READ AND SAVE THESE INSTRUCTIONS

Reveal®

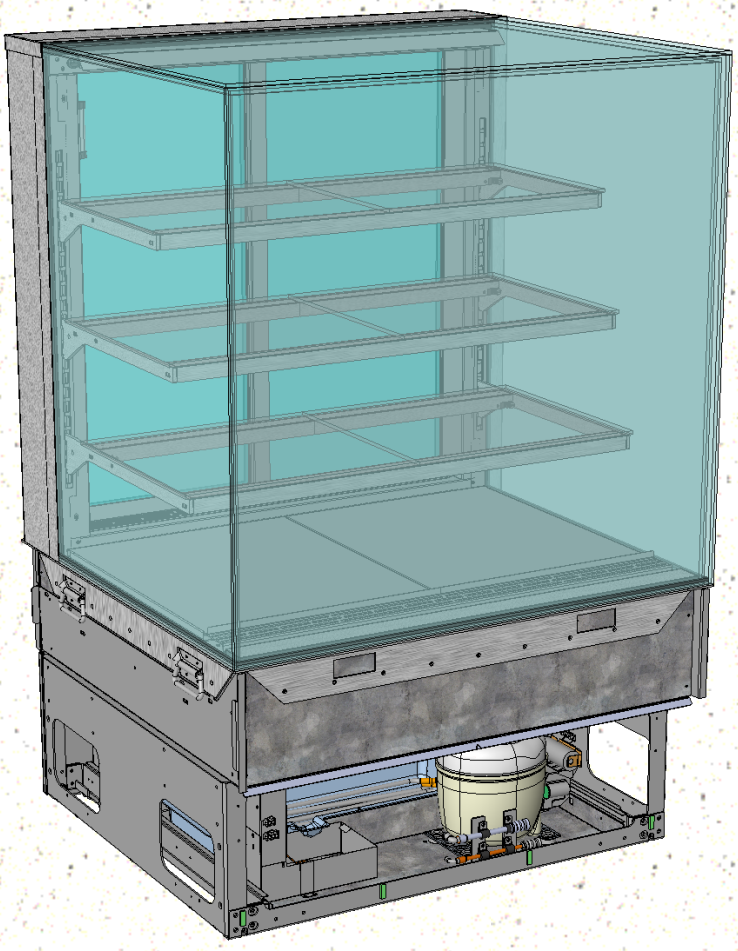
INSTALLATION & OPERATING MANUAL

SCC P/N 20-80692

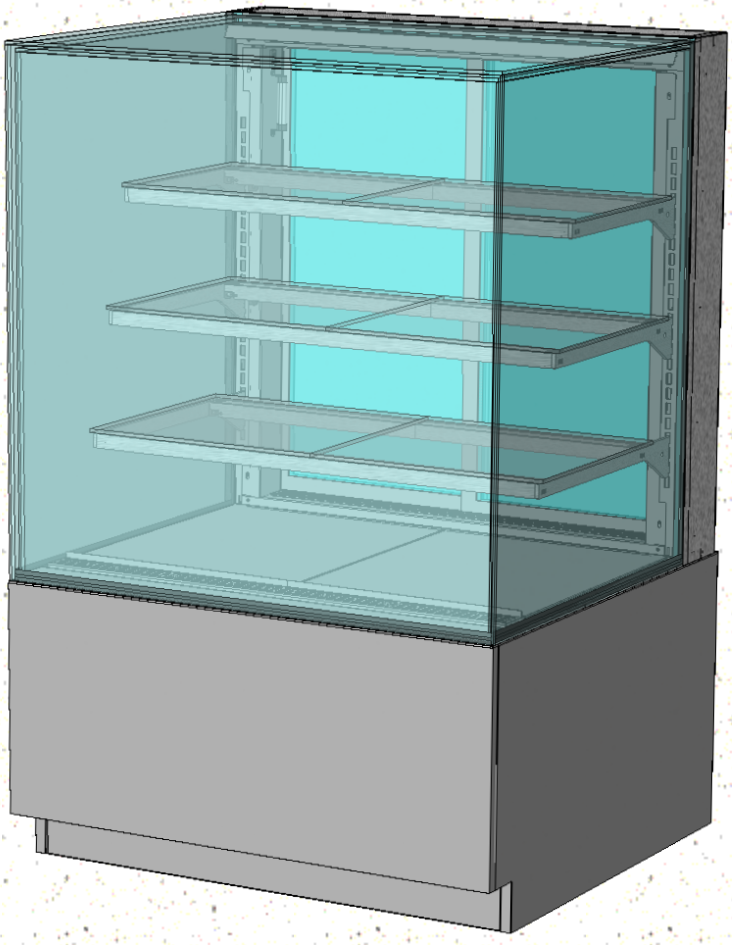
REVEAL® FREE STANDING SERVICE REFRIGERATED MERCHANDISERS

- **> REAR SLIDING DOORS**
- **> SELF-CONTAINED OR REMOTE UNITS**
- ***> CAUTION! DO NOT PUSH OR PULL ON UPPER GLASS ENCLOSURE!***
- ***> ONLY USE HANDLES (AT EACH END OF CASE) TO PUSH OR PULL CASE INTO POSITION!***
- **> SEE PAGES 10-11 FOR PANEL, GRILLE & TOE-KICK ATTACHMENT INSTRUCTIONS**
- ***> SEE PAGES 12-15 FOR CASE ADJOINMENT INSTRUCTIONS.***

Models Are Shipped WITHOUT Panels and Cladding Attached. See Page 10 and 11 For Component Attachment Instructions.



Model NR3655RSV Free Standing Unit Shown Before Front/Side Cladding and Toe-Kick Have Been Attached



Model NR3655RSV Free Standing Unit Shown After Front/Side Cladding and

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

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REVEAL® FREE STANDING REFRIGERATED SERVICE MODEL APPLICABILITY & DIMENSIONS

Model	Upper Display Case Height	Overall Case Height	Case Depth x Width
NR3633RSV	13 5/8”	32 7/8”	33”D* x 35 3/4”W
NR3640RSV	20 3/8”	39 5/8”	33”D* x 35 3/4”W
NR3647RSV	27 7/8”	47 1/8”	33”D* x 35 3/4”W
NR3655RSV	35 1/4”	54 5/8”	33”D* x 35 3/4”W
NR4833RSV	13 5/8”	32 7/8	33”D* x 47 3/4”W
NR4840RSV	20 3/8”	39 5/8”	33”D* x 47 3/4”W
NR4847RSV	27 7/8”	47 1/8”	33”D* x 47 3/4”W
NR4855RSV	35 1/4”	54 5/8”	33”D* x 47 3/4”W
NR6033RSV	13 5/8”	32 7/8”	33”D* x 59 3/4”W
NR6040RSV	20 3/8”	39 5/8”	33”D* x 59 3/4”W
NR6047RSV	27 7/8”	47 1/8”	33”D* x 59 3/4”W
NR6055RSV	35 1/4”	54 5/8”	33”D* x 59 3/4”W
NR7233RSV	13 5/8”	32 7/8”	33”D* x 71 3/4”W
NR7240RSV	20 3/8”	39 5/8”	33”D* x 71 3/4”W
NR7247RSV	27 7/8”	47 1/8”	33”D* x 71 3/4”W
NR7255RSV	35 1/4”	54 5/8”	33”D* x 71 3/4”W

OVERVIEW

- These Structural Concepts Reveal® cases are designed to merchandise packaged products at 40°F (4 °C) or less product temperatures.
- Cases should be installed and operated according to this operating manual's instructions to insure proper performance. Improper use will void warranty.

TYPE I vs. TYPE II ENVIRONMENTAL CONDITIONS

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

- Type I display refrigerators are intended for use in an area where environmental conditions are controlled and maintained so that the ambient temperature does not exceed 75 °F (24 °C) and 55% maximum humidity.
- Type II display refrigerators are intended for use in an area where environmental conditions are controlled and maintained so that the ambient temperature does not exceed 80 °F (27 °C) and 55% maximum humidity.
- If unsure if your unit is Type I or II, see tag next to serial label. See ***SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE*** section in this manual for sample serial labels.

COMPLIANCE

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

WARNINGS

- Please read the important warnings in this document carefully as they can prevent injury or death.

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

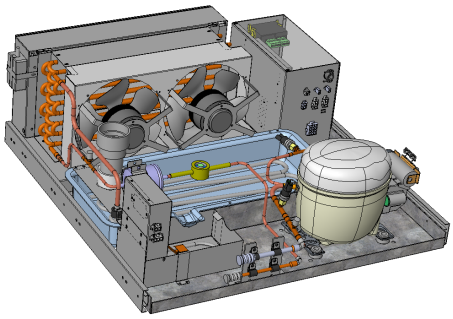
Risk of electric shock. Disconnect power before servicing unit.
CAUTION! More than one source of electrical supply is employed with units that have separate circuits.
Disconnect ALL ELECTRICAL SOURCES before servicing.

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.

PRECAUTIONS

- Following are important precautions to prevent damage to unit or merchandise. 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.

CAUTION! LAMP REPLACEMENT GUIDELINES

LED lamps reflect specific size, shape and overall design. Any replacements must meet factory specifications.

CAUTION! GFCI BREAKER USE REQUIREMENT

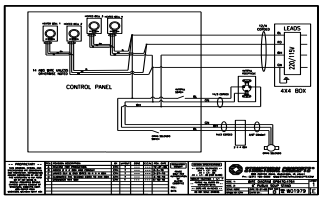
If N.E.C. (National Electric Code) or your local code requires GFCI (Ground Fault Circuit Interrupter) protection, you MUST use a GFCI breaker in lieu of a GFCI receptacle.

CAUTION! ADVERSE CONDITIONS / SPACING ISSUES

- **Performance issues caused by adverse conditions are NOT covered by warranty.**
- **End panels must be tightly joined or kept at least 6-inches away from any structure to prevent condensation.**
- **Unit must be kept at least 15-feet from exterior doors, overhead HVAC vents or any air curtain disruption to maintain proper temperatures.**
- **Do not expose to direct sunlight or heat source (ovens, fryers, etc.).**

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

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



WIRING DIAGRAM FORMAT & LOCATION

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

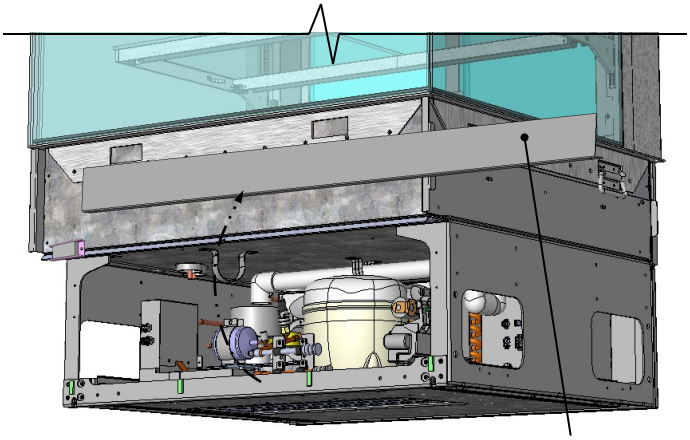
CAUTION!

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

INSTALLATION: TOE-KICK & AIR INTAKE GRILLE REMOVAL / DISCONNECTING CASE FROM PALLET

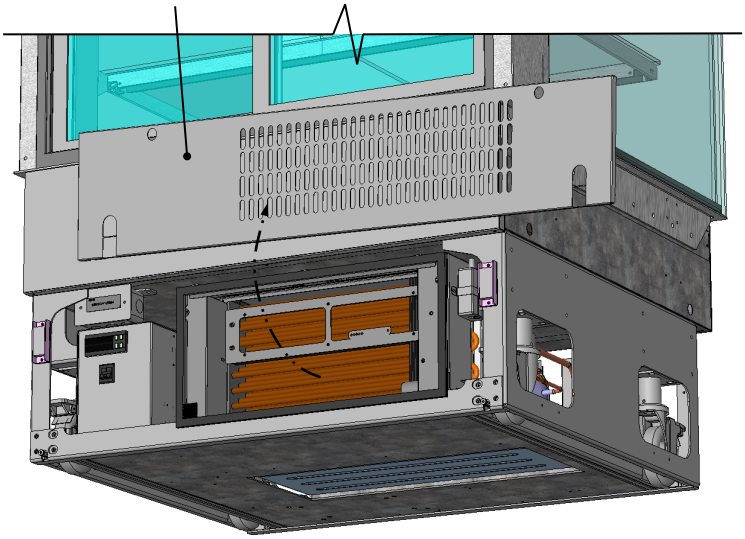
1. Remove Front Toe-Kick From Case

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



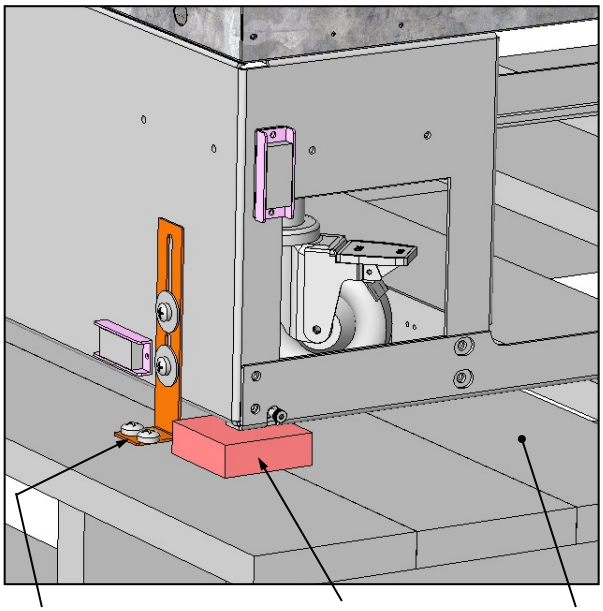
2. Remove Air Intake Grille From Case

- To prevent damage to case, if air intake grille is on the case, lift it ***UP and OFF***.
- Air intake grille is held in place by magnets. No screw removal is required.
- Place air intake grille in secure location while removing case from pallet.



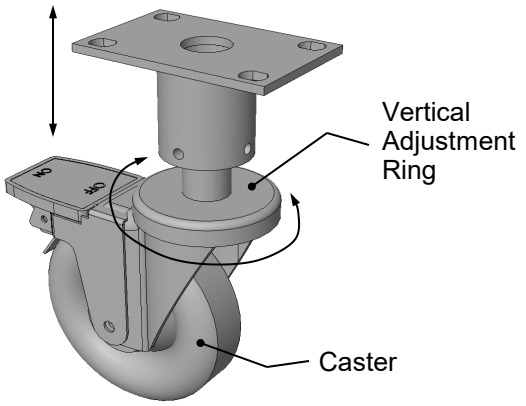
3. Disconnect Case From Pallet

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



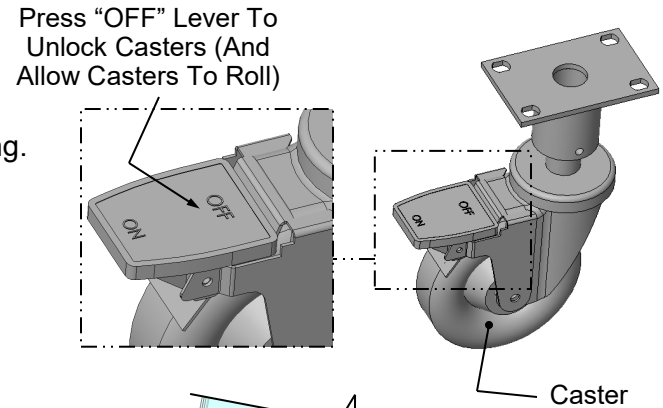
4. Caster Height: Raising and Lowering

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



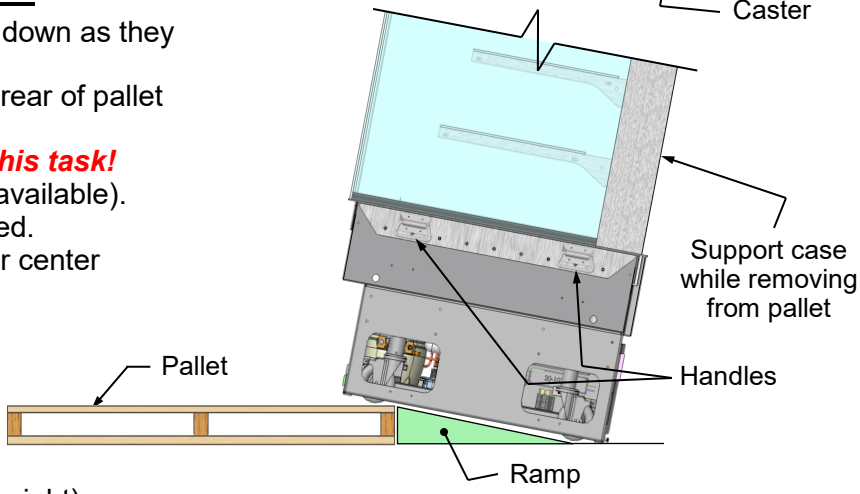
5. Caster Rolling Capability: Unlocking

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



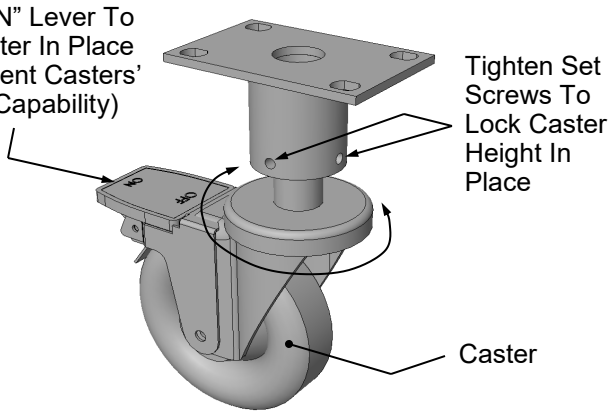
6. Carefully Remove Case From Pallet

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



7. Casters: Locking

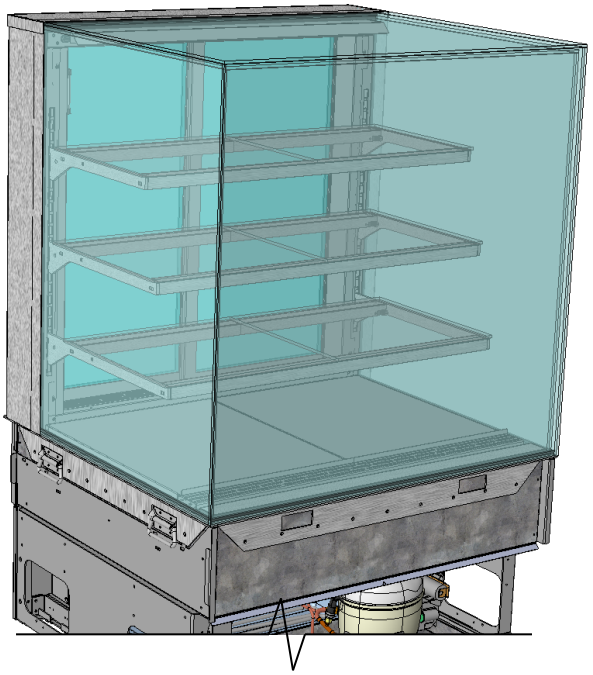
- After case is at desired position (and height), use level to check that case is level and plumb.
- Readjust height as needed (as instructed in step #4).
- Locking Height: After proper height (and positioning) of case is attained, tighten the two (2) set screws to lock each caster's height in place.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

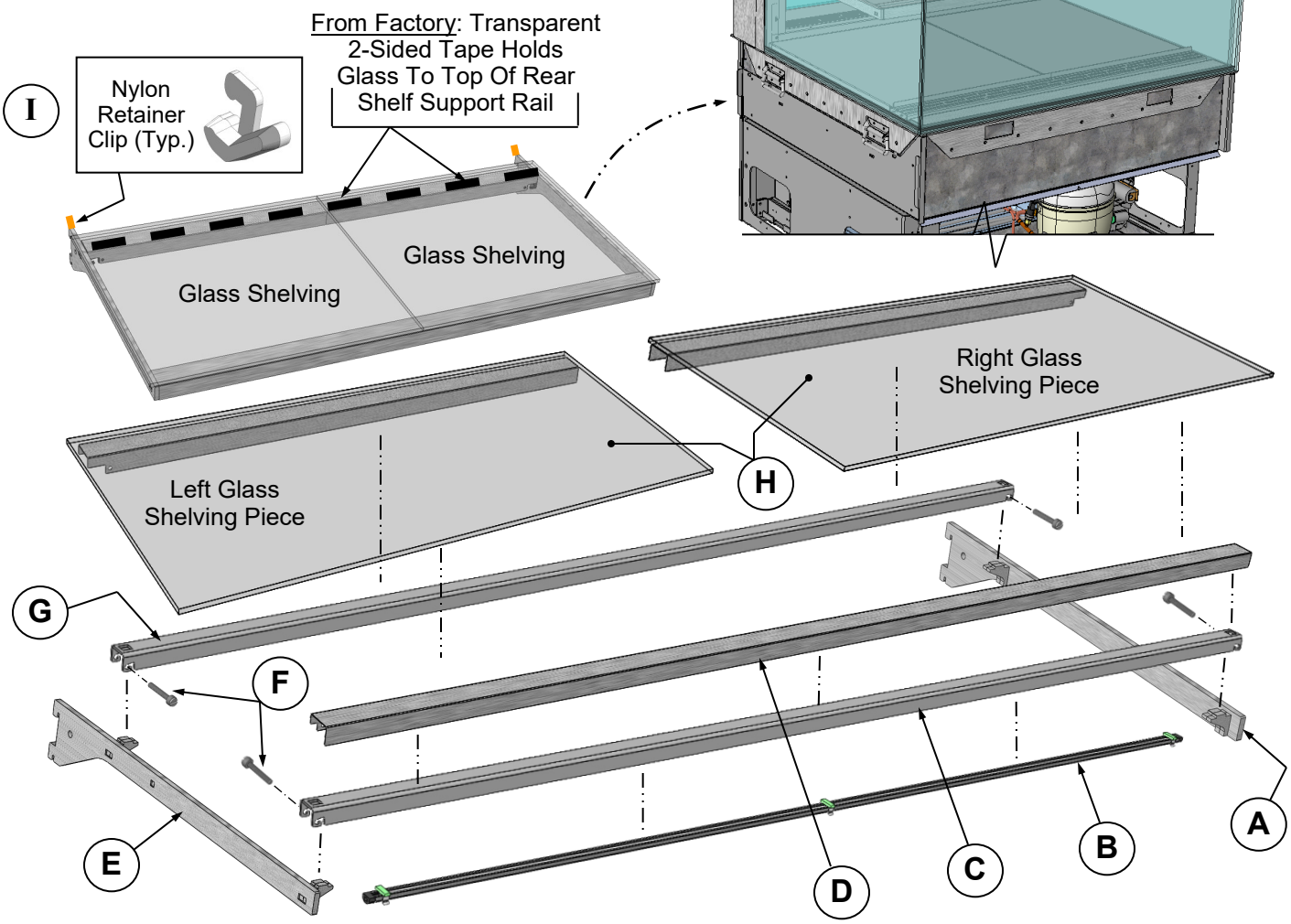


8. Shelving Assembly Components

- Check that glass shelving is in proper position before placing product in case
- Shelves may be adjusted vertically or entirely removed from merchandiser.
- Metal shelving brackets ARE NOT able to be angled. They are at a fixed 90° position.
- There are 12 components comprising each shelf assembly:

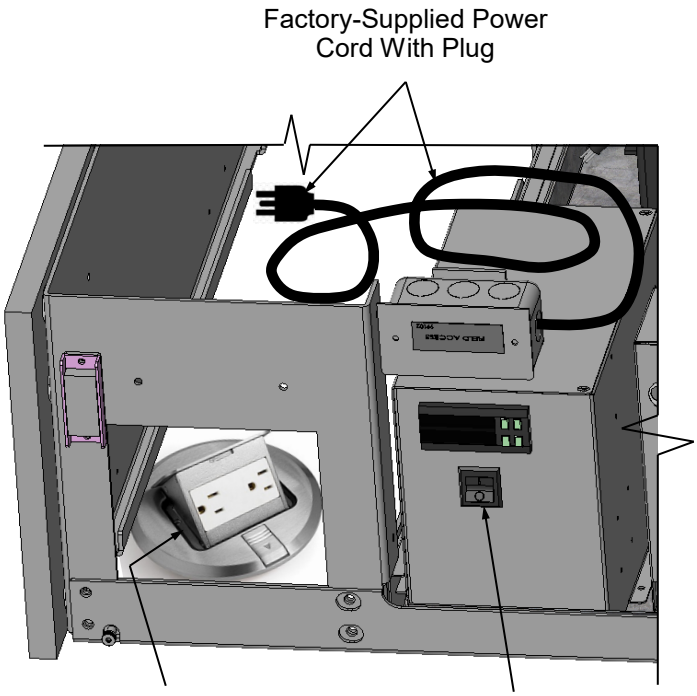
A. Right bracket (with hooks to attach to slots in upright)
B. LED light with magnets
C. Front shelf support rail (LED light attaches to its inner cavity via magnets)
D. Cover (rests atop front shelf support rail)
E. Left bracket (hooks to attach to slots in upright)
F. Nylon thumb screws (4 per shelf) secures shelving during shipment. Note: Remove (using pliers, if necessary) and discard thumbscrews after case is installed so shelves can be disassembled (to clean or service).
G. Rear shelf support rail
H. Left and right glass shelf/cover assemblies (glass is affixed to covers with 2-sided tape from factory). Caution! Glass pieces ARE NOT IDENTICAL! Notches on underside metal covers determine placement in case.
I. Nylon retainer clips (2 per shelf) secure brackets during shipment. Note: To adjust or remove shelves, you must remove retainers; pliers may be required to accomplish this task.





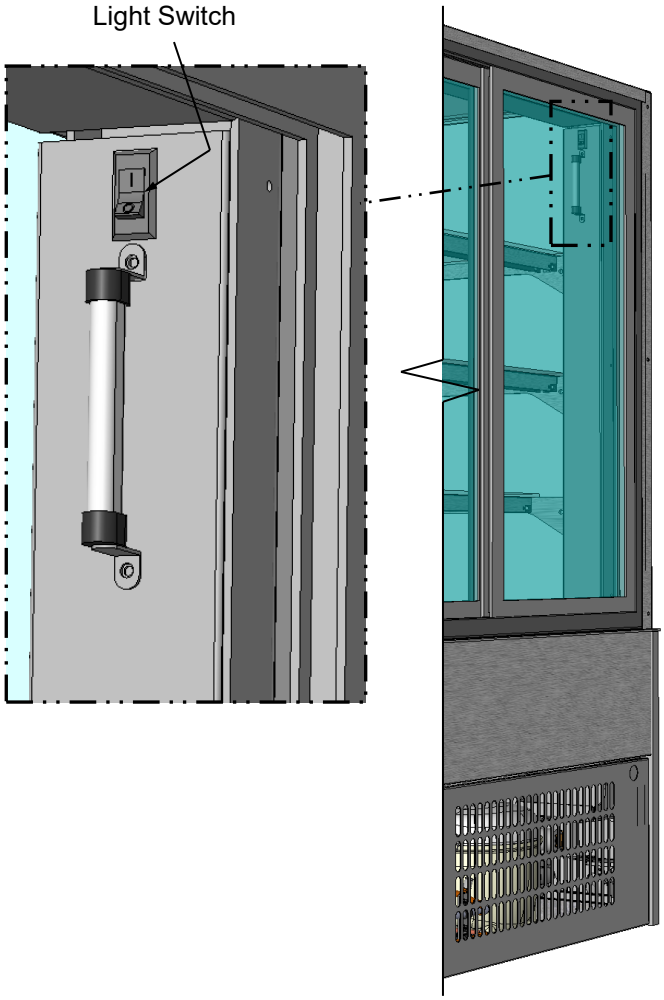
9. Plug Case In / Turn On Main Power Switch

- Power cord with plug is factory-supplied.
- Plug case into customer-supplied electrical outlet.
- Note 1: Partially-disassembled view at right is shown with casters removed for illustrative purposes only. View/location of floor receptacle is for illustrative purposes only.
- Note 2: Due to space constraints, it may be necessary to pull out condenser package to maneuver power cord plug around components and into receptacle.
- Turn main power switch on.
- Check that case is energized. Lift deck pans to confirm that evaporator fans are rotating).



10. Turn On LED Light Switch

- LED light switch is accessible at case rear upright (after opening rear sliding door).
- See illustration below.



11. Remove Shipping Brace

- Shipping brace keeps condenser package secure during shipment and while positioning case.
- After case has been moved into position, remove shipping brace at air intake side of condenser package only (opposite end of that shown below).
- *Note: Shipping Brace Is ONLY To Be Removed From Air Intake Side of Condenser Package!*

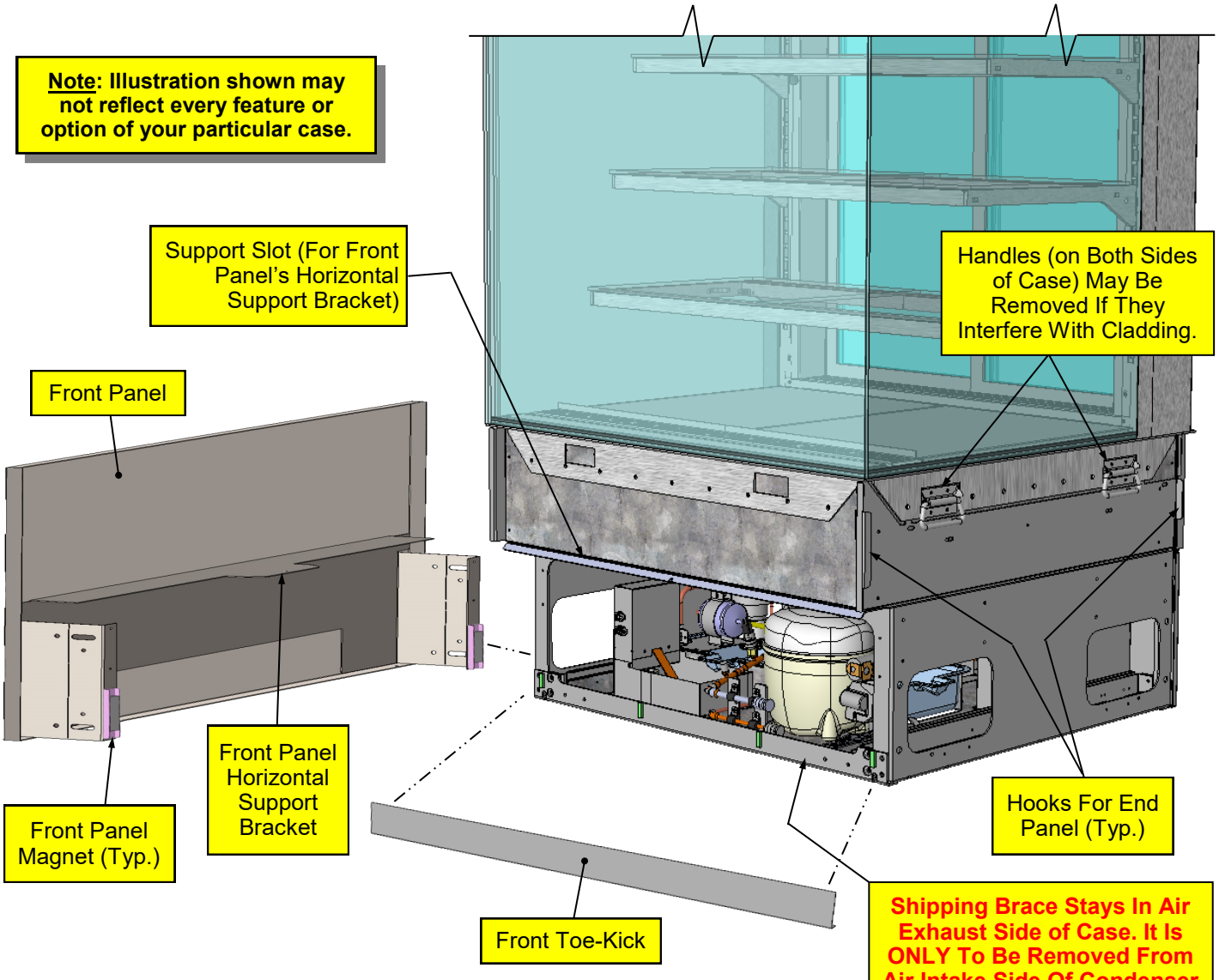
12. Attaching Front Panel Components

- Carefully remove components from packaging.
- Note: All front panel components may be attached to case via magnets (WITHOUT screw attachments).
- Attach front toe-kick to case (via lower magnets).
- Slide front panel horizontal support bracket into case's support slot (line up arrows).
- Then, slide front panel into case until it attaches to case via lower magnets.
- See illustration below.

13. Handles On Sides of Case

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

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



14. Attaching Side Panels

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

15. Attaching Rear Upper Panel

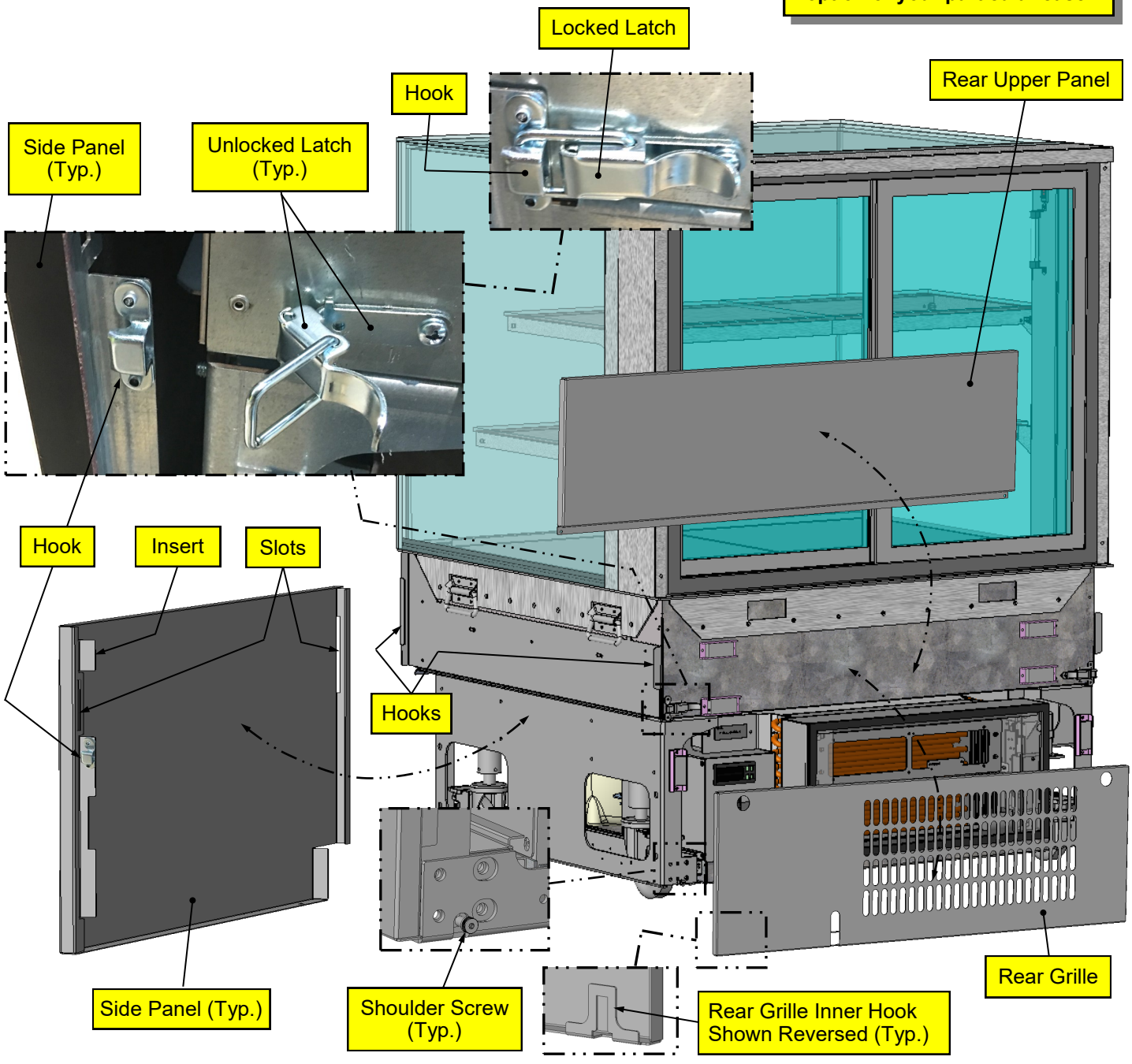
- Place rear upper panel onto care rear.
- Four (4) magnets will hold it firmly in place.
- See illustration below

16. Attaching Rear Grille

- Use finger holes to place rear grille's inner hooks onto case rear's lower shoulder screws.
- Snap onto case's two (2) rear vertical magnets.

>> Note: Components may be removed in reverse order they were shown being attached on this sheet.

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



Case Adjoinment Overview

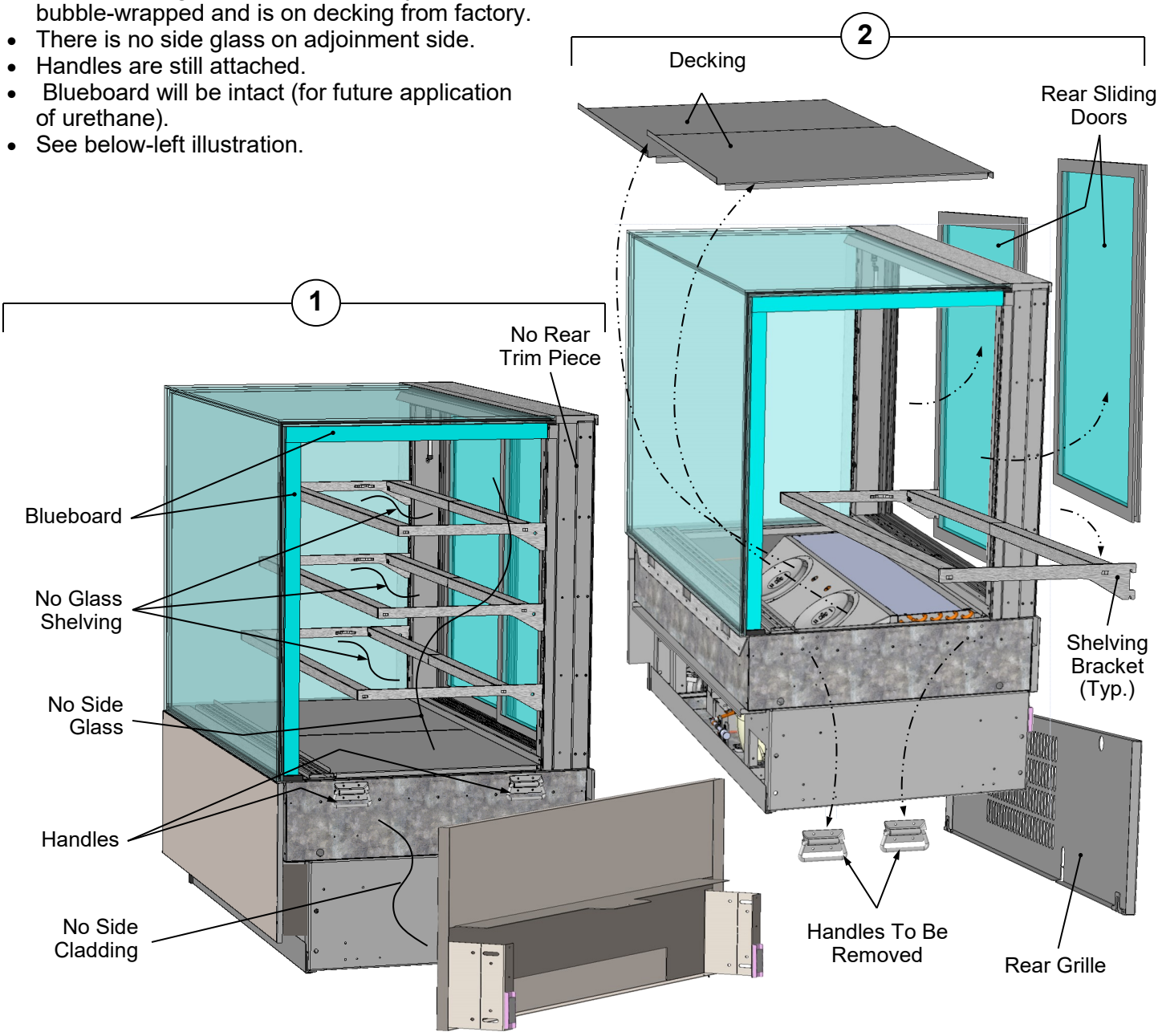
>> Carefully follow these step-by-step case adjoinment instructions.
>> Warranty is void if unapproved urethane//sealant is used in case adjoinment process.
>> Move cases into position before beginning this adjoinment process.

1. Case Arrival From Factory

- Adjoined cases will NOT have side cladding on adjoinment side.
- There is no rear trim piece on adjoinment side.
- Glass shelving is shipped separately; it is bubble-wrapped and is on decking from factory.
- There is no side glass on adjoinment side.
- Handles are still attached.
- Blueboard will be intact (for future application of urethane).
- See below-left illustration.

2. Case Preparation Prior To Adjoinment

- Remove front panel.
- Remove rear grille.
- Remove rear sliding doors.
- Remove decking.
- Remove handles.
- Remove ALL shelving brackets.
  Note: Each shelving bracket has a different depth and must be returned to case accordingly!
- Store components in safe and secure location away from foot traffic.
- See below-right illustration.
- *>> Adjoinment instructions continue on next page.*



3. Industrial Grade Urethane Application

- Lay a generous, CONTINUOUS bead of SCC-provided urethane adhesive (as identified with — — — line pattern shown below).
- Lay a generous bead of industrial grade urethane adhesive at center of uprights (in non-visible areas).
- This urethane prevents refrigerated air from escaping between cases (causing condensation and reducing refrigeration efficiency) as well as preventing ants or other insects from entering case.
- See illustration below.

4. Case Adjoinment w/SCC-Provided Screws

- Note: Cases in this adjoinment have a wide range of surfaces (metal, foam board, blueboard, etc.).
- A variety of SCC-provided wood screws, bolts, washers and nuts are provided in adjoinment kit.
- Due to wide range of hole locations, you must access adjoinment points through rear door, rear grille, decking, front panel and rear grille areas.
- Firmly tighten all screws!

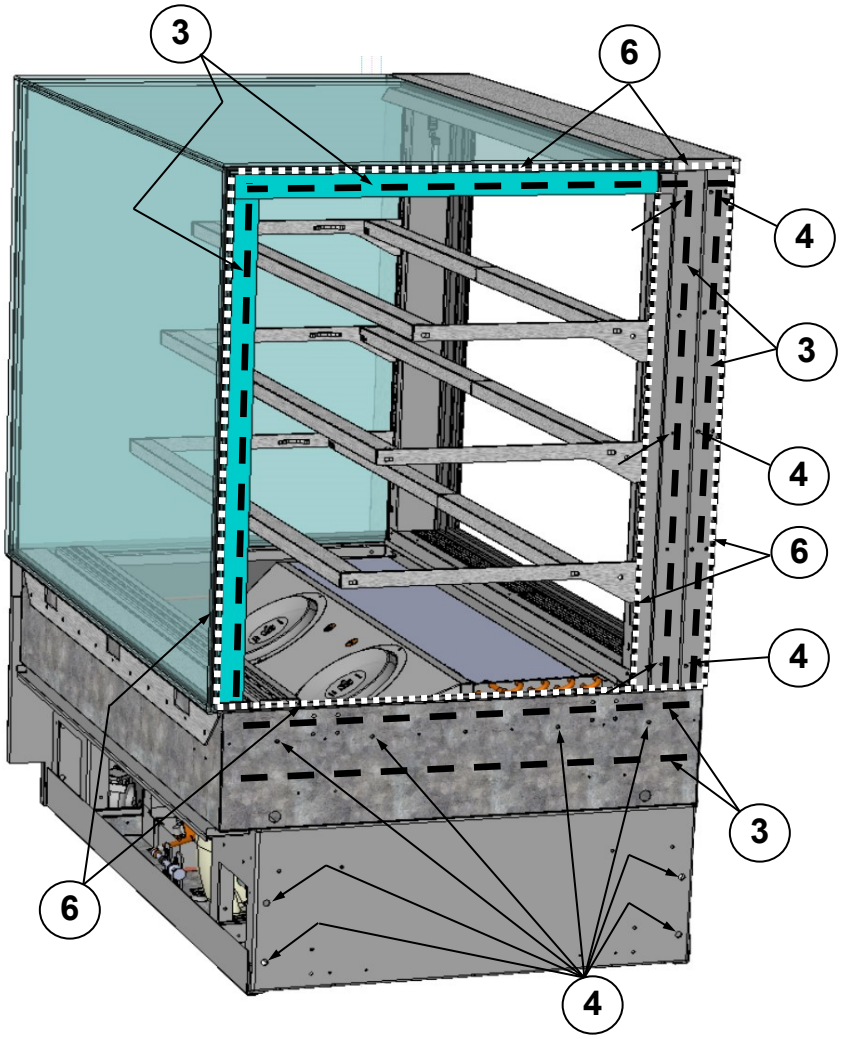
5. Inner Raceway Adjoinment

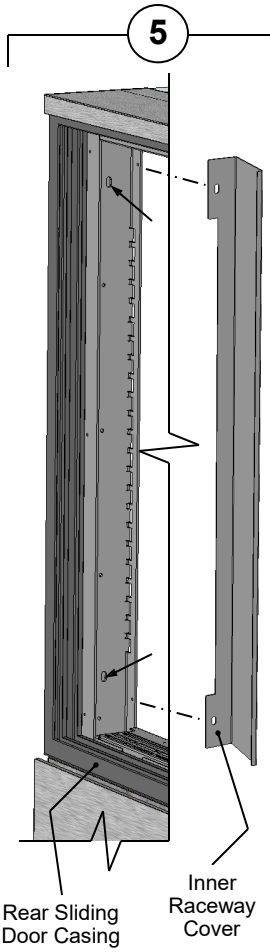
- Inner raceway cover must be removed (by removing 2 screws).
- Use 1/4-20 bolts, nuts and washers to attach inner raceway upright to adjoining case.
- Then, reattach inner raceway cover.

6. Silicone Sealant Application

- After case is adjoined, apply a generous, CONTINUOUS bead of silicone sealant (as identified with ▪▪▪▪▪▪▪▪ line pattern shown below) at both inner and outer adjoinment seams.
- When properly applied, this sealant will prevent water from seeping between cases (into the case or to the floor) as well as prevent crumbs or other residue from entering between case seams.

>> Adjoinment instructions continue on next page.





Industrial Grade Urethane Adhesive (For Refrigeration Bead Applications)

Silver, Black or Clear Silicone Sealant Conforming To NSF/ANSI 51 Specifications (For Sanitation Bead Applications)

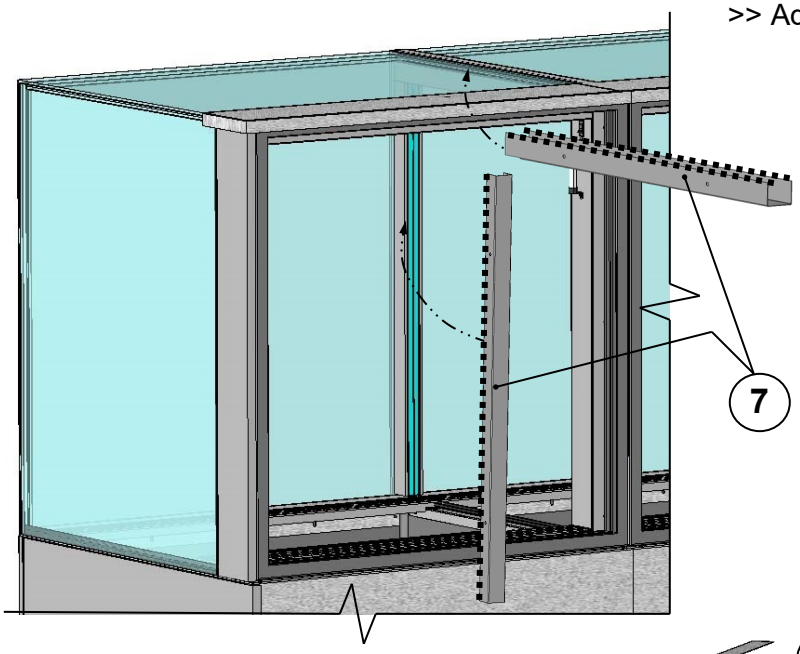
7. C-Bracket Attachment

- After cases are attached, place vertical and horizontal C-brackets at inner case.
- Use SCC-provided screws to attach to Celtec/ blueboard. Two holes at each side of both C-brackets are provided for screws.
- After C-brackets are adjoined, apply a generous, CONTINUOUS bead of silicone sealant (as identified with ▪▪▪▪▪▪▪▪▪ line pattern shown).
- Note: Illustration below shows silicone bead applied at required spot on C-brackets PRIOR to attachment to case for illustrative purposes only.

8. Middle Trim Attachment

- After placing generous, CONTINUOUS bead of silicone sealant (as identified with ▪▪▪▪▪▪▪▪▪ line pattern shown below) middle trim may be attached to case.
- Apply a generous bead of silicone at underside of trim piece and attach at seam.

>> Adjoinment instructions continue on next page.



Silver, Black or Clear Silicone Sealant Conforming To NSF/ANSI 51 Specifications (For Sanitation Bead Applications)

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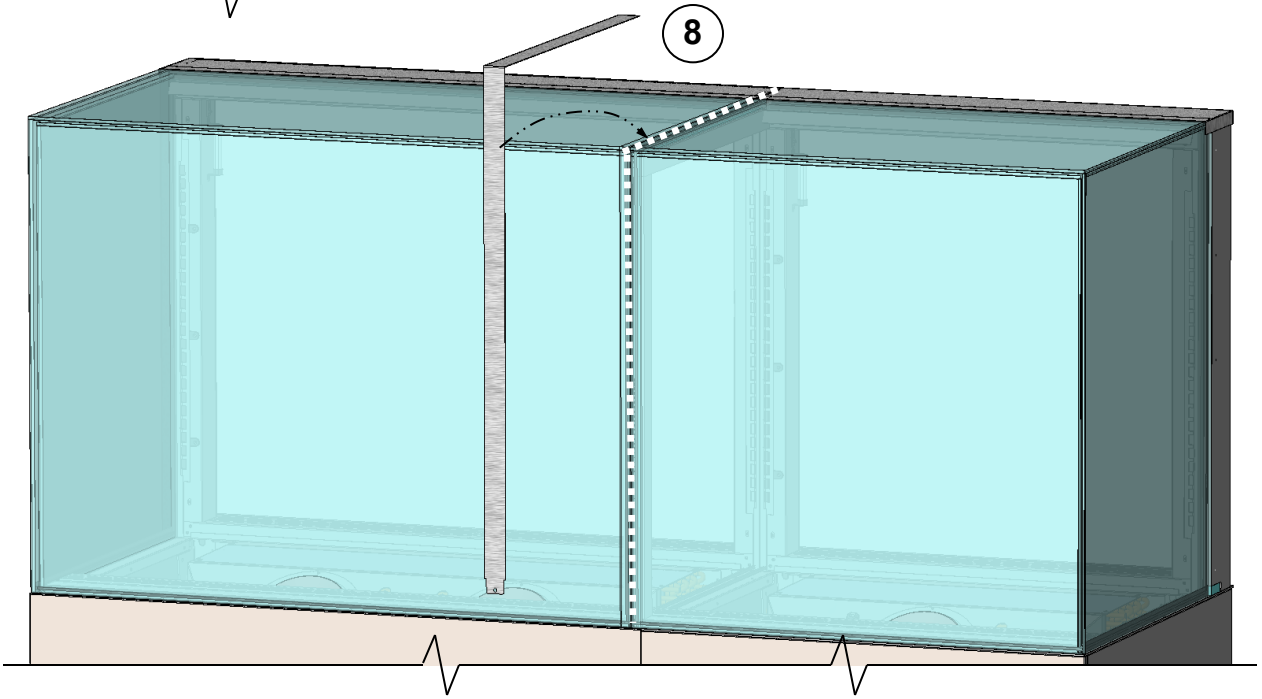
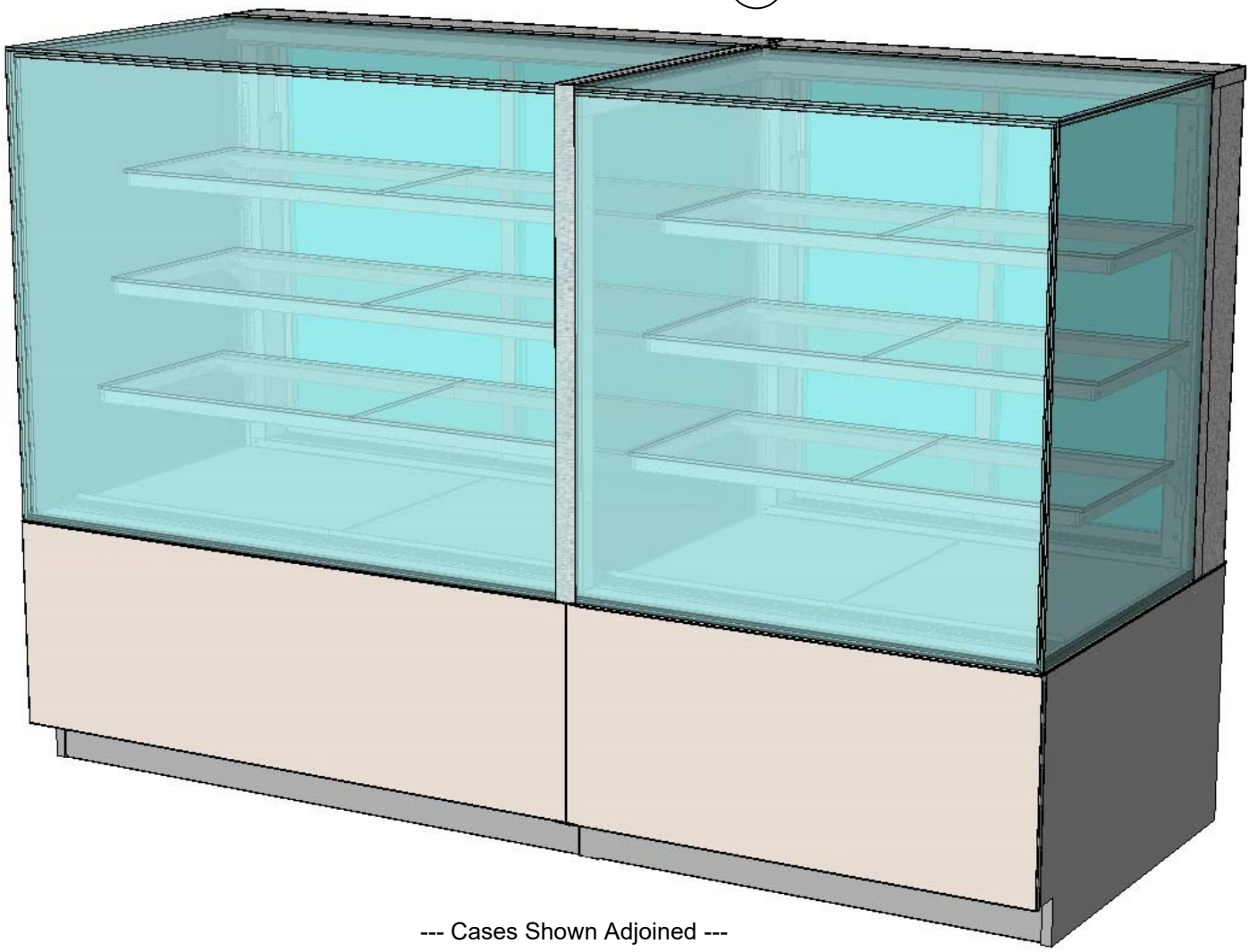


9. Case Adjoinment Complete / Component Replacement

- After case adjoinment is complete, replace decking, shelving, front panel, rear grille, and rear sliding doors in reverse order they were removed.
- Glass may now be removed from protective bubble-wrap and placed on shelving brackets.
- Discard handles that had been removed.
- See illustration below.

9

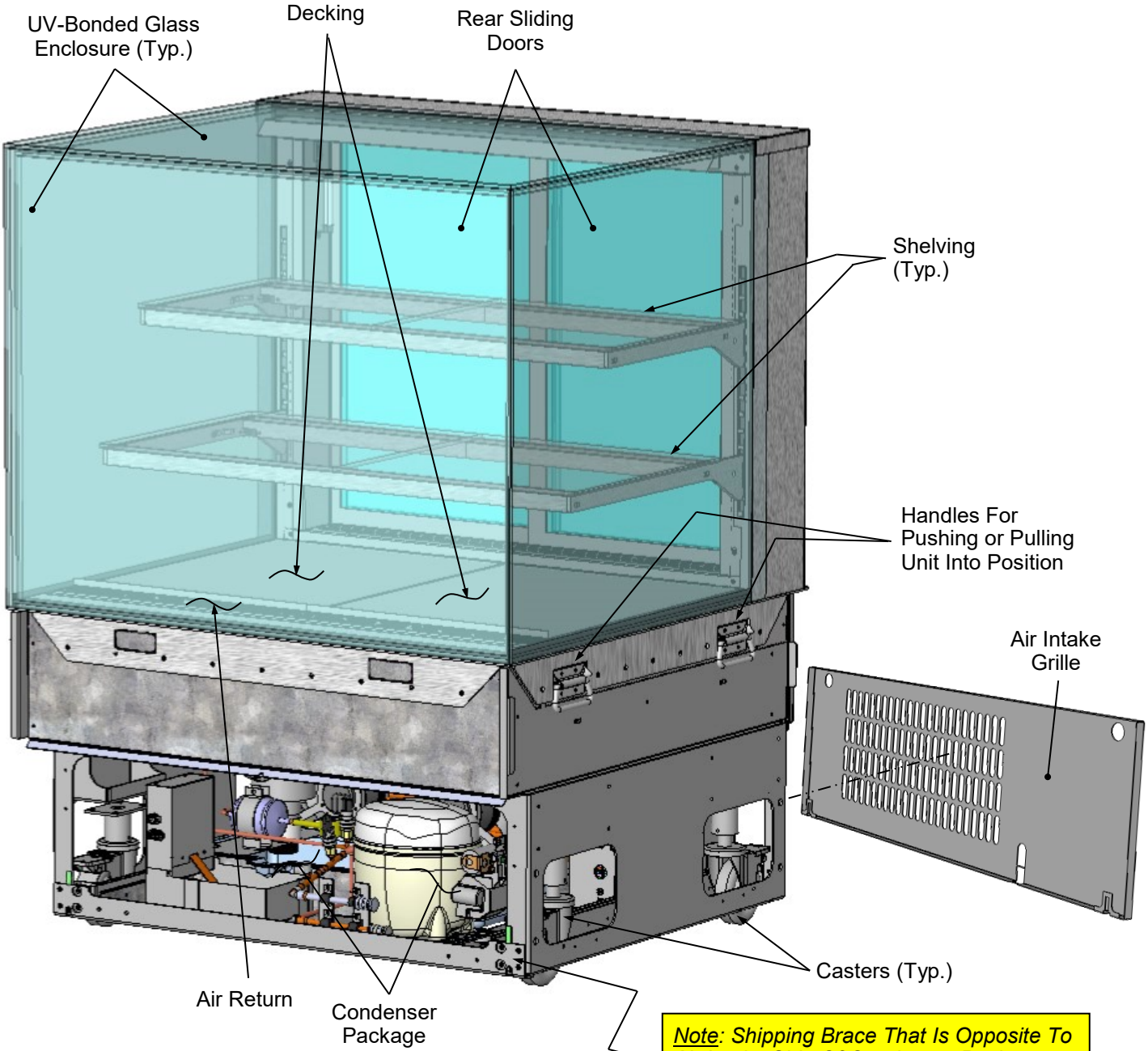


--- Cases Shown Adjoined ---

1. Front View Of Free Standing, Service Merchandisers

- Model NE3635RSV is illustrated below.
- Air intake grille, side cladding, front base kick & front panel have been removed for illustrative purposes only.
- See next page for rear view.

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

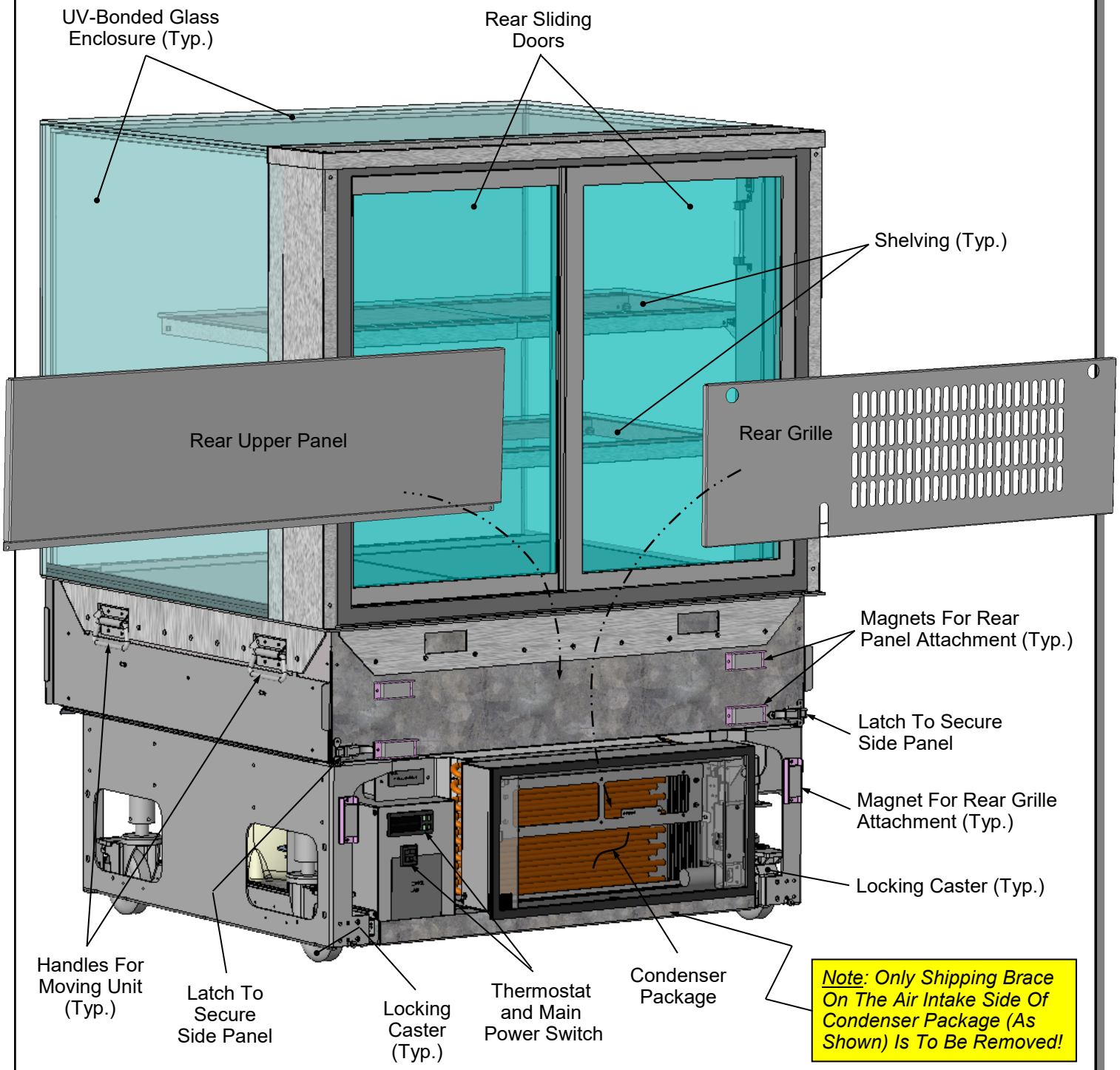


Note: Shipping Brace That Is Opposite To Air Intake Side Of Condenser Package (Shown) Is Not To Be Removed.

2. Rear View Of Free Standing, Service Merchandisers

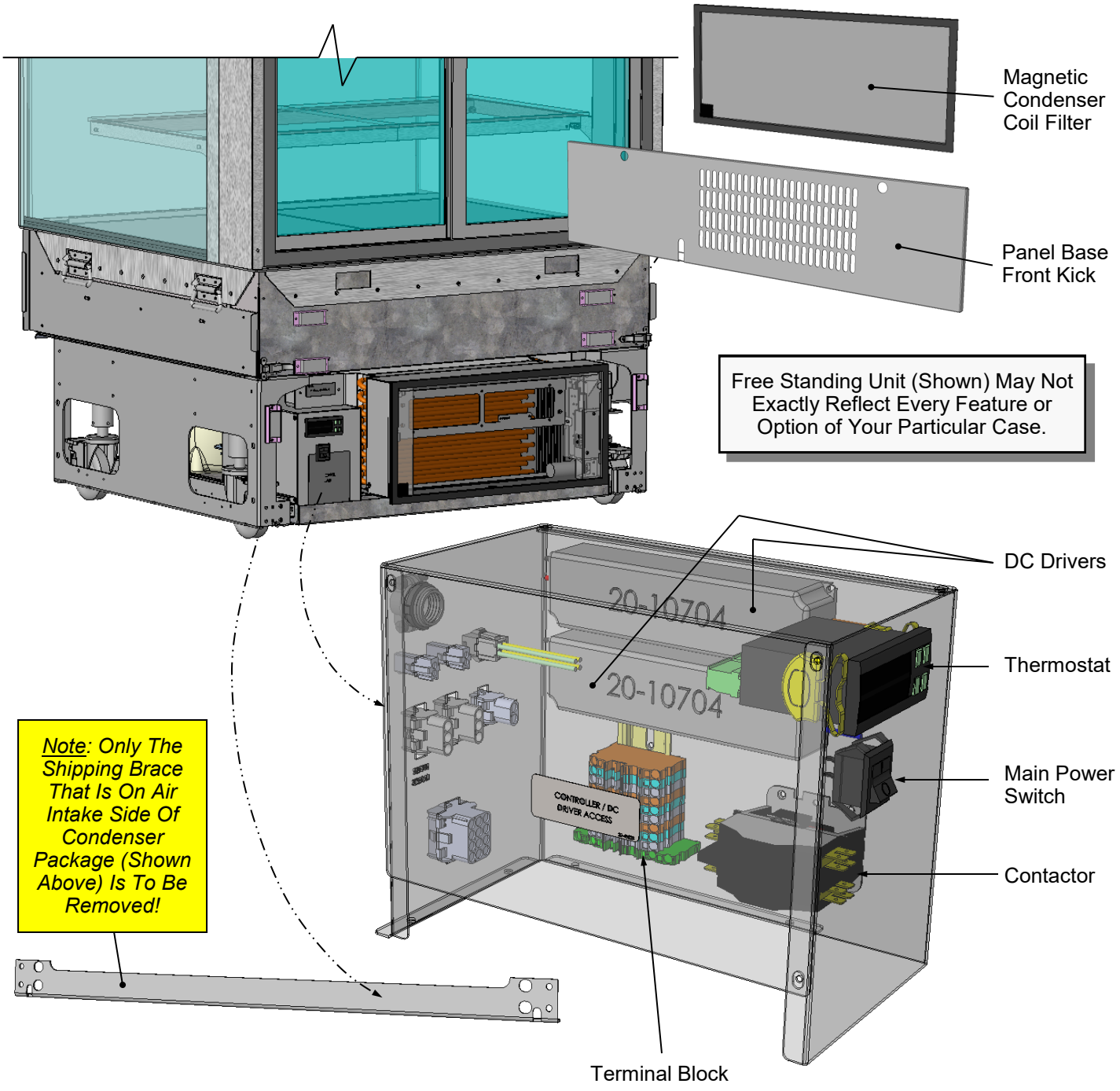
- Model NR4855RSV free standing unit is illustrated below.
- Air intake grille, rear panel, side cladding & shipping brace are removed for illustrative purposes only.

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



3. Controller / DC Driver Access / Components

- Remove front panel by lifting up and off; no screw removal is required.
- Magnetic condenser coil filter is directly accessible. See ***CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)*** for cleaning instructions.
- Remove shipping brace by loosening two (2) shoulder screws.
- Remove 4 screws from the controller/DC driver box cover to access electrical components.
- Note: Only certified electricians are to access electrical components in case.
- After accessing controller and/or DC drivers, return components to case in reverse order they were removed.

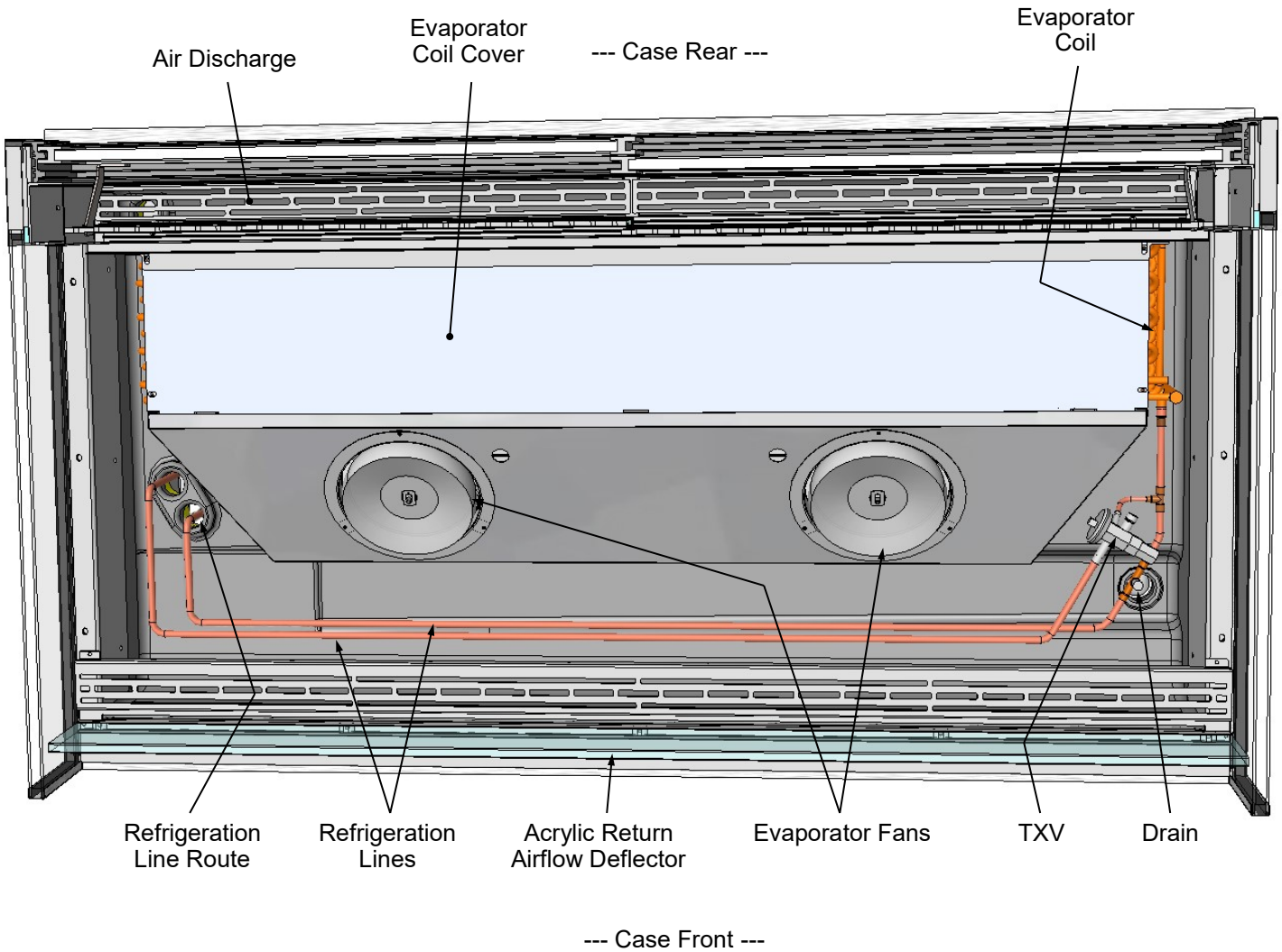


4. Tub Area (After Deck Pan Removal)

***Note**: Refrigeration service to be accomplished by refrigeration/electrical contractors only.*

Caution! Turn main power off before accessing tub area.

- Illustration below shown after removal of deck pans.
- After cleaning or servicing in tub area, return deck pans to case and return power to case.



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

5. LED Light Switch Location

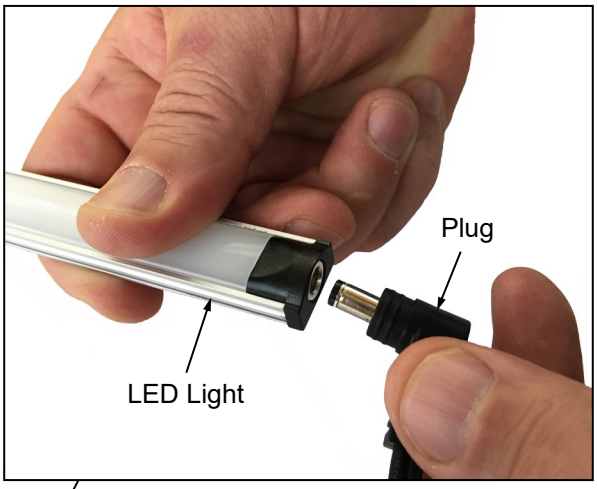
- Light switch is in column cover (accessible by sliding open door at case rear).
- See illustrations below-right.

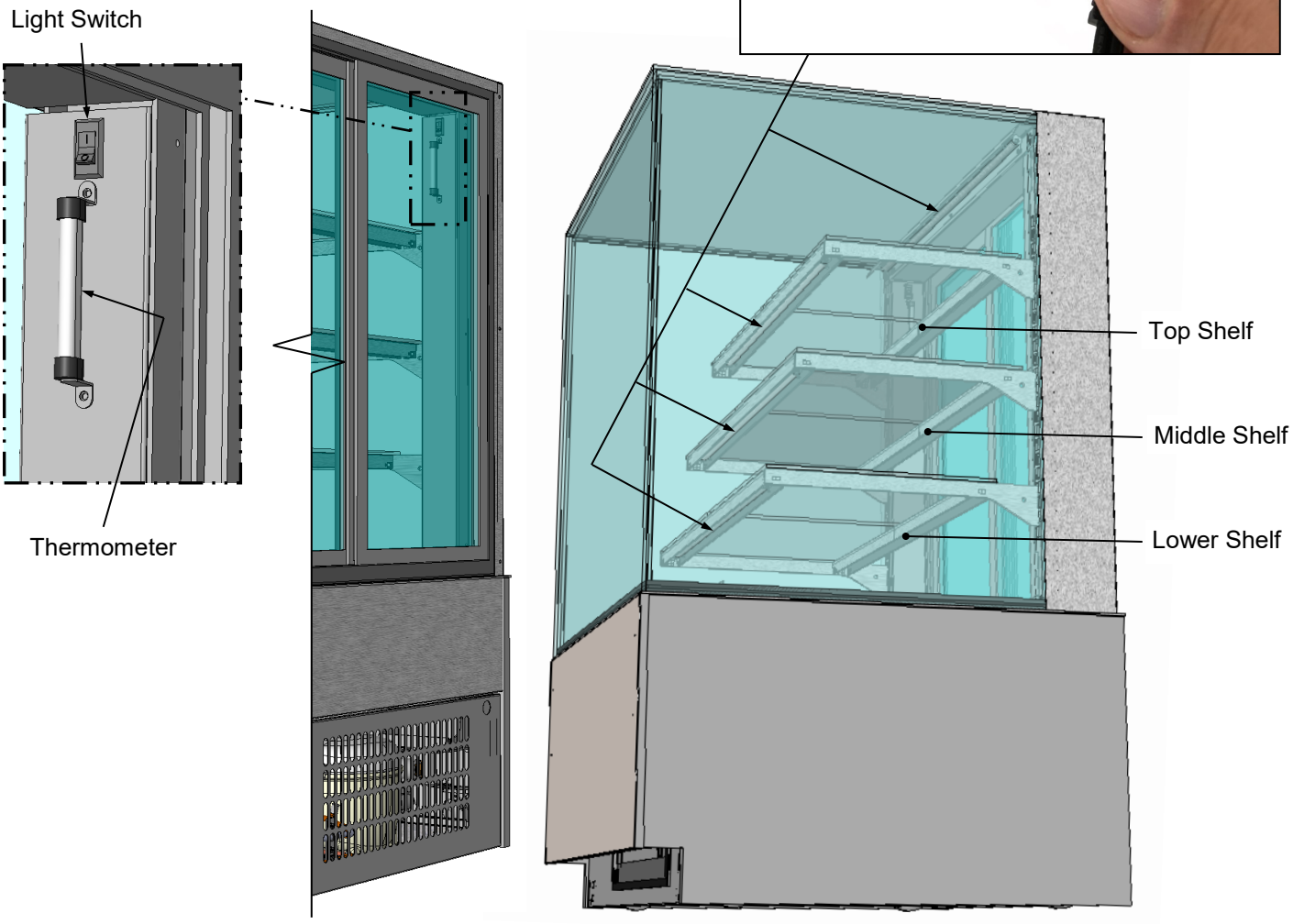
6. LED Lights

- LED lights are located at both header and shelving of case (as shown below).
- Check that ALL of the light plugs are properly connected to the LED light.
- Plug must be inserted ALL THE WAY into the LED light orifice (with no gap) to work properly.
- See ***TROUBLESHOOTING*** section in manual if LED lights malfunction.

7. Thermometer Function & Placement

- Thermometer provides temperature of refrigerated section of case.
- Thermometers reflect warmest air temperature in merchandiser. They do not provide actual food temperature.
- Use probe thermometers to determine actual product temperatures.

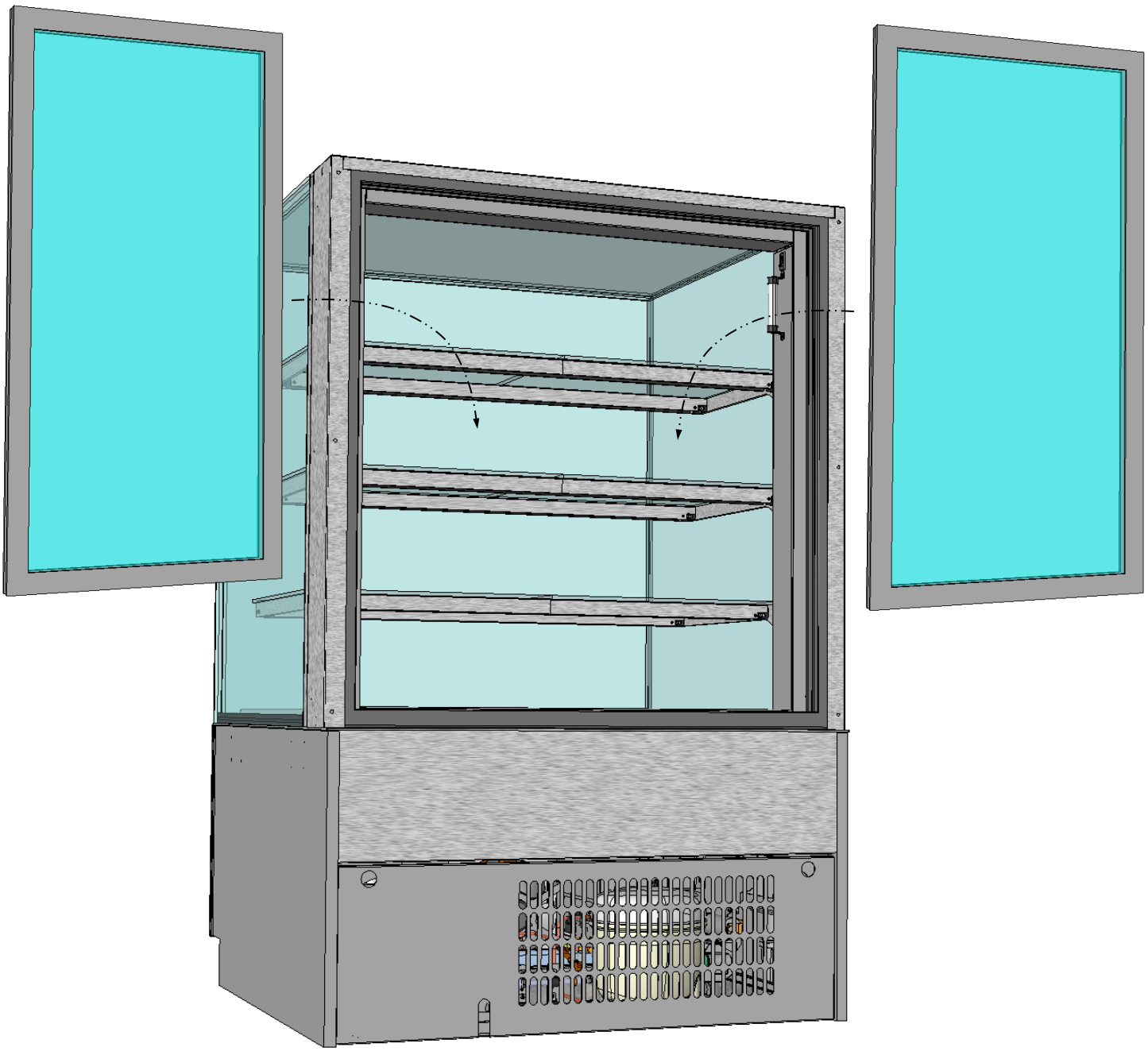




8. Rear Sliding Door Removal / Replacement

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

Model NR3635RSV Free Standing Unit (Shown) May Not Exactly Reflect Every Feature or Option of Your Particular Case.

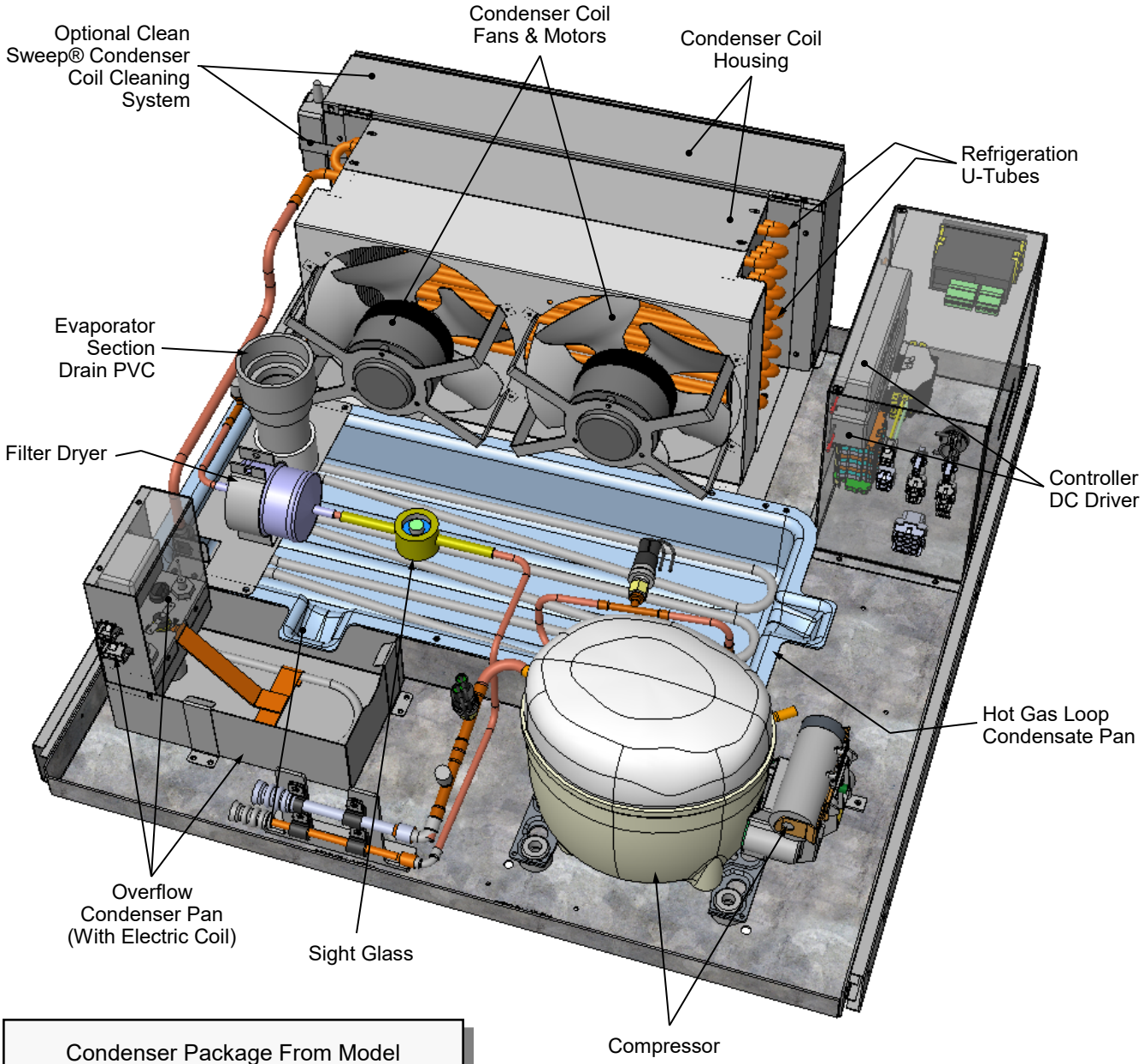


9. Condenser Package (Self-Contained Units Only)

Assembly/disassembly and servicing to be performed by licensed refrigeration contractor.

Condensate Package Configuration

- Illustration shown is from model NR3635RSV. Your unit's component layout may slightly vary.



Condenser Package From Model NR3635RSV Free Standing Unit (Shown) May Not Exactly Reflect Every Feature or Option of Your Particular Case.

1. Product Placement

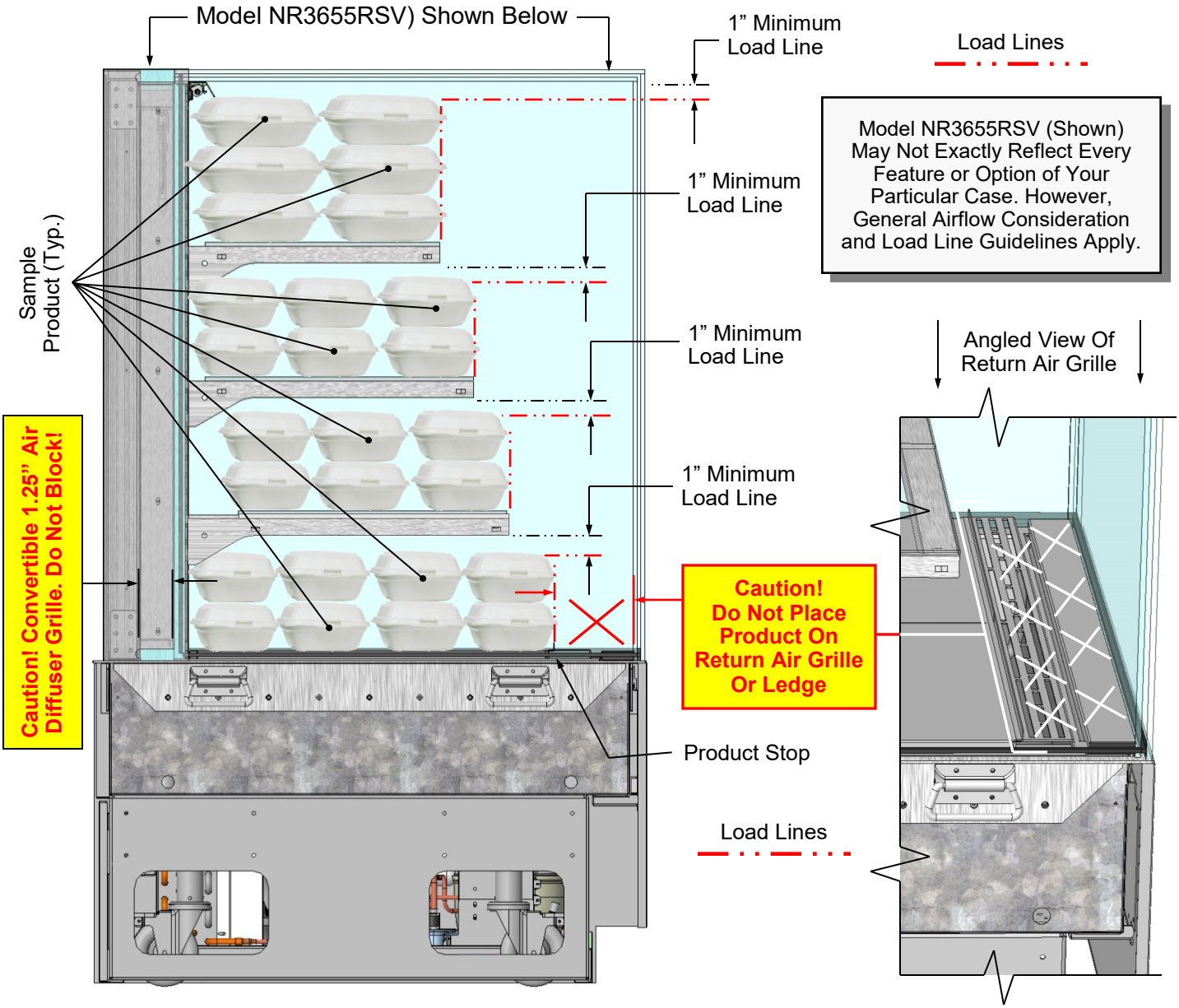
- Product can be placed on decking or steps (risers) within the service display area.
- A wide range of product may be displayed.

2. Air Diffuser Grille & Return Air Grille Considerations

- Proper airflow is critical to maintain proper product temperature.
- Proper product placement will allow rear air to flow over (and around) product to return air grille at case front. See illustration below for specifics.
- Caution! For airflow to reach return air grille, you must not block front or rear grilles with product.
- Do not place product on front ledge of case.

3. Load Lines

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



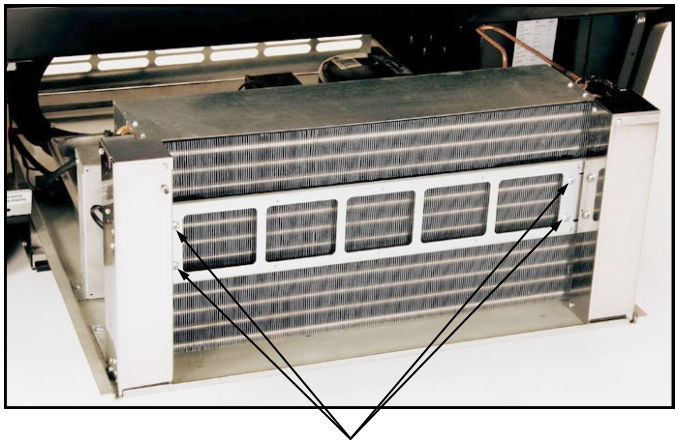
CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)

FREQ.	INSTRUCTIONS
Daily	**Glass Surfaces:** Clean glass surfaces and shelves with household or commercial glass cleaner.
Daily	**Rear Sliding Door Exterior Glass:** Clean with household or commercial glass cleaner. Clean out rear door track with moist cloth.
Daily	**End Panels, Front Panel, Toe-Kick, etc.:** Wipe off all surfaces with warm water and mild soap solution and non-abrasive cloth.
Daily	**Decks:** Wipe off decks with moist cloth dipped in mild soap and water solution.
Daily	**Acrylic Surfaces (Rear Perforated Plenums):** • Clean: Use soft, clean cloth dipped in solution of warm water and small amount of mild, liquid soap. Apply light pressure while wiping away all smudges and residue. • Rinse: Use pure water in spray bottle to rinse. • Dry: Use soft, clean cloth (rather than abrasive paper towel). • Avoid: Never use window or household cleaners such as Windex®, Formula 409®, or fantastik®. Never use scouring compounds or solvents such as acetone, gasoline, alcohol, 111 trichloroethylene, WD-40® or lacquer thinner. • Polishing: Buff with light coat of automobile paste wax or plastic cleaner/polish. • Scratches: Use high quality buffing compound. Carefully follow instructions.
Daily	**Stainless Steel Surfaces:** • Wash with a solution of hand dishwashing liquid detergent and water or a solution of baking soda and water. Rinse and polish dry with paper towel or soft cloth. • Never use scouring powders or steel wool as they will scratch stainless steel. • Brighten by polishing with a cloth dipped in vinegar or in ammonia; sprinkle baking soda on sponge and rub gently; rinse. Polish dry with paper towel. • Remove streaks or heat stains from stainless steel by rubbing with club soda.
Weekly	**Magnetic Condenser Coil Filter (Self-Contained Units Only):** • This filter helps prevent dust particles from entering condenser coil. • It is accessible at air intake side of case. • Clean magnetic condenser coil filter by following either step 1 or 2; then follow step 3: 1. 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. Dry with soft cloth or paper towel. Return to case. 2. If dishwasher is used, remove magnetic condenser coil filter from case. Use a rag or soft-bristled brush to wipe off excess dust particles from filter. Submerse in warm, soapy water. Use soft-bristled brush to remove dust, dirt, grease and grime that may collect on filter. Rinse thoroughly. 3. Dry with soft cloth or paper towel (as shown below) or allow to air dry. Replace.
Quarterly	**Under Case Cleaning:** > Remote units: Remove lower rear panel (and/or front panel) and clean as directed below. > Self-contained units/moving case: Remove lower grille and opposite side (front or rear panel) panel. Unlock casters and lower casters to floor. See ***INSTALLATION, CONT'D.: CASTER ADJUSTMENT / LOCK / UNLOCK / CASE REMOVAL FROM PALLET*** section in manual for instructions. Slide/roll case out of current position. Clean as directed below. > Self-contained units/stationary case: Remove lower grille (at intake side); slide condenser package out from under case. Optional: remove panel that is opposite lower grille. Clean as directed below. • Use vacuum with brush to remove all dust, dirt, food particles or residue from underside of case. • Replace lower grille (and/or panel that is opposite lower grille) when cleaning is complete.

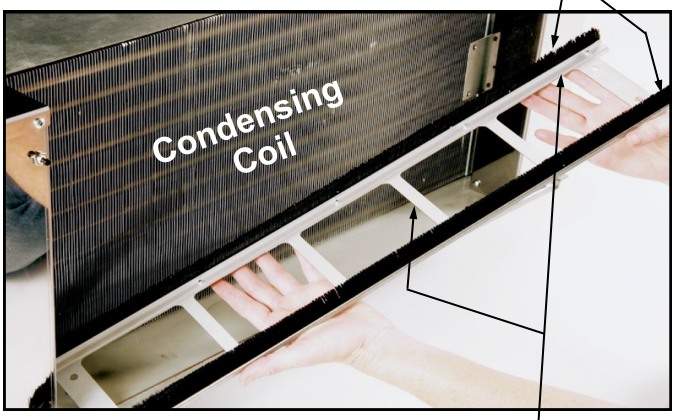
WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

FREQ.	INSTRUCTIONS
Quarterly	**<u>Condensing Coil</u>:** • Remove air intake grille to access area. Simply lift up and off. • Roll/slide out condenser package. <u>Note</u>: At initial slide-out, it may be necessary to remove two (2) compressor pan shipment screws to slide it out from under case. • ***Warning! Coil fins are sharp. Handle with care!*** • ***Caution! Airborne dust can contaminate food!*** Use wet rags to cover area where air pressure is blowing. • Use air pressure or industrial strength vacuum; clean dust and dirt that may collect on condenser coil. • Slide/roll condensing package back under case. • Return air intake grille to case.
Quarterly	**<u>Condenser Package</u>:** *Caution! Disconnect power from case before cleaning!* • See ***CASE DESIGN, CONT'D: CONDENSER PACKAGE (SELF-CONTAINED UNITS ONLY)*** section in manual for illustrations. • *Warning! Condensate pan may be HOT! Disconnect power from case and allow to cool before cleaning condensate pan!* • Remove air intake grille from case (no screw removal is required). • Slide/roll condenser package out from under case. • Use a scrub-brush and a de-scaling solution such as CLR® (to prevent corrosion, lime and rust). Follow instructions as to proper dilution, safety precautions and scrubbing method. • If electric coil overflow condensate pan is dirty, clean it (and in same manner) while cleaning rest of condenser package. • After thoroughly cleaning condensate pan with scrub-brush and solution, rinse thoroughly with clean water (in spray bottle) and wipe dry with sponge or paper towel. • Use moist cloth to wipe off dust & debris that collects on various parts (fans, sight glass, overflow pan, etc.). • Slide condenser package back under case. • Return air intake grille to case (no screws required).
Quarterly	**<u>Under Case Cleaning</u>:** Once refrigeration package is clear of unit, vacuum under case to remove dust and dirt that may collect under case.
Quarterly	**<u>Tub Area (Evaporator Coil, Drain, Fans, Brackets, Etc.)</u>:** *Caution! Disconnect power from case before cleaning tub, coil, fan, motor and drain area!* • See ***CASE DESIGN, CONT'D: TUB AREA (AFTER DECK PAN REMOVAL)*** section in manual for illustration. • Use vacuum to clean entire area. • After vacuuming, clean area with warm water, clean cloth, and mild soap solution. • Remove any debris that may clog drain. • Wipe down fan blades, motors and brackets with moist cloth.

FREQUENCY	INSTRUCTIONS
Quarterly	**<u>Optional Clean Sweep™ Condensing Coil Cleaner</u>:** *Disconnect power from case before servicing the Clean Sweep™ Condenser Coil Cleaner!* • Remove air intake grille (by lifting up and off); no screw removal is required. • Slide/roll out condensing package from underside of case assembly. • Remove the four (4) screws holding the Clean Sweep™ rail intact. • Remove the Clean Sweep™ rail. • Wash rails' brushes in hot water and mild soap solution. • If brushes are worn, they must be replaced. Call Technical Service Department to replace. Toll-Free number is listed at end of manual. • Clean condensing coil: Use air pressure or industrial strength vacuum; clean the dust and dirt that may collect on the condenser coil. • ***Caution! Coil fins are sharp. Handle with care!*** • Reattach Clean Sweep™ rail to condensing unit (4 screws). • Slide/roll condensing package back under case. • Replace air intake grille to case (4 screws). • See photos below.



(4) Screws

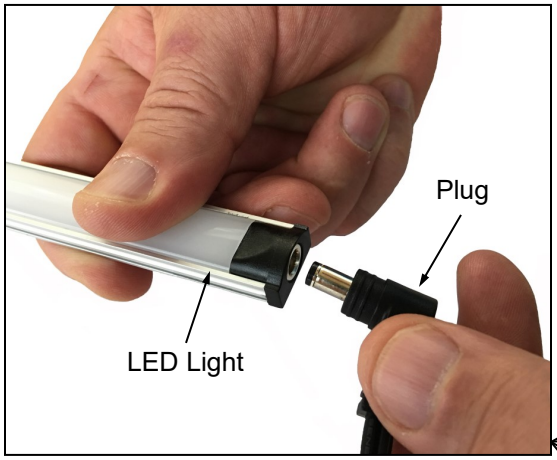


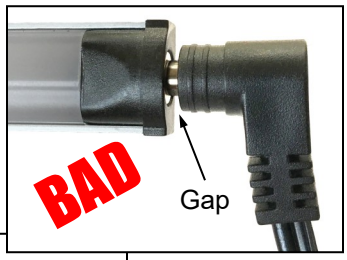
--- Above photos are taken after air intake grille has been removed from case ---

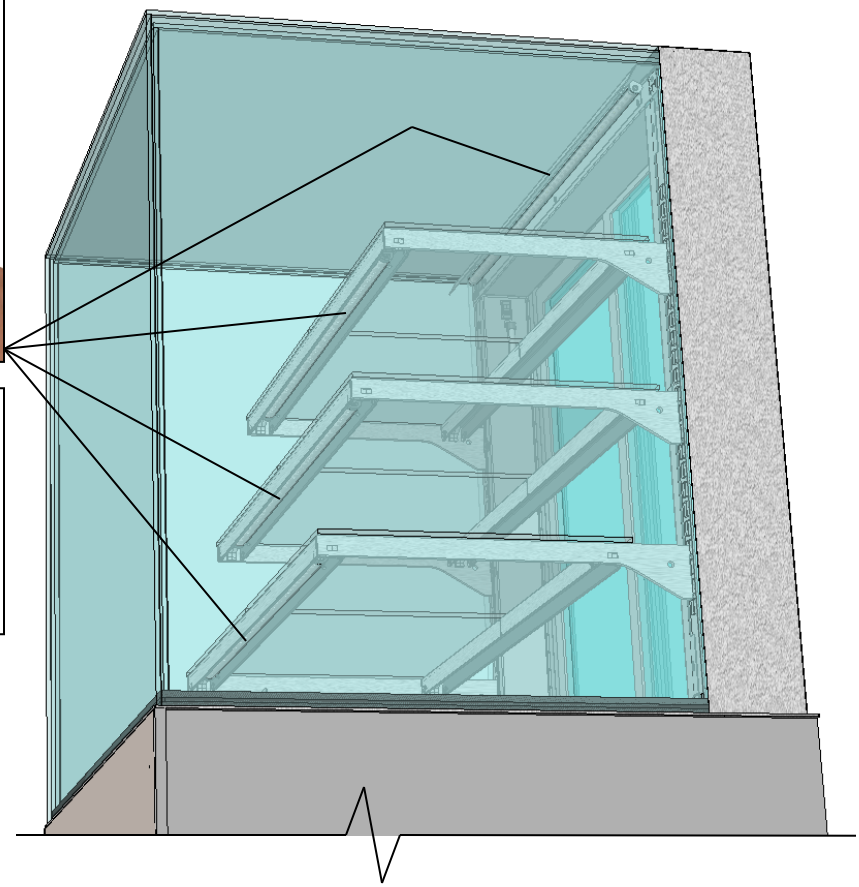
TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL) - PAGE 1 OF 2

CONDITION	TROUBLESHOOTING
Water Is On The Floor	Call service provider.
Fan Emits Excessive Noise	Call service provider.
Case is Not Holding Proper Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Product must be pre-chilled before placing in case.
	Check that the case is not in the sun or near a heat or air-conditioning vent. See ***OVERVIEW / DISPLAY TYPE I vs. II / COMPLIANCE / WARNINGS / PRECAUTIONS*** section in this manual for specifics.
	If case is located near outside doors, temperature fluctuation can hinder unit's ability to maintain temperature.
	• 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.

CONDITION	TROUBLESHOOTING
Case Lights Not Working	Check that light switch is in the *ON* position. • See ***CASE DESIGN, CONT'D: LED LIGHT SWITCH LOCATION / LED LIGHTS / THERMOMETER*** section in manual for switch location (regardless of case design).
	If case is not hard-wired, check that power cord is properly connected to wall outlet.
	Check that ALL of the light plugs are properly connected to the LED light. • Plug must be inserted ALL THE WAY into the LED light orifice (with no gap). • See illustrations below-left.
	Power may not be reaching the case. • Contact store management to have trained service provider perform troubleshooting. • Troubleshooting to be performed by trained service providers only is on next page.
	If case light still do not come on, it may need to be replaced. • Contact Structural Concepts' Technical Service Department for replacement light (see ***TECHNICAL SERVICE*** section of this manual for contact information). • To replace, disconnect plug from existing LED light. Disconnect LED light from its brackets. Replace with new LED light. Insert plug ALL THE WAY into LED light orifice.







CONDITION	TROUBLESHOOTING
Water Is On The Floor	***Caution!*** Disruption of power or malfunctioning condensate pan (or electric coil overflow condensate pan) may cause water to overflow pan and seep onto flooring causing damage! Until condensate pan(s) are functioning (or are replaced), follow these procedures: • 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. • When power to case is restored, condensate pan should function properly and water will no longer overflow onto flooring.
	Check that the drain trap is free of debris.
	Check that the drain PVC is correctly positioned over condensate pan.
	Check store conditions. To prevent condensation in Type I environments, maximum conditions are to be 55% humidity / 75° Fahrenheit. For Type II environmants, maximum conditions are to be 55% humidity / 80° Fahrenheit. See serial label (near main power switch) for NSF® Type of your case.
	Check that electric coil overflow condensate pan is properly plugged in or connected.

TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY), PAGE 2 OF 3

CONDITION	TROUBLESHOOTING
Fans Emit Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fans 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.
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	See ***TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)*** section in manual for most common troubleshooting solutions.
	Check power. • If power is not supplied to the case, facility may have faulty power distribution. • If power is supplied to the case but lights are not energized, case's power supply may be faulty.
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.
	If case is located near outside doors, temperature fluctuation can hinder unit's ability to maintain temperature.
	Check that condenser coil has been cleaned.
	Check that magnetic air filter (attached to air intake grille) has been cleaned. See ***CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)*** section in operating manual for instructions.
	Check return air grilles for obstructions.
	Check sight glass for flashing and/or low charge.
	Check set point temperature; it may be adjusted too high.
Digital Control Display Is Blank	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
System Is Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
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 specifics.

TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - CONDENSING SYSTEM

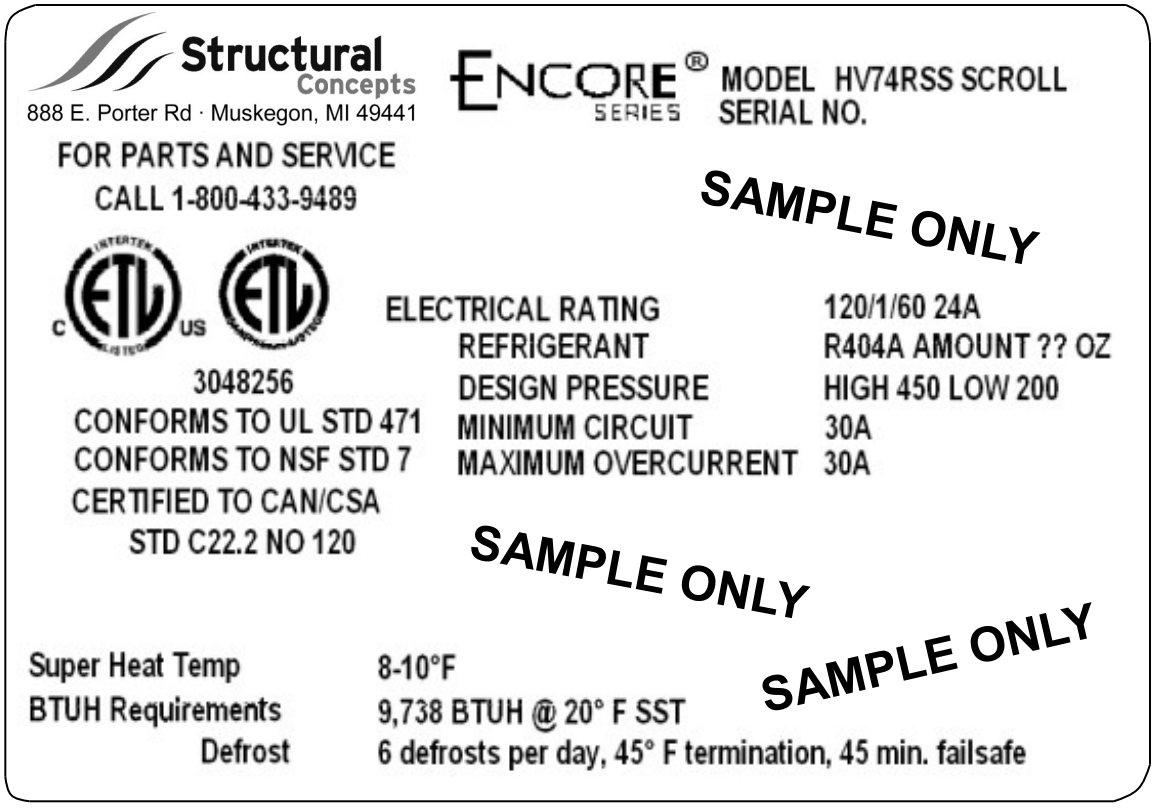
CONDITION	TROUBLESHOOTING
Head Pressure Too High	Check that the condensing coil is not dirty or covered.
	Check that condensing fans are working.
	Check that refrigerant is not overcharged.
	Perform sub-cooling check and verify that no contaminates are in system.
	Check that liquid line filter dryer 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 (BY TRAINED SERVICE PROVIDERS ONLY) - EVAPORATOR SYSTEM

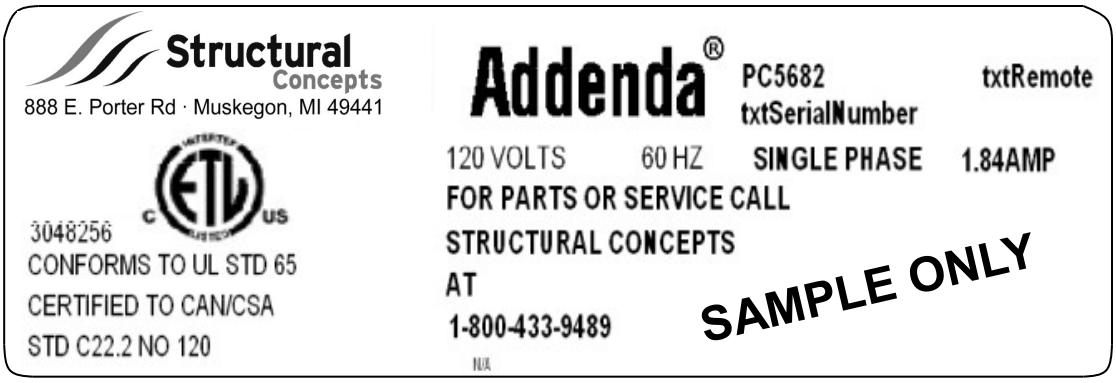
CONDITION	TROUBLESHOOTING
Low Suction Pressure	Check if sight glass is flashing or showing low charge.
	Check that expansion valve (TXV) isn't restricted. Check element charge.
	Check that liquid line or filter isn't restricted. Check that refrigeration lines and/or hoses are not kinked on either high 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 15-feet 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 a. Poor thermal contact. b. Warm location.

Serial Label Location & Information Listed / Technical Information & Service

- Serial labels are located near the electrical access on your case.
- Serial labels contain electrical, temperature & refrigeration information, as well as regulatory standards to which the case conforms.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.
- See images below for samples of both refrigerated and non-refrigerated serial labels.



----- Sample Serial Label For Refrigerated Case -----



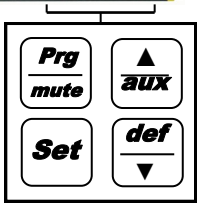
----- Sample Serial Label For Non-Refrigerated Case -----

CAREL

ir33 platform

Integrated Electronic Microprocessor Controller

Programming The Instrument



To Modify The Setpoint

Set — Press and hold the "SET" key for at least 1 second.

▲ aux / def ▼ — 2. Use arrow keys ▲ ▼ on temperature controller to increase (or decrease) the setpoint.

Set — 3. Quickly press and release the "SET" key again.

To Modify Defrost, Differential or Other Parameters

Prg mute / Set — 1. Press & hold "Prg" & "SET" keys together for five (5) seconds; display will flash "0", representing password prompt.

Set — 2. Confirm by pressing "SET" key.

▲ aux / def ▼ — 3. Press ▲ or ▼ to reach the category to be modified.

Set — 4. Press "SET" to modify this selected parameter.

▲ aux / def ▼ — 5. Increase or decrease the value using the ▲ or ▼ button respectively.

Set — 6. Press the "SET" key to temporarily save the new value and return to the display of the parameter.

Prg mute — 7. Press & hold the "Prg" key for at least 5 seconds to save changes. This action will also mute the audible alarm (buzzer) & deactivate the alarm relay.

How To Change Reading From Fahrenheit (°F) To Celsius (°C)

Prg mute / Set — 1. Press and hold "Prg" and "SET" keys together for at least 5 seconds; display will show "0", representing password prompt.

Set — 2. Confirm by pressing "SET" key.

▲ aux / def ▼ — 3. Press ▲ or ▼ until reaching the parameter "/ 5".

Set — 4. Press "SET" to modify this selected parameter.

▲ aux / def ▼ — 5. Press ▲ or ▼ to change value to desired setting: "0" for Celsius (°C) or "1" for Fahrenheit (° F).

Set — 6. Press "SET" key to temporarily save the new value and return to the display of the parameter.

Prg mute — 7. Press & hold "Prg" key for at least 5 seconds to save changes. ***Note!*** ***All values will automatically convert to new scale. No conversion is required.***

Warning! Save Your Parameter Settings!

1. To store the new parameter values, PRESS and HOLD the "Prg" key for at least 5 seconds.
2. All modifications made to parameters will be lost if you do NOT press a button within 60 seconds. Should this "timeout" occur, normal operational settings (prior to modifications being made) will resume.
3. If the instrument is switched off before pressing the "Prg" key, all modifications to parameters will be lost.

def ▼ — ***To Activate Manual Defrost***

Press and hold the "def" key for at least 5 seconds.

▲ aux — ***To Activate / Deactivate Auxiliary Output***

Press and hold the "aux" key for 1 second.

Prg mute / ▲ aux — ***To Reset Any Alarms With Manual Reset***

Press and hold the "Prg" and "aux" key for at least 1 second.

CAREL

ir33 platform

Integrated Electronic Microprocessor Controller

User Interface - Display

ICON	FUNCTION	DESCRIPTION	Normal operation			Start up
			ON	OFF	BLINK	
	COMPRESSOR	ON when the compressor starts. Flashes when the activation of the compressor is delayed by safety times.	Compressor on	Compressor off	awaiting activation	
	FAN	ON when the fan starts.Flashes when the activation of the fan is prevented due to external disabling or procedures in progress.	Fan on	Fan off	awaiting activation	
	DEFROST	ON when the defrost is activated. Flashes when the activation of the defrost is prevented due to external disabling or procedures in progress.	Defrost in progress	Defrost not in progress	awaiting activation	
AUX	AUX	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as AUX (or LIGHT in firmware version 3.6) is activated.	AUX auxiliary output active(version 3.6 light auxiliary output active)	AUX auxiliary output not active	Anti-sweat heater function active	
	ALARM	ON following pre-activation of the delayed external digital input alarm. Flashes in the event of alarms during normal operation (e.g. high/low temperature) or in the event of alarms from an immediate or delayed external digital input.	Delayed external alarm (before the time 'A7" elapses)	No alarm present	Alarms in norm. operation (e.g. High/low temperature) or immediate or delayed alarm from external digital input	
	CLOCK	ON if at least one timed defrost has been set.At start-up, comes ON for a few seconds to indicate that the Real Time Clock is fitted.	If at least 1 timed defrost event has been set	No timed defrost event set	Alarm clock	ON if real-time clock present
	LIGHT	Flashes if the anti-sweat heater function is active, ON when the auxiliary output (1 and/or 2) selected as LIGHT is activated (in firmware version 3.6 it does not flash in anti-sweat heater mode and comes on when the dead band output is active).	Light auxiliary output on(version 3.6 dead band auxiliary output active)	Light auxiliary output off	Anti-sweat heater function active(version 3.6 does not flash in anti-sweat heater mode)	
	SERVICE	Flashes in the event of malfunctions, for example E2PROM errors or probe faults.		No malfunction	Malfunction (e.g. E2PROM error or probe fault). Contact service	
	CONTINUOUS CYCLE	ON when the CONTINUOUS CYCLE function is activated. Flashes if the activation of the function is prevented due to external disabling or procedures in progress (E.g.: minimum compressor OFF time).	CONTINUOUS CYCLE operation activated	CONTINUOUS CYCLE function not activated	CONTINUOUS CYCLE operation requested	

Summary Table of Alarm and Signals: Display, Buzzer and Relay

Code	Icon on the display	Alarm relay	Buzzer	Reset	Description
rE	flashing	on	on	automatic	virtual control probe fault
E0	flashing	off	off	automatic	room probe S1 fault
E1	flashing	off	off	automatic	defrost probe S2 fault
E2	flashing	off	off	automatic	probe S3 fault
E3	flashing	off	off	automatic	probe S4 fault
E4	flashing	off	off	automatic	probe S5 fault
'___'	No	off	off	automatic	probe not enabled
LO	flashing	on	on	automatic	low temperature alarm
HI	flashing	on	on	automatic	high temperature alarm
AFr	flashing	on	on	manual	antifreeze alarm
IA	flashing	on	on	automatic	immediate alarm from external contact
dA	flashing	on	on	automatic	delayed alarm from external contact
dEF	on	off	off	automatic	defrost running
Ed1	No	off	off	automatic/manual	defrost on evaporator 1 ended by timeout
Ed2	No	off	off	automatic/manual	defrost on evaporator 2 ended by timeout
Pd	flashing	on	on	automatic/manual	maximum pump down time alarm
LP	flashing	on	on	automatic/manual	low pressure alarm
AtS	flashing	on	on	automatic/manual	autostart in pump down
cht	No	off	off	automatic/manual	high condenser temperature pre-alarm
CHT	flashing	on	on	manual	high condenser temperature alarm
dor	flashing	on	on	automatic	door open too long alarm
EE	flashing	off	off	automatic	E²prom error, unit parameters
EF	flashing	off	off	automatic	E²prom error, operating parameters
ccb	Signal				start continuous cycle request
ccE	Signal				end continuous cycle request
dFb	Signal				start defrost call
dFE	Signal				end defrost call
On	Signal				switch ON
off	Signal				switch OFF
rES	Signal				reset alarms w/manual reset / reset HACCP alarms / reset temp. monitoring

CAREL

ir33 platform

Integrated Electronic Microprocessor Controller

Summary Table of Operating Parameters

CODE	PARAMETER	UOM*	TYPE	MINIMUM	MAXIMUM	DEFAULT
/5	Select Celcius (°C) or Fahrenheit (°F)	flag	C	0	1	For Case Specific Defaults See Serial Label Located Near Electrical Access On Your Case. For Additional Technical Information Call Structural Concepts Technical Service Dept. at 1(800) 433.9489
/c1	Calibration of probe 1	°C/°F	C	-20	20	
/c2	Calibration of probe 2	°C/°F	C	-20	20	
St	Temperature set point	°C/°F	F	r2	r1	
rd	Control delta	°C/°F	F	20	0.1	
dI	Interval between defrosts	hours	F	0	250	
dt1	End defrost temperature, evaporator	°C/°F	F	-50	200	
dP1	Maximum defrost duration, evaporator	min	F	1	250	
d6	Display on hold during defrost	-	C	0	2	
dd	Dripping time after defrost	min	F	0	15	
d/1	Display of defrost probe 1	°C/°F	F	-	-	

* Unit Of Measure

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

DAYS/HOURS AVAILABLE:
MONDAY - FRIDAY (CLOSED HOLIDAYS)
8:00 a.m. TO 5:00 p.m. EST

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

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

LIMITED WARRANTY

Overview: All sales by Structural Concepts Corporation (hereafter referred to as "SCC") are subject to the following limited warranty. "Goods" refers to the product or products being sold by SCC.

Warranty Scope: Warranty is for equipment sold in the United States, Canada, Mexico and Puerto Rico. Equipment sold elsewhere may carry modified warranties.

Warranty; Remedies; Limitations: The limit of liability of SCC toward the exchange cost of the original compressor motor (and/or any other components) is one year parts and labor. If any Goods are found to be of faulty material or workmanship within one year of the original F.O.B. (free on board) unit shipment, SCC will, at its option (after inspection by an authorized representative), replace or pay the reasonable cost of replacement of the faulty Goods. If warranty claim is not made within this one year time period, SCC is not bound to warrant Goods. A motor-compressor (and/or any other components) replaced during the warranty shall not exceed manufacturer's current established wholesaler's exchange price. If replacement motor-compressor (and/or other components) is available via storage facility, parts truck, etc., SCC mandates that readily accessible replacement components be used toward repair of Goods; in such instances, SCC will replace such equipment (at its own expense) after confirmation of its use/placement on defective unit. SCC shall not be charged an additional fee, up-charge or expense for such replacement Goods. If SCC is unable to repair or replace the defective Goods, SCC shall issue a credit to the Purchaser for full or partial purchase price, as SCC shall determine. The replacement or payment in the manner described above shall be the sole and exclusive remedy to Purchaser for a breach of this warranty. If any Goods are defective or fail to conform to this warranty, SCC will furnish instructions for their disposition. No Goods shall be returned to SCC without its prior consent.

SCC's liability for any defect in the Goods shall not exceed the purchase price of the Goods. SCC SHALL HAVE NO LIABILITY TO PURCHASER FOR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, LOST PROFITS, OR OTHER ECONOMIC INJURY DUE TO ANY DEFECT IN THE GOODS OR ANY BREACH OF SCC, SCC SHALL NOT BE LIABLE TO THE PURCHASER IN TORT FOR ANY NEGLIGENT DESIGN OR MANUFACTURE OF THE GOODS, OR FOR THE OMISSION OF ANY WARNING THEREFROM.

SCC shall have no obligation or liability under this warranty for claims arising from any other party's (including Purchaser's) negligence or misuse of the Goods or environmental conditions. This warranty does not apply to any claim or damage arising for or cause by improper storage, handling, installation, maintenance, or from fire, flood, accidents, structural defects, building settlement or movement, acts of God, or other causes beyond SCC's control.

Except as expressly stated herein, SCC makes no warranty, express, implied, statutory or otherwise as to any parts or goods not manufactured by SCC. SCC shall warrant such parts or Goods only (I) against such defects, (II) for such periods of time, and (III) with such remedies, as are expressly warranted by the manufacturer of such parts of Goods. Notwithstanding the foregoing, any warranty with respect to such parts of Goods and any remedies available as a result of a breach thereof shall be subject to all of the procedures, limitations, and exclusions set forth herein.

THE WARRANTIES HEREIN ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE. IN PARTICULAR, SCC MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representative, agent or dealer of SCC has authority to modify, expand, or extend this Warranty, to waive any of the limitations or exclusions, or to make any different or additional warranties with respect to Goods.

Period of Limitations: No claim, suit or other proceeding may be brought by Purchaser for any breach of the foregoing warranty or this Agreement by SCC or in any way arising out of this Agreement or relating to the Goods after one year from the date of the breach. In the interpretation of this limitation on action for a breach by SCC, it is expressly agreed that there are no warranties of future performance of the goods that would extend that period of limitation herein contained for bringing an action.

Indemnifications: Purchaser agrees to indemnify, hold harmless, and defend SCC if so requested, from any and all liabilities, as defined herein, suffered, or incurred by SCC as a result of, or in connection with, any act, omission, or use of the Goods by Purchaser, its employees or customers, or any breach of this Agreement by Purchaser. Liabilities shall include all costs, claims, damages, judgments, and expenses (including reasonable attorney fees and costs).

Remedies of SCC: SCC's rights and remedies shall be cumulative and may be exercised from time to time. In a proceeding or action relating to the breach of this Agreement by Purchaser, Purchaser shall reimburse SCC for reasonable costs and attorney's fees incurred by SCC. No waiver by SCC of any breach of Purchaser shall be effective unless in writing nor operate as a waiver of any other breach of the same term thereafter. SCC shall not lose any right because it has not exercised it in the past.

Applicable Law. This Agreement is made in Michigan; it is governed by and interpreted according to Michigan law. Any lawsuit arising out of this Agreement or the Goods may be handled by a federal or state court whose district includes Muskegon County, Michigan, and Purchaser consents that such court shall have personal jurisdiction over Purchaser.

LED Lighting Components Within Lighting System: Supermarket: 5-year LED warranty from date of shipment. Foodservice: 2-year LED warranty from date of shipment. After one year, warranty does not include labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of either defective part or replacement parts. Remedy of repair or provision of a replacement part without charge shall be the exclusive remedy for any warranty claim. The replacement LED and/or power supply assumes the unused portion of warranty remaining on unit(s). A 90-day warranty will apply for any LED sold as a service part. Warranty claim must include serial and model number of unit as well as date code on defective LED lighting component(s). Manufacturer may request return of defective part(s) at customer's expense to initiate claim.

Glass Material: Glass (UV-bonded glass, glass sneeze guards, glass enclosures, glass held in place via posts, etc.) is only warranted to FIRST POINT OF DELIVERY.

Miscellaneous: If any provision of this Agreement is found to be invalid or unenforceable under any law, the provision shall be ineffective to that extent and for the duration of the illegality, but the remaining provisions shall be unaffected. Purchaser shall not assign any of its rights nor delegate any of these obligations under this Agreement without prior written consent of SCC. This Agreement shall be binding upon and inure to the benefit of SCC and Purchaser and each of their legal representatives, successors and assignees. SCC warrants its products to be free of defects in materials and workmanship under normal use and service for a period of one (1) year from the date of delivery.

This warranty is extended only to the original purchaser for use of the Goods. It does not cover normal wear parts such as plastic tongs, tong holders, tong cables, bag holders, or acrylic dividers.

General Conditions: All service labor and/or parts charges are subject to approval by SCC. Contact Customer Service Dept. in writing, by phone, fax or email.

All claims must contain the following information: (1) model & serial code number of equipment; (2) the date and place of installation; (3) the name and address of the agency which performed the installation; (4) the date of the equipment failure; and (5) a complete description of the equipment failure and all circumstances relating to that failure.

Once the claim has been determined to be a true warranty claim by SCC's Customer Service Department, the following procedure will be taken: (1) replacement parts will be sent at no charge from SCC on a freight prepaid basis; (2) reimbursement for service labor will be paid if the following conditions have been met - (a) prior approval of service agency was awarded from the Customer Service Department; and (b) an itemized statement of all labor charges incurred is received by the Customer Service Department. The cost of the service labor reimbursement will be based on straight time rates and reasonable time for the repair of the defect.

If problems occur with any compressor, notify SCC's Customer Service Department immediately. Any attempt to repair or alter the unit without prior consent from the Customer Service Department will render any warranty claim null and void. This warranty and protection plan does not apply to any condensing unit or any part thereof which has been subject to accident, negligence, misuse, or abuse, or which has not been operated in accordance with the manufacturer's recommendations or if the serial number of the unit has been altered, defaced, or removed.

One Year Limit of Liability: After SCC's one-year parts and labor warranty on the original F.O.B. (free on board) unit has expired, SCC is not liable for either the equipment or labor costs of repairing or replacing the motor compressor, nor any other components that were included in the original F.O.B. (free on board) unit.