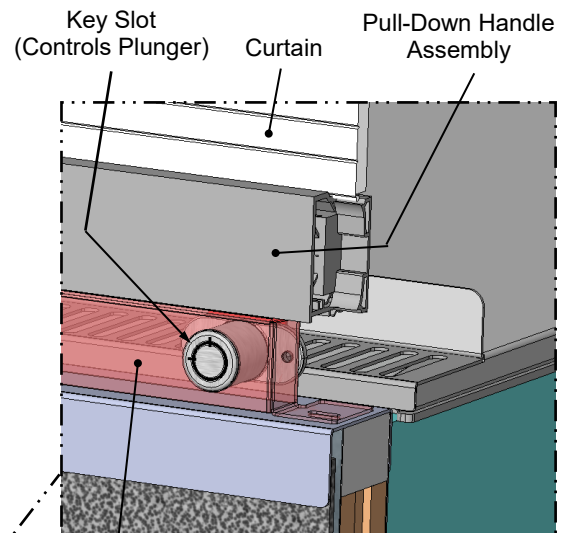
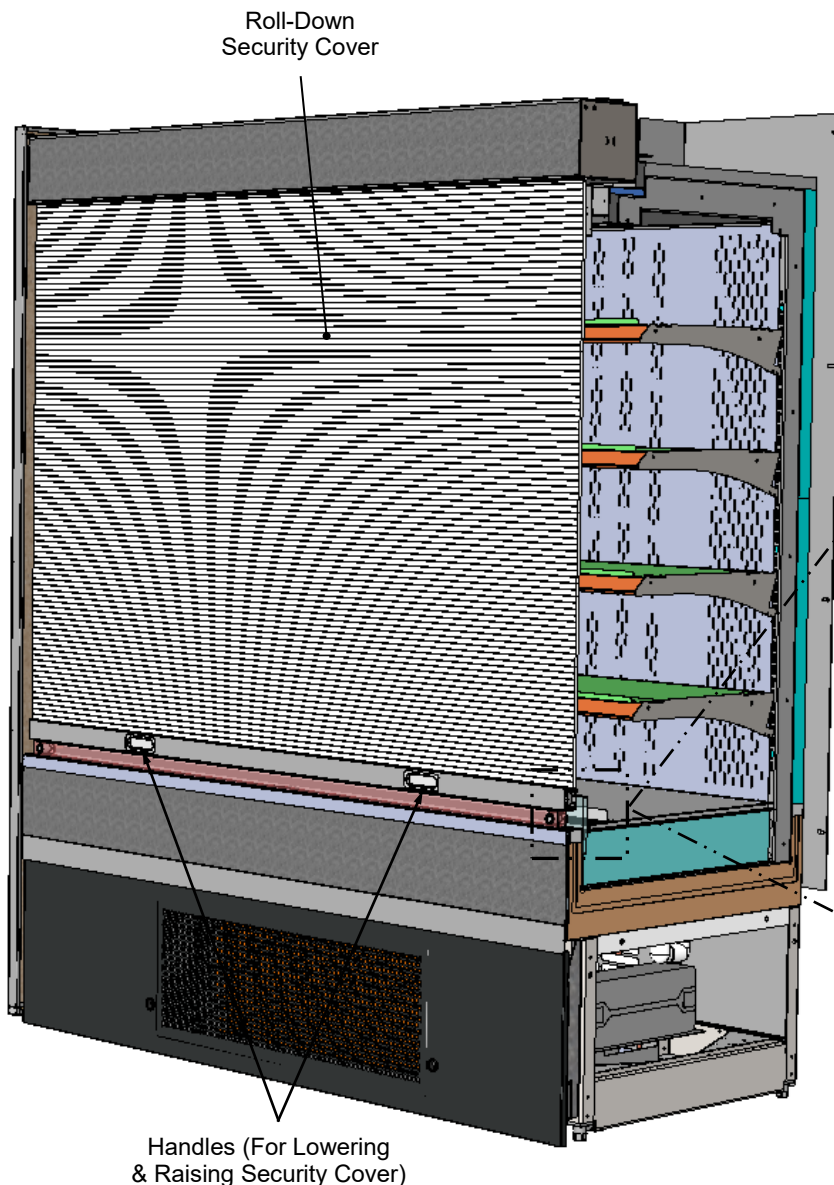
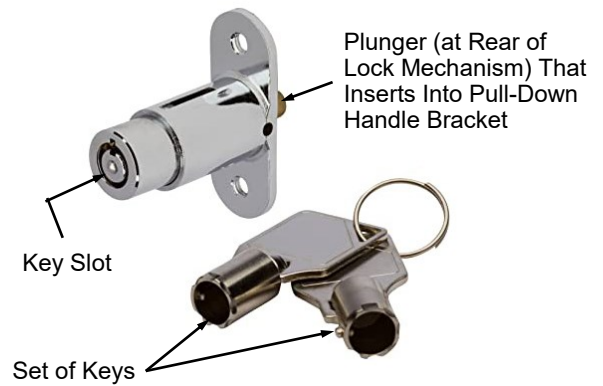
OPTIONAL ROLL-DOWN SECURITY COVER - MODEL B4732 ILLUSTRATED / YOUR MODEL MAY VARY

Roll Down Security Cover (Optional): Shown Extended

- Optional roll down security cover has two handles for grasping, lowering and raising.
- After roll-down cover is lowered, key may be turned clockwise to lock latch into strike bracket.
- Turn counter-clockwise to unlock.
- Keep keys in safe and secure place.
- Sample lock mechanism components (including sample set of keys) are shown at top-right.

Model B7132 Is Shown Partially Disassembled With Transparent Strike Bracket For Illustrative Purposes Only.

--- Lock Mechanism Components ---



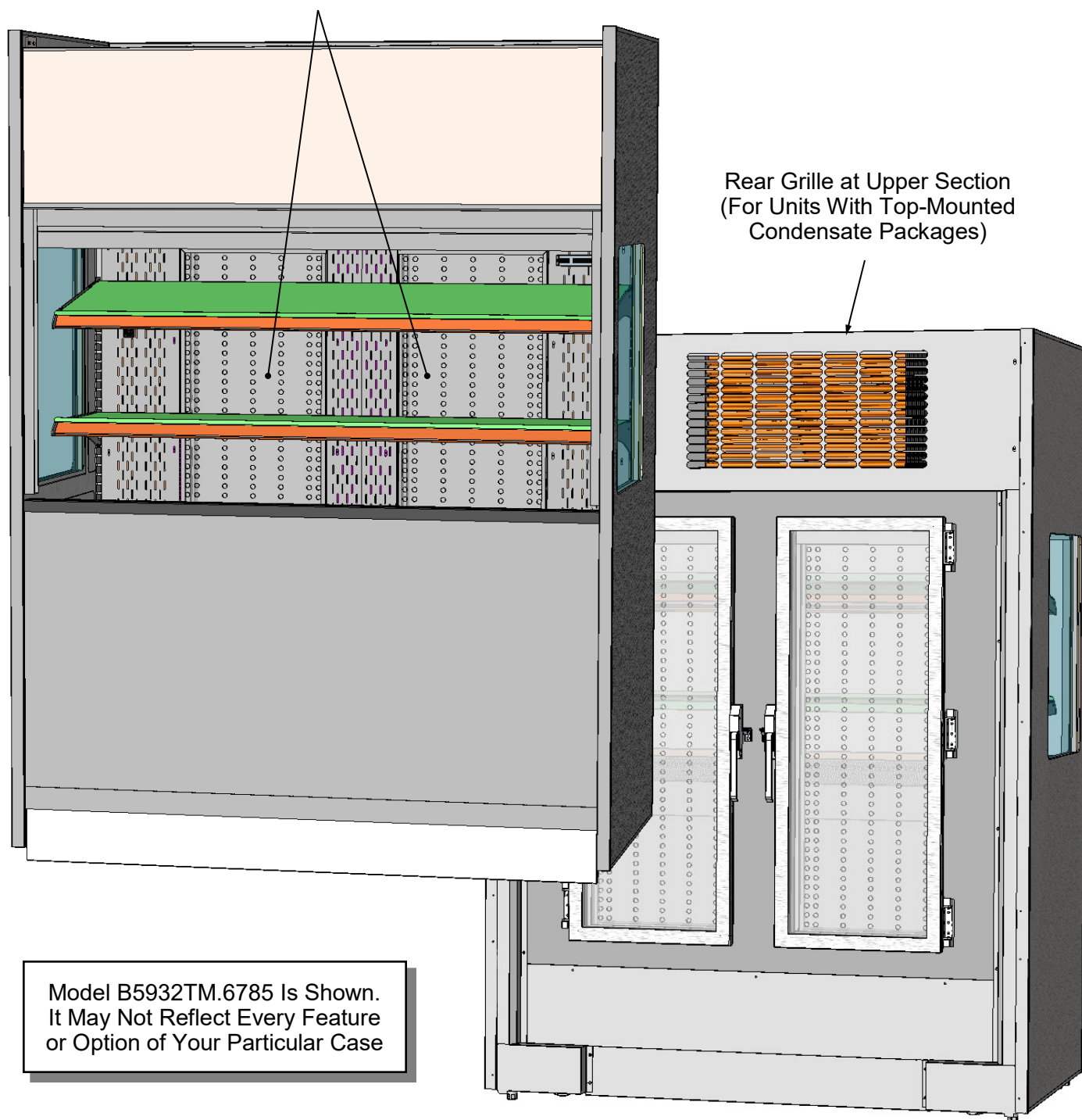
OPTIONAL DUAL REAR DOORS (WITH PERFORATED PLENUM DOORS) / B5932TM SHOWN

Dual Rear Doors (Optional):

- Illustration below has had optional roll-down security cover removed for illustrative purposes.

- Transparent rear doors have perforated plenum as part of each hinged door.
- Note: Transparent doors are not available on non-standard models.
- See illustrations below.

Note: Transparent Doors Are Not Available On Non-Standard Models



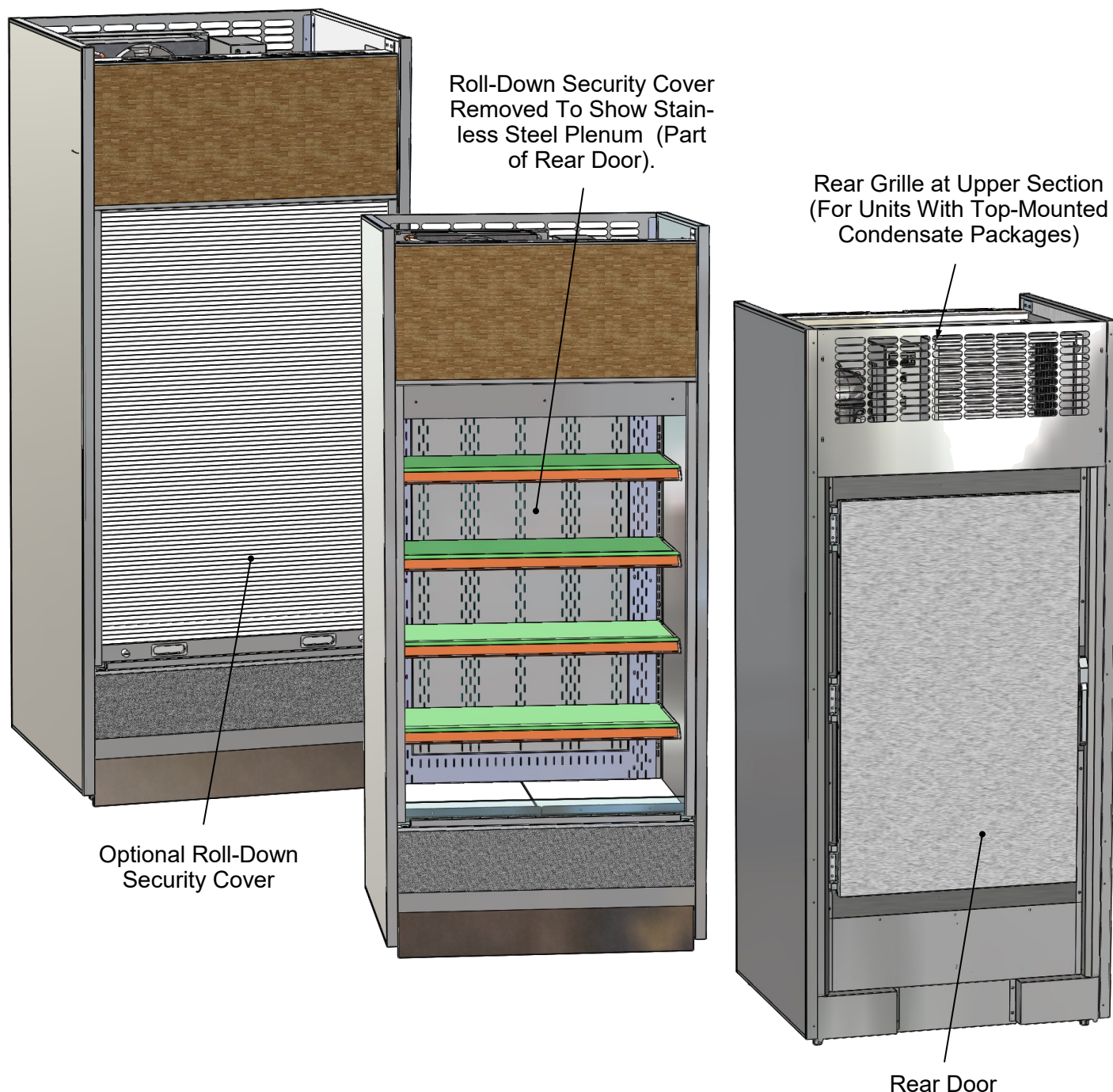
OPTIONAL SINGLE REAR DOOR (WITH PERF. PLENUM AS PART OF DOORS) / B3632TM SHOWN

Single Rear Door (Optional):

- Illustrations below show optional roll-down security cover intact AND removed for illustrative purposes.

- Rear door has stainless steel skin with stainless steel perforated plenum as part of door assembly.
- See illustrations below.

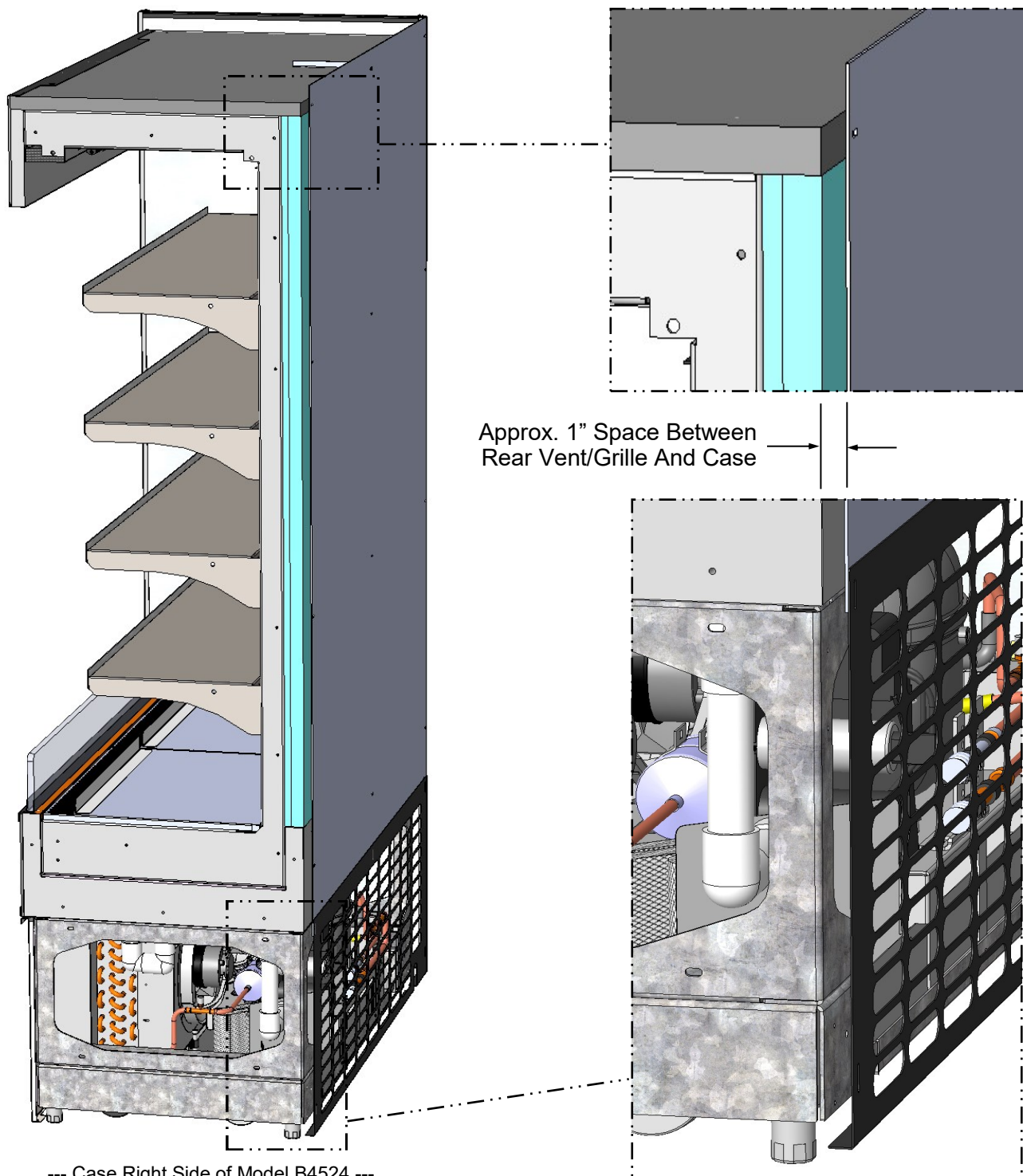
Model B3632TM Is Shown. It May Not Reflect Every Feature or Option of Your Particular Case



Wall Spacing / Rear Venting (May Not Be Applicable To Your Model)

Venting Panel: *Caution! Venting is an integral part of case temperature management. Case **MUST NOT** be pushed up against wall if rear venting panel is not attached!*

Rear Grille: *Rear grille may be removed (by removing 4 screws) for service or maintenance of condenser unit. Return rear grille to case rear when completed.*

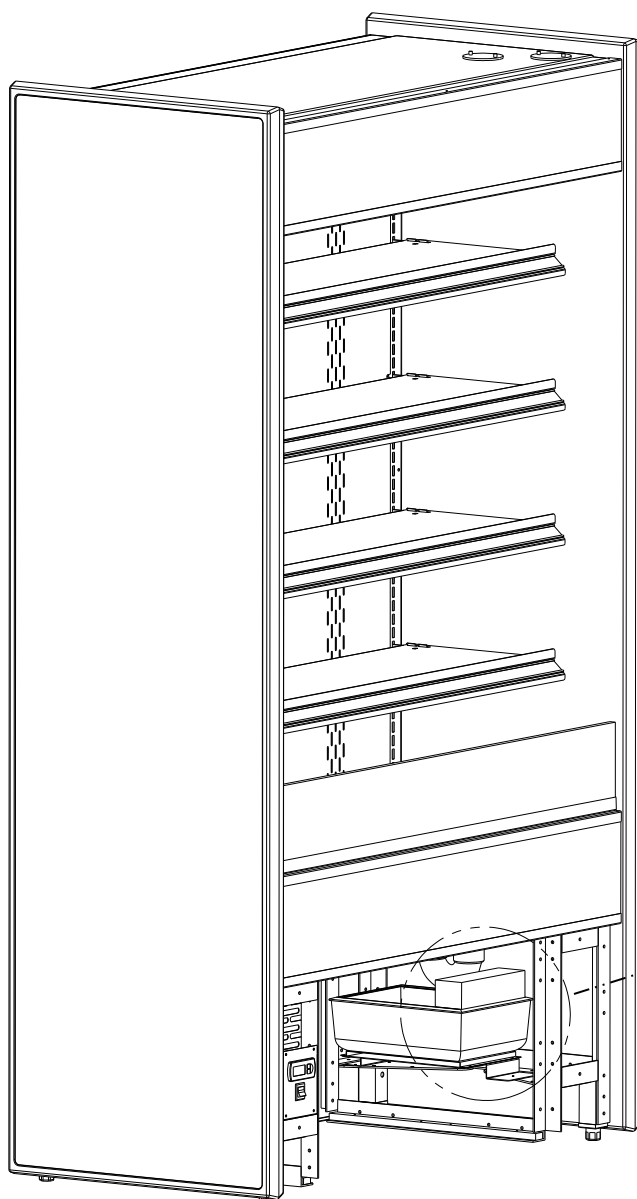


Condensate Pan Access

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

First, remove the front grille and slide out the condenser package. See **FRONT GRILLE ACCESS / CHECK CONDENSER PAN / REFRIGERATION ASS'Y / TURN ON POWER** section in this operating manual for instructions.

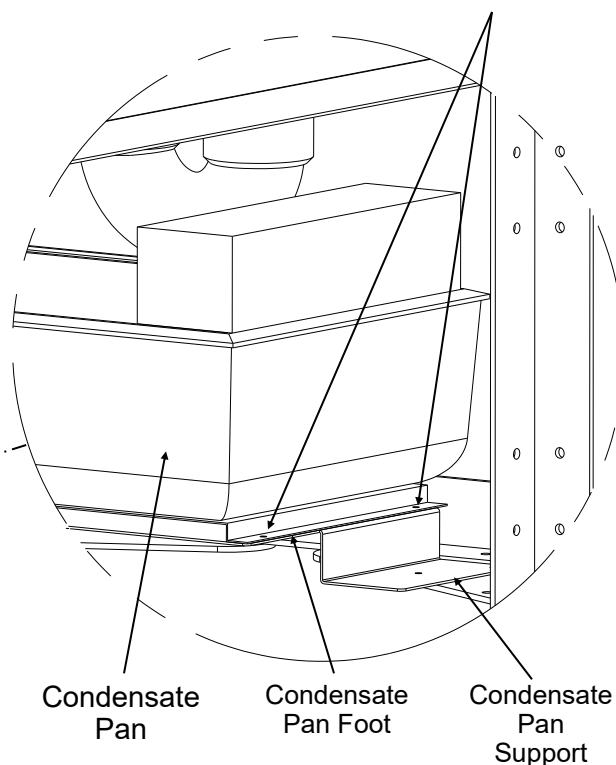
- Unplug the condensate pan from its outlet.
- Remove the two (2) screws holding the condensate pan foot to the condensate pan support (see illustration below).
- Carefully slide the condensate pan off from the condensate pan support.
- When done servicing or cleaning, return and reconnect in reverse order it was removed.



---- Case Front (Refrigeration Assembly Removed) ----

Note: Depending upon your particular refrigeration package, removable, electric-coil condensate pan may not be part of case. Cases with EnergyWise refrigeration packages DO NOT have a removable electric-coil condensate pan.

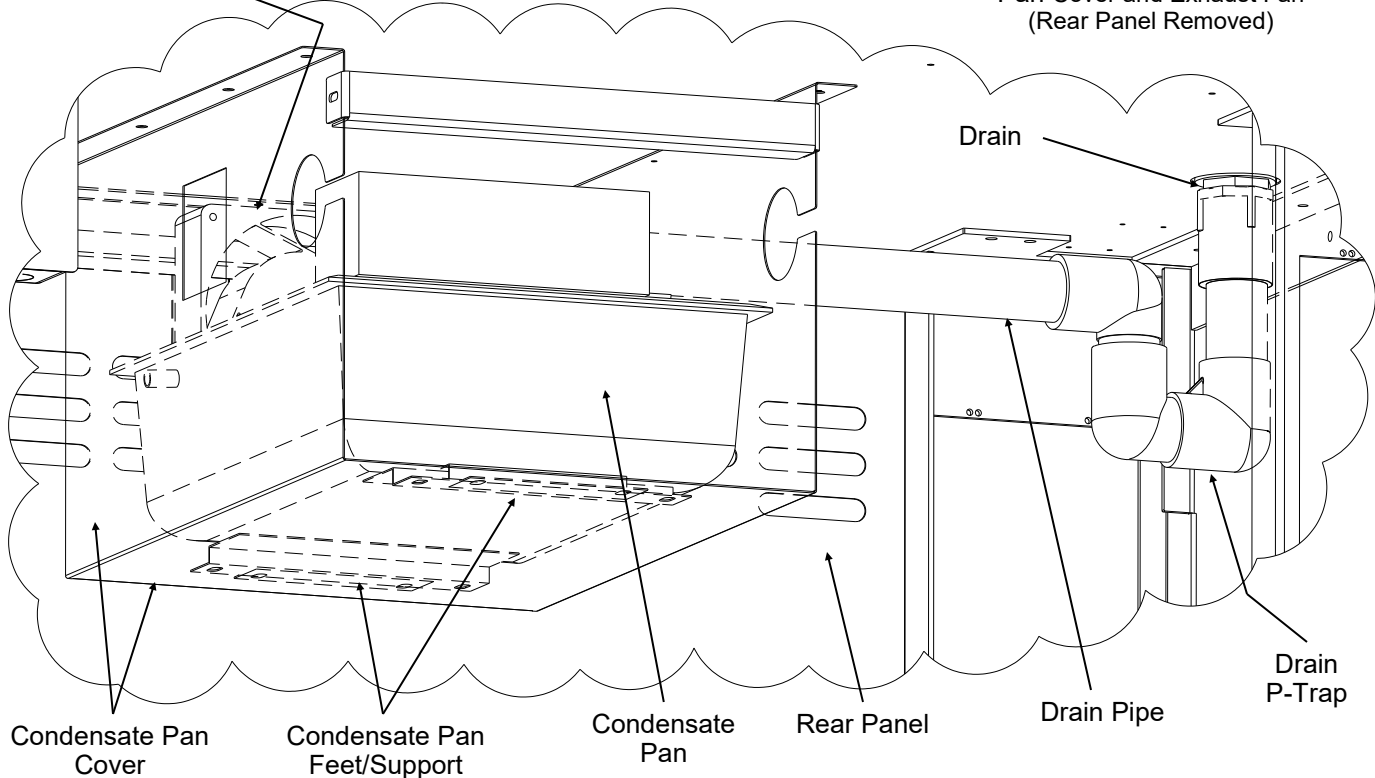
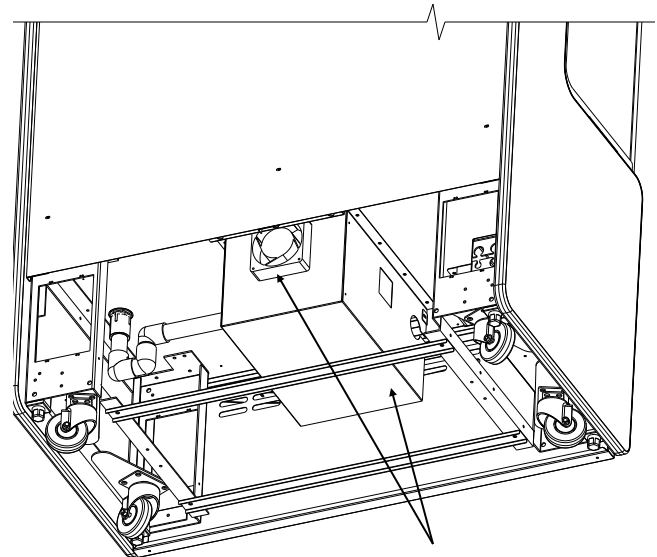
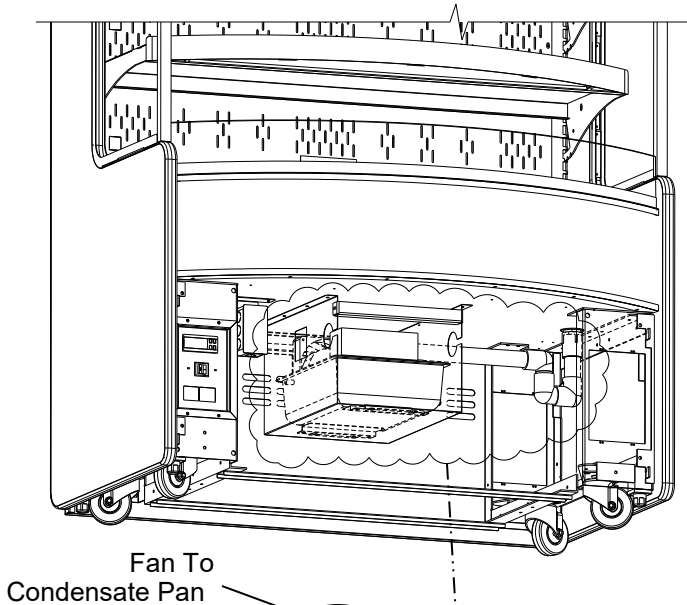
Two (2) Condensate Pan
Screws (Connecting
Pan Foot To Support)



CONDENSATE PAN ACCESS: REMOTE UNITS WITH CONDENSATE PANS ONLY

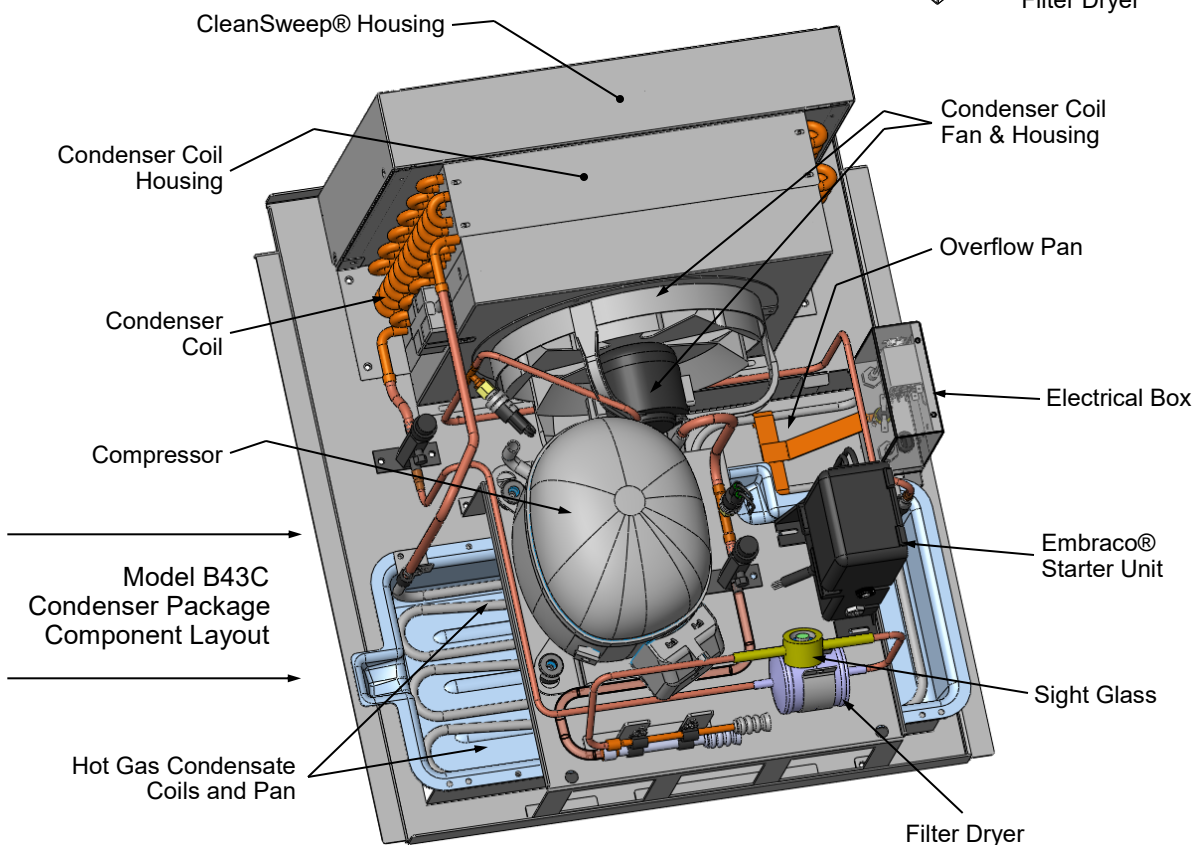
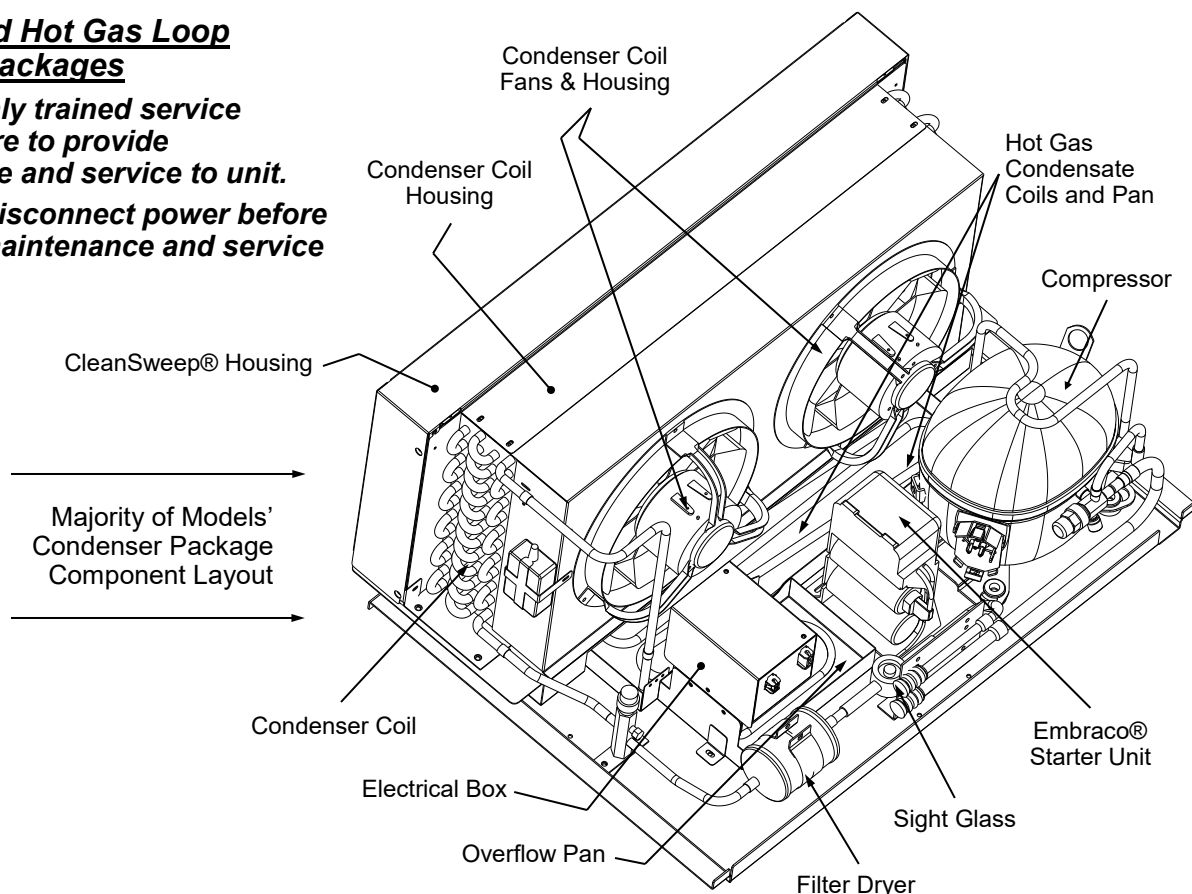
Condensate Pan Access and/or Removal

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.
- To access, remove the front panel. Simply lift panel up and off (no screw removal is required).
- To service or clean, unplug the condensate pan from its outlet.
- Remove the screws holding the condensate pan foot to the condensate pan support (see illustration below).
- Carefully slide the condensate pan off from its support.
- When done servicing or cleaning, return and reconnect in reverse order it was removed.



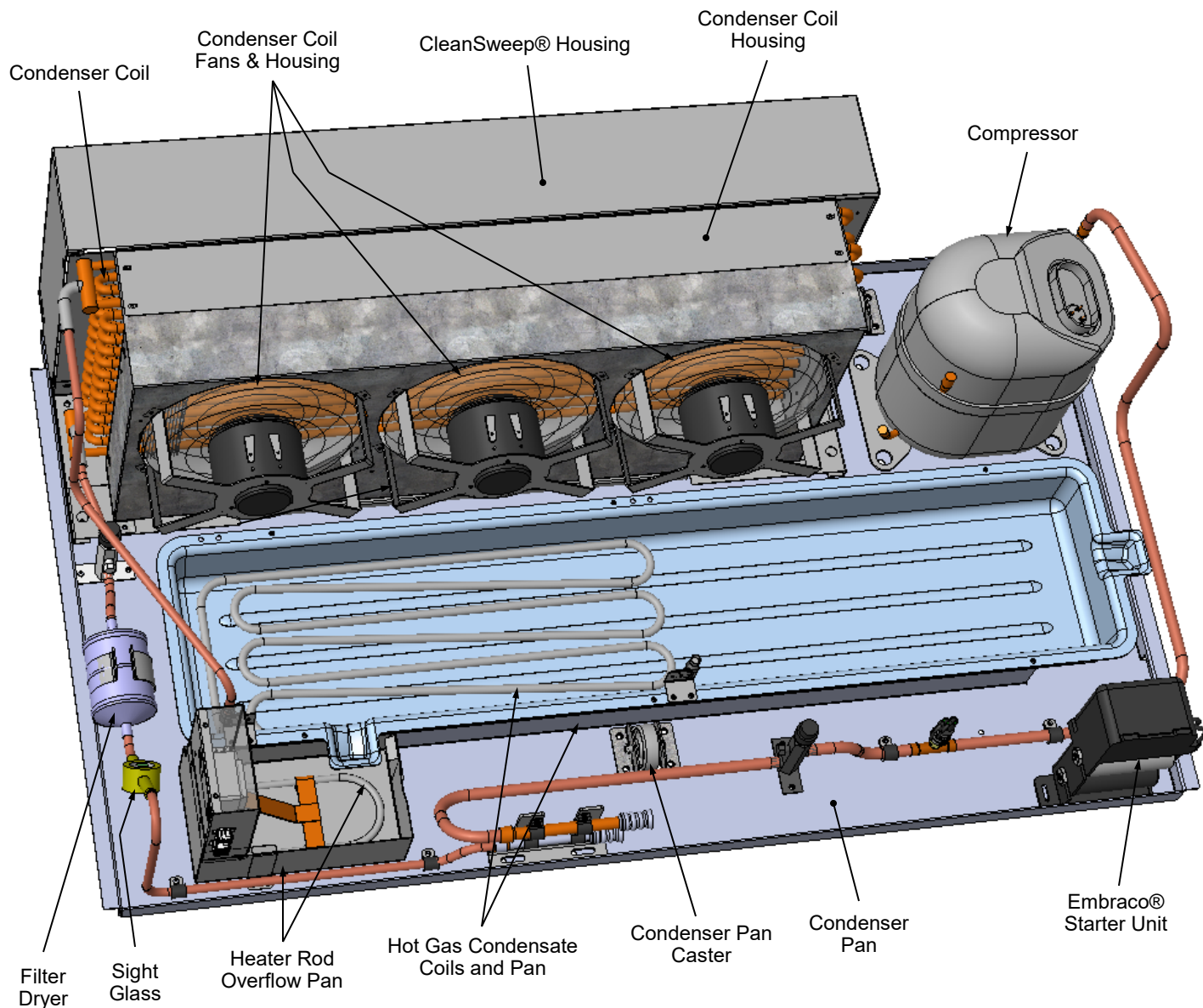
Self-Contained Hot Gas Loop Condensate Packages

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.



Self-Contained Hot Gas Loop Condensate Package

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.

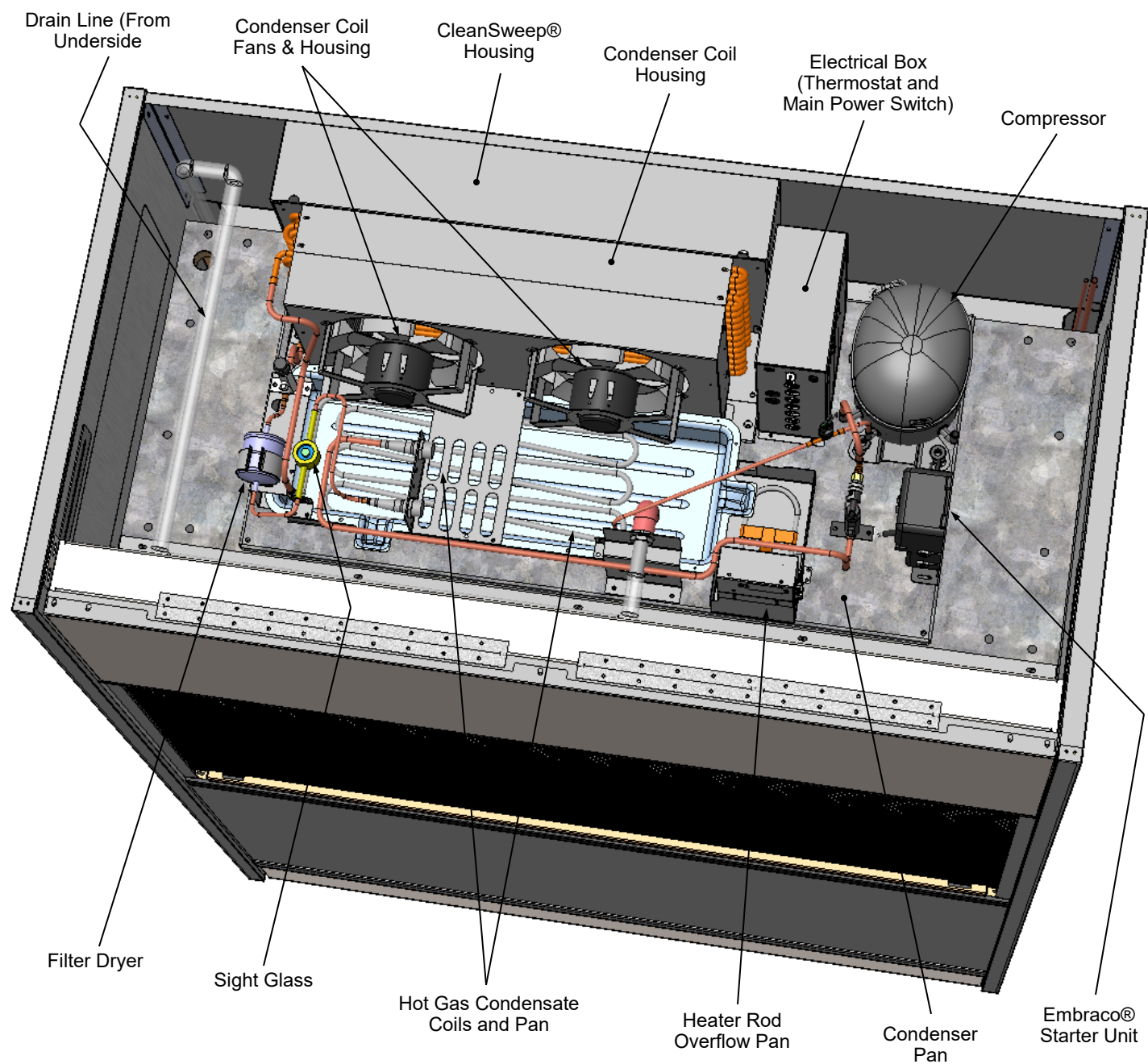


--- Model B6632SC.6241 Condenser Package Component Layout ---

SELF-CONTAINED HOT GAS LOOP CONDENSATE PACKAGE LAYOUTS - TOP MOUNTED

Self-Contained Hot Gas Loop Condensate Package - Top Mounted

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.
- **Important!** See next page for underside pump/drain pan for top mounted units.

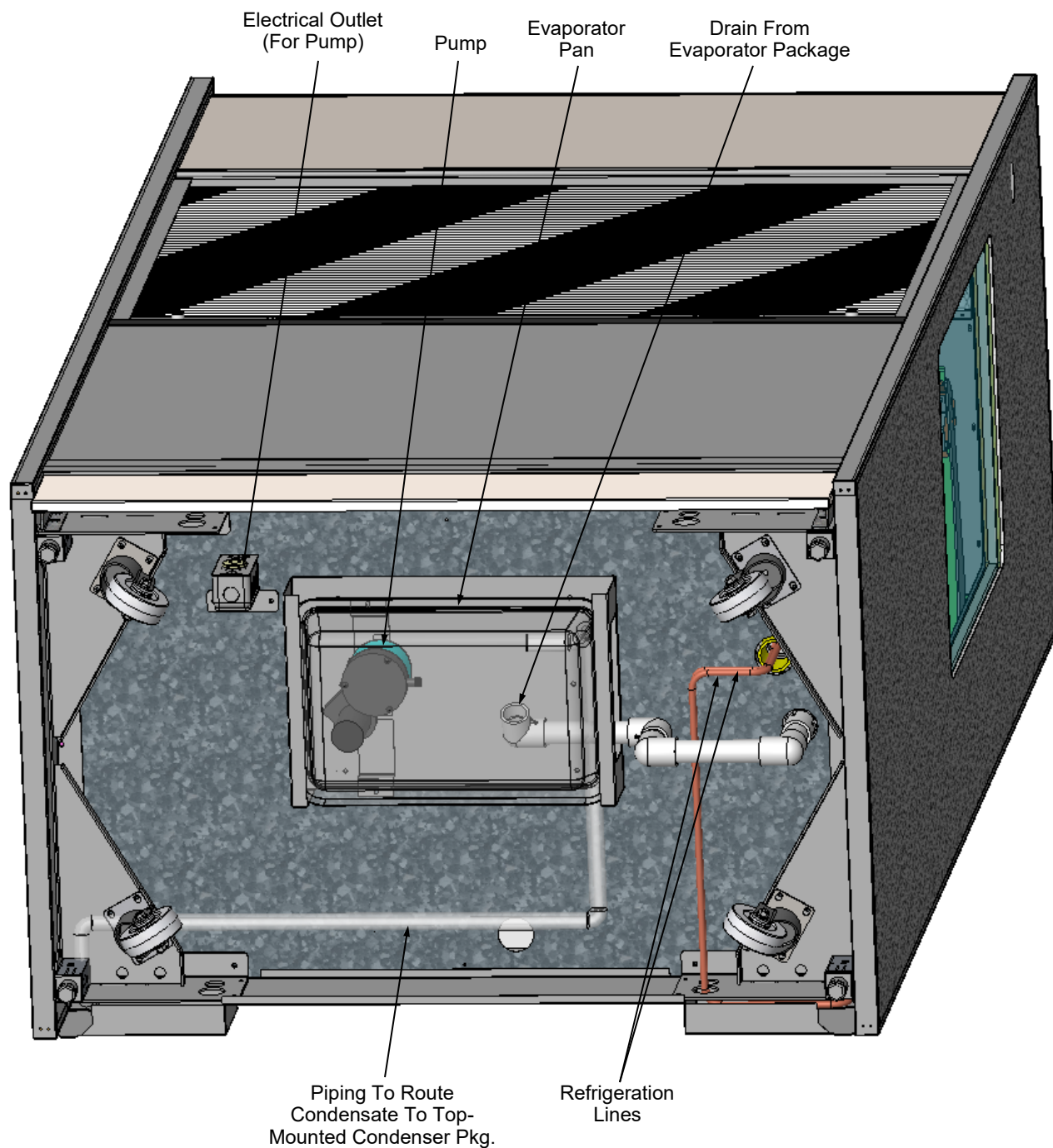


--- Model B5932TM.6785 Condenser Package Component Layout ---

UNDERSIDE PUMP/DRAIN UNIT (FOR UNITS WITH TOP-MOUNTED SELF-CONTAINED COND. PKGS.)

Underside Pump/Drain Unit (For Top-Mounted Self-Contained Condenser Packages)

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.



--- Model B5932TM.6785 Condenser Package Component Layout ---

LOAD LEVEL GUIDE / TEMPERATURE GUIDE (MODEL B42 SHOWN / APPLICABLE TO OTHERS)

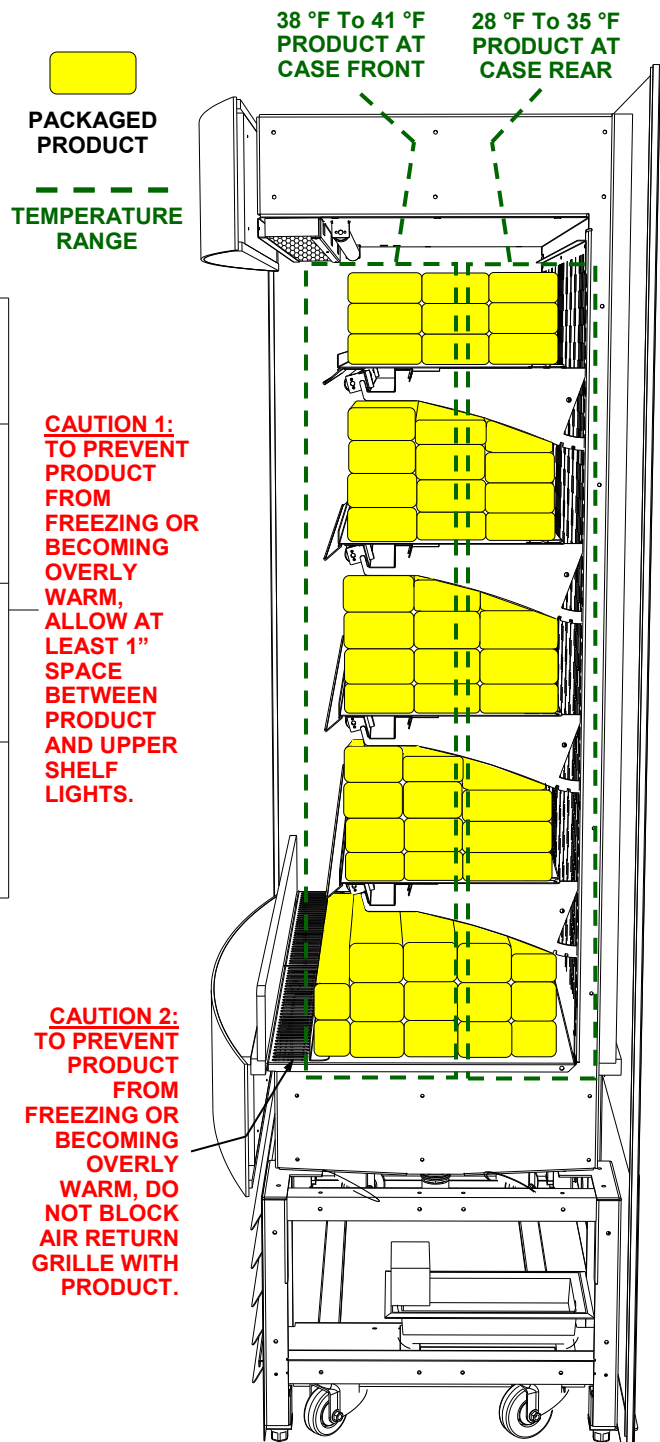
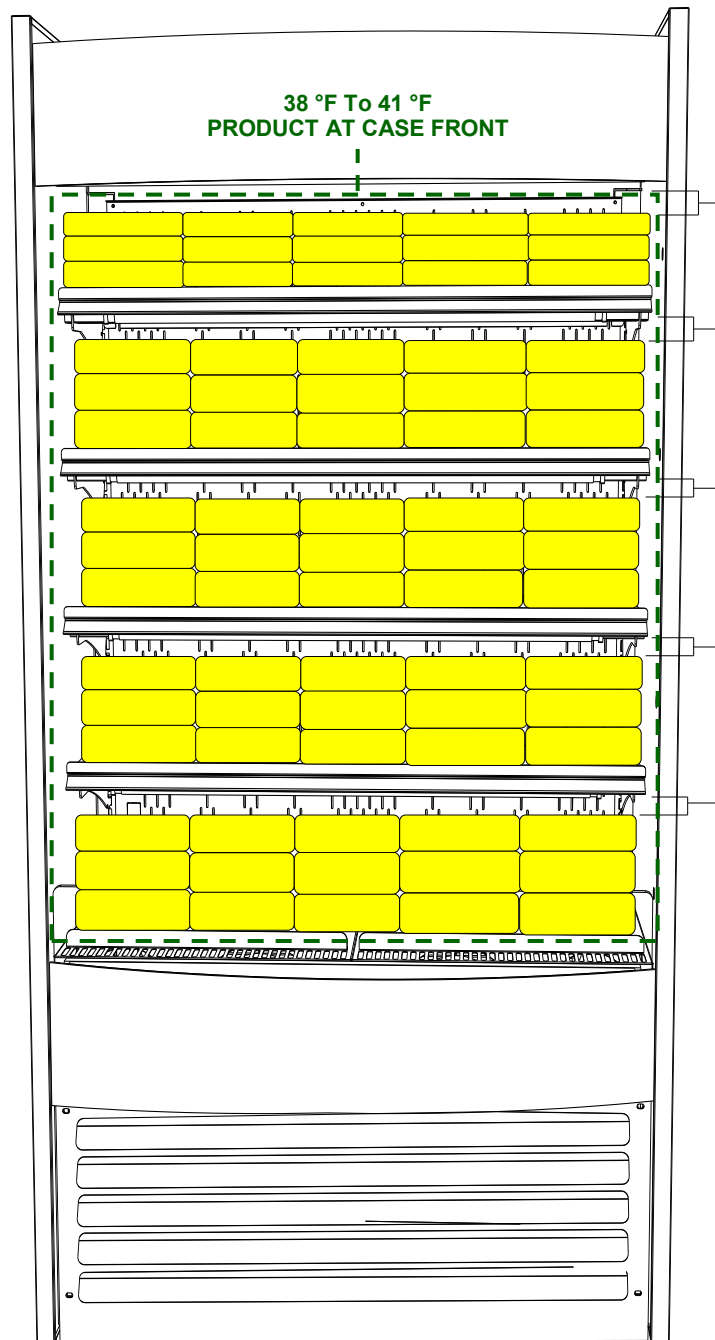
LOAD LEVEL & TEMPERATURE GUIDE

CAUTION 1: TO PREVENT PRODUCT FROM FREEZING OR BECOMING OVERLY WARM, ALLOW AT LEAST 1" SPACE BETWEEN PRODUCT AND UPPER SHELF LIGHTS.

CAUTION 2: TO PREVENT PRODUCT FROM FREEZING OR BECOMING OVERLY WARM, DO NOT BLOCK AIR RETURN GRILLE WITH PRODUCT.

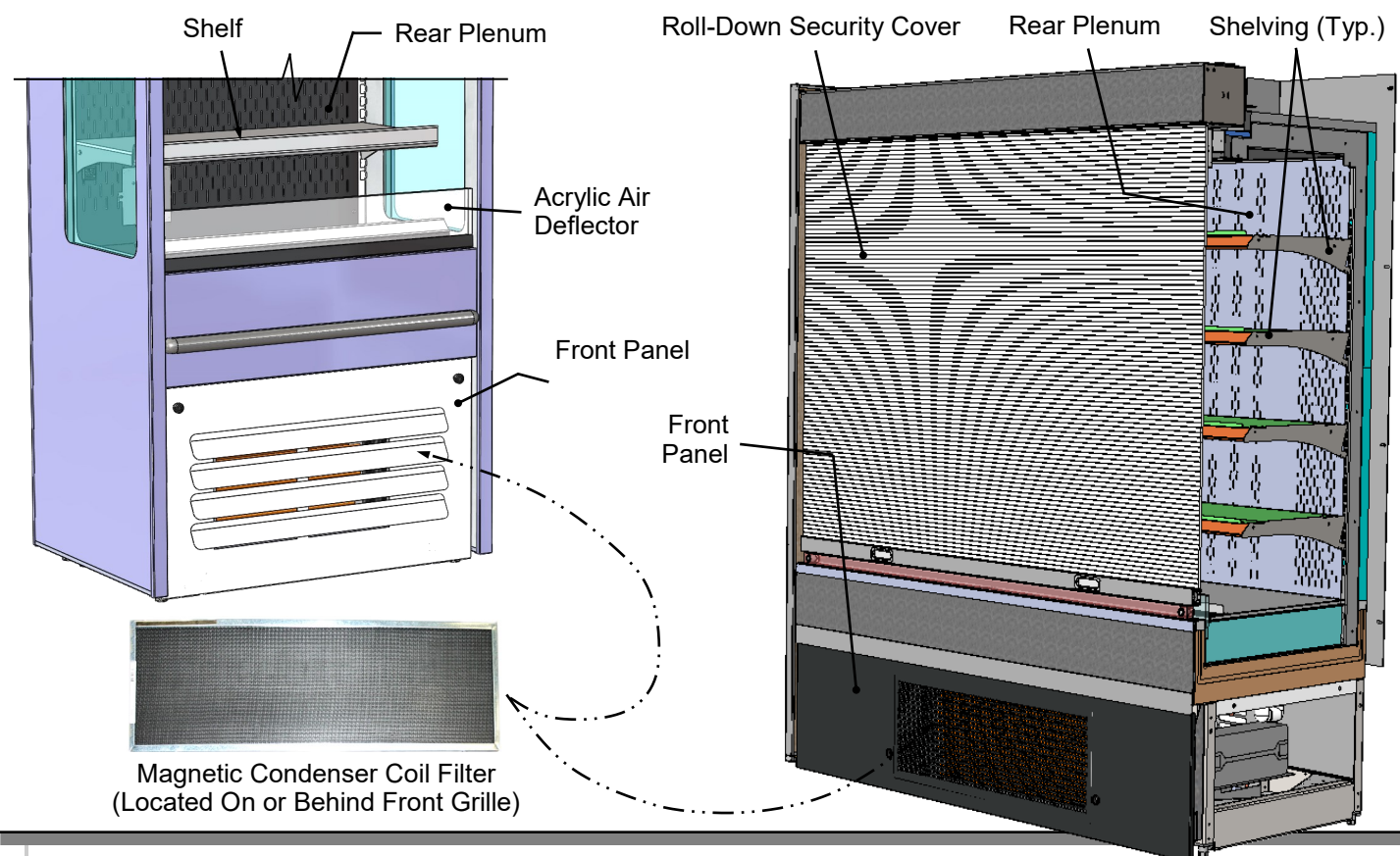
- IMPROPER PRODUCT PLACEMENT PREVENTS PROPER AIRFLOW CAUSING PRODUCT TO FREEZE OR BECOME OVERLY WARM.
- FOLLOW THESE PRODUCT PLACEMENT GUIDELINES TO MAINTAIN DESIRED PRODUCT TEMPERATURES.

NOTE: SEE VIEW AT RIGHT FOR PRODUCT TEMPERATURE RANGE AT FRONT vs. REAR OF CASE



CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL

FREQ.	INSTRUCTIONS
Daily	Sides/Front Panel: Clean with mild all-purpose cleaner and soft cloth.
Daily	Acrylic Air Deflectors: Clean with mild all-purpose cleaner and soft cloth. Never use ammonia-based cleaners (nor household or commercial window cleaner) on acrylic.
Daily	Shelves & Decks: Clean with mild all-purpose cleaner and soft cloth.
Daily	Glass Surfaces (Optional Rear Transparent Doors, Mirrors, etc.): <ul style="list-style-type: none"> Clean with household or commercial glass cleaner and soft cloth.
Weekly	Magnetic Condenser Coil Filter Option (Self-Contained Units Only): <ul style="list-style-type: none"> This optional filter helps prevent dust particles from entering condenser coil. Access by removing front panel from case. Clean magnetic condenser coil filter by following these steps: <ol style="list-style-type: none"> 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. 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. Dry with soft cloth or paper towel or allow to air dry. Replace.
Weekly	Rear Perforated Plenum (Either Stainless Steel or Acrylic) / Roll-Down Security Cover: <ul style="list-style-type: none"> Clean with mild all-purpose cleaner and soft cloth.
Quarterly	Under Case Cleaning: Quarterly (or whenever condenser package is removed from underside of case, vacuum (or broom) under case to remove all 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!

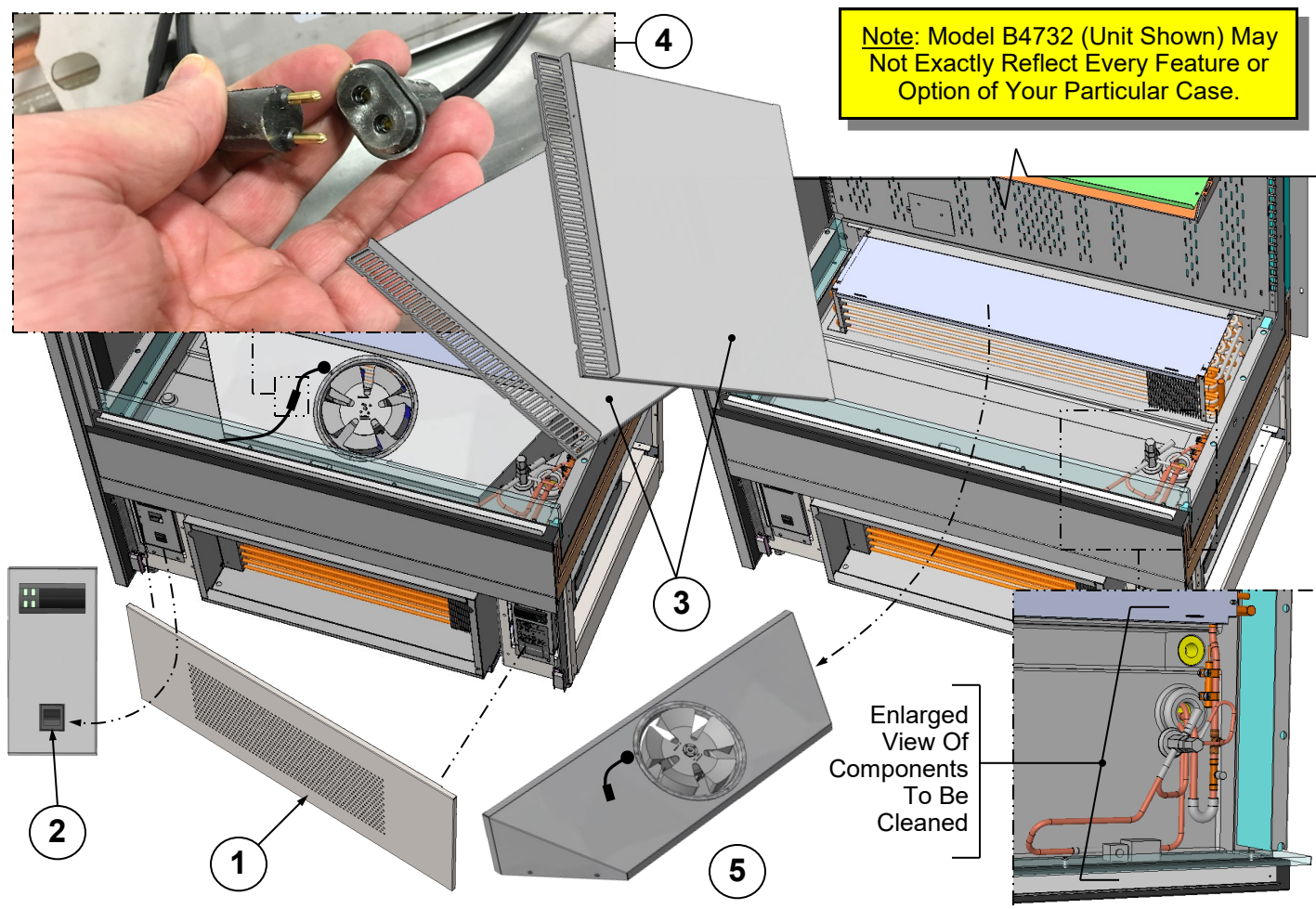
1. Remove front panel (to access controls). No screw removal is required. Place in safe place away from foot traffic.
2. Turn off main power switch (located near thermostat).
3. Remove both deck pans/sub-deck. Place in safe place away from foot traffic.
4. Remove electrical tape (if any) and disconnect 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!

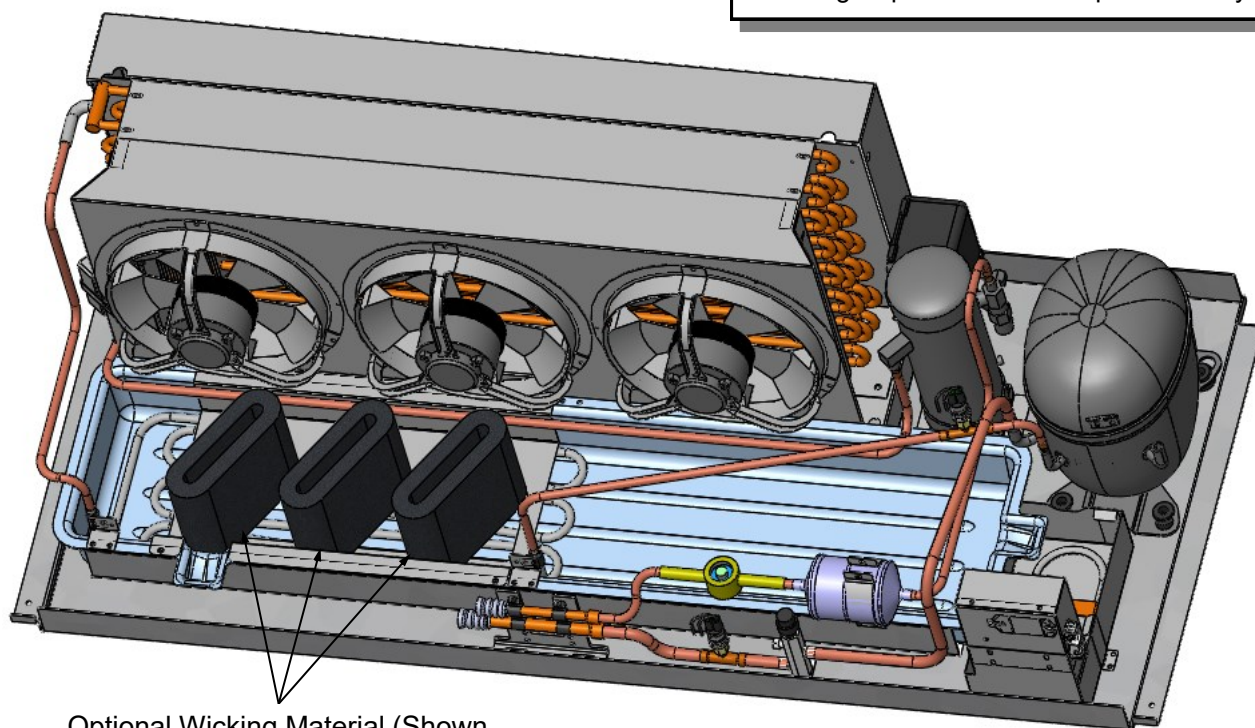
QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS

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: Random Hot Gas Loop Condensate System Shown Below. Standard Electric Coil Condensate Pans Have Slightly Different Layout. Your Model's Design Specifics and Components May Differ.



Optional Wicking Material (Shown For Illustrative Purposes Only)

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.

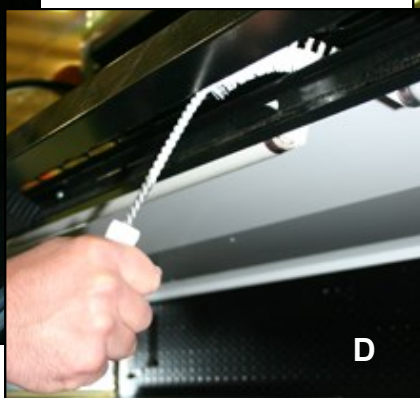
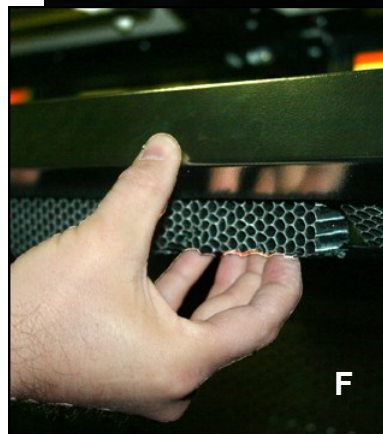
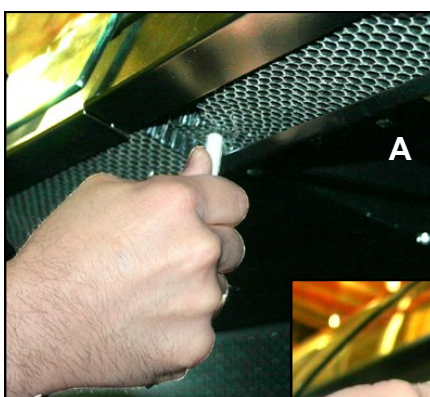
D. Use brush to reach in and, with outward sweeping motion, pull any crumbs or residue out of honeycomb area.

> 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).



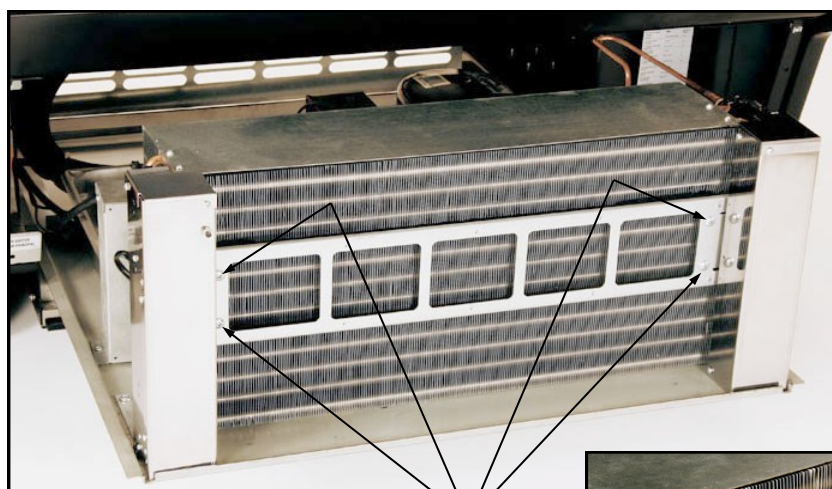
WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

ANNUAL PREVENTIVE MAINTENANCE INSTRUCTIONS

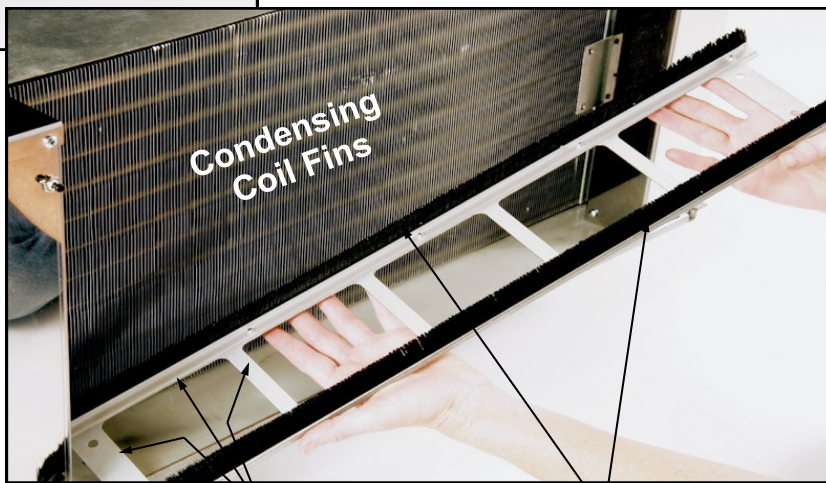
Optional Clean Sweep® Condensing Coil Cleaner:

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
Case Not Lining Up	See INSTALLATION section in this User Manual for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On The Floor	<p>Caution! Water on flooring can cause much damage! Until cause is determined (and repaired), follow these procedures:</p> <ul style="list-style-type: none"> • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.
	Check that the drain trap is free of debris.
	Check that the drain hose is correctly positioned over condensate pan (or floor drain, for remote units).
	<p>Check store conditions.</p> <ul style="list-style-type: none"> • To prevent condensation in NSF/ANSI Type I environments, maximum conditions are to be 55% relative humidity / 75° Fahrenheit. • For NSF/ANSI Type II environments, maximum conditions are to be 55% relative humidity / 80° Fahrenheit. • 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.
	Check condensate pan float for proper operation (electric condensate trays).
	Check that condensate pan is properly plugged in or connected.
	<p>Caution! Condensate pan may be malfunctioning. If so, water will overflow pan and seep onto flooring causing damage! Until condensate pan is functioning (or is replaced), follow these procedures:</p> <ul style="list-style-type: none"> • Use wet vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.
	<p>Caution! Disruption of power can cause water to overflow pan and seep onto flooring causing damage! Check that power to case is constant. Until power is restored, follow these procedures:</p> <ul style="list-style-type: none"> • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drainage. Swap out regularly until drainage of case is complete (or until power is restored). • When power to case is restored, condensate pan should function properly and water will no longer overflow onto flooring.
	<p>Caution! Wicking material (if any) on your particular hot gas loop condensate tray may be dirty or worn and need replacement.</p> <ul style="list-style-type: none"> • Slide condensate package out from under unit. • After refrigeration system has been carefully slid out, replace wicking material with new. If wicking material is not available, contact Structural Concepts. See toll-free number at last page of this operating manual. • <u>Note:</u> See PREVENTIVE MAINTENANCE - TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY - PAGE 2 of 4 section in this User Manual for wicking material illustration.

CONDITION	TROUBLESHOOTING
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motors. Check motor shaft for bearing wear.
	Check that fan motors are securely mounted in brackets.
	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.
Fans Are Not Working	Check that the MAIN power switch is on.
	Check that fans are plugged in at the fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shrouds
	Check that power is going to fans
	Check that fan wiring is connected on terminal blocks.
Digital Control Display Is Blank	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
System Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.

CONDITION	TROUBLESHOOTING
Case Lights Are Not Working	Check that light switch is in the <i>on</i> position.
	Check that ALL of the light cords and plugs are properly connected. See LED LIGHT FIXTURES section in this manual for specifics.
	Service Technicians Only: Check voltage at LED drivers. If voltage is entering but not exiting, LED driver may be faulty.
Control Display Is Flashing	See your case's serial label for your model's specified settings. See SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE for label location, etc.
Case Is Not Holding Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Unit needs product to be pre-chilled.
	Temperature changes during defrost mode but will return to normal. Fourth LED will indicate defrost cycle in progress.
	Check that case is not in sun or near a heat or air-conditioning vent. See OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS section in manual for adverse conditions/spacing issue parameters.
	If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature. See OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS section in manual for adverse conditions/spacing issue parameters.
	Check that condenser coil air filter (attached to rear grille) has been cleaned. See GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL) section in operating manual for instructions.
	Check that condenser coil has been cleaned.
	Check air return grilles for obstructions.
	Check sight glass for flashing and/or low charge.
	Check Set Point Temperature; it may be adjusted too high.
Condensing Unit Is Not Operating	Check that the power is turned on.
	Determine if temperature controller settings are properly set. See your case's serial label for your model's specified settings. See SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE section in manual for label location, etc.

TROUBLESHOOTING - CONDENSING SYSTEM (BY TRAINED SERVICE PROVIDERS ONLY)

CONDITION	TROUBLESHOOTING
Head Pressure Too High	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 OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS section in this manual.
Head Pressure Too Low	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 - EVAPORATOR SYSTEM (BY TRAINED SERVICE PROVIDERS ONLY)

CONDITION	TROUBLESHOOTING
Low Suction Pressure	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 that superheat is between 6 °F to 8 °F.
	Check that there is no air recirculation around evaporator coil.
	Check that evaporator coil is not iced up.
High Suction Pressure	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"> a. Poor thermal contact. b. Warm location.


Serial Label Location & Information Listed / Technical Information & Service


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

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



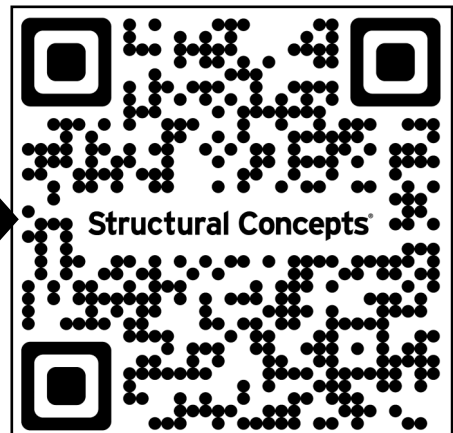
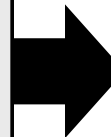
Carel® iJF Platform



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.

