



Structural Concepts NE4827RSSV Slide In Self Service Merchandisers User Manual

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Structural Concepts®

Structural Concepts NE4827RSSV Slide In Self Service Merchandisers



Product Information

- **Product Name:** Slide-In, Self-Service Merchandisers
- **Model NE4827RSSV:** With Dual Shelves and Acrylic Perforated Plenums
- **Model NE3620RSSV:** With Single Shelf and Acrylic Perforated Plenums
- **Manufacturer:** Structural Concepts Corp.
- **Address:** 888 E. Porter Rd, Muskegon, MI 49441
- **Phone:** 231.798.8888
- **Fax:** 231.798.4960
- **Website:** www.structuralconcepts.com

Product Usage Instructions

Installation

1. Toe-Kick & Air Intake Grille Removal: Follow the instructions provided to remove the toe-kick and air intake grille.
2. Case Disconnection & Pallet Removal: Disconnect the case and remove it from the pallet as instructed.
3. Positioning Case: Place the case in the desired location.
4. Side Handles: Use the side handles to move and position the case if needed.
5. Shipping Brace & Grille: Remove the shipping brace and grille from the case.
6. Shelving Assembly Components: Assemble the shelves according to the provided instructions.
7. Plug Case In & Turn On: Connect the case to a power source and turn it on.
8. Air Intake Grille & Upper Rear Panel: Install the air intake grille and upper rear panel as instructed.
9. Optional Acrylic Security Cover: If desired, install the optional acrylic security cover following the provided instructions.
10. Optional Rear-Vented Panel Assembly: If required, assemble and install the optional rear vented panel.

Case Design

- **Front View of Slide-In, Self-Service Merchandisers:** Familiarize yourself with the front view of the merchandisers.
- **Rear View of Slide-In, Self-Service Merchandisers:** Take note of the rear view of the merchandisers for reference.
- **Controller / DC Drivers / Main Power Switch / Condenser Coil Filter:** Understand the location and function of the controller, DC drivers, main power switch, and condenser coil filter.
- **Night Curtain Access and Operation:** Learn how to access and operate the night curtain.
- **Tub Area (After Deck Pan Removal):** Get familiar with the tub area after removing the deck pan.
- **LED Light Switch / LED Lights / Thermometer:** Understand the operation and location of the LED light switch, LED lights, and thermometer.
- **Rear Sliding Door Removal / Rear Perforated Plenum Control:** Learn how to remove the rear sliding door and control the rear perforated plenum.
- **Condenser Package (Self-Contained Units Only):** For self-contained units, understand the condenser package and its components.

Product Placement and Maintenance

- **Product Placement / Honeycomb Airflow Consideration / Load Lines:**

Follow the guidelines provided for product placement, honeycomb airflow consideration, and load lines.

- **Cleaning Schedule:**

Store personnel should perform the cleaning schedule as outlined in the instructions.

- **Preventive Maintenance:**

Trained service providers should perform preventive maintenance tasks as described.

Troubleshooting

- **Troubleshooting (Store Personnel Only):** Store personnel can follow the troubleshooting instructions for basic issues.
- **Troubleshooting (Trained Service Providers – Condensing System):** Trained service providers should refer to the troubleshooting instructions specific to the condensing system.
- **Troubleshooting (Trained Service Providers – Evaporator System):** Trained service providers should refer to the troubleshooting instructions specific to the evaporator system.

Model

Model	Upper Display Case Height	Overall Case Height	Case Depth x Length
NE3613RSSV	13 5/8"	32 7/8"	33"D* x 35 3/4"L
NE3620RSSV	20 3/8"	39 5/8"	33"D* x 35 3/4"L
NE3627RSSV	27 7/8"	47 1/8"	33"D* x 35 3/4"L
NE3635RSSV	35 1/4"	54 5/8"	33"D* x 35 3/4"L
NE4813RSSV	13 5/8"	32 7/8"	33"D* x 47 3/4"L
NE4820RSSV	20 3/8"	39 5/8"	33"D* x 47 3/4"L
NE4827RSSV	27 7/8"	47 1/8"	33"D* x 47 3/4"L
NE4835RSSV	35 1/4"	54 5/8"	33"D* x 47 3/4"L
NE6013RSSV	13 5/8"	32 7/8"	33"D* x 59 3/4"L
NE6020RSSV	20 3/8"	39 5/8"	33"D* x 59 3/4"L
NE6027RSSV	27 7/8"	47 1/8"	33"D* x 59 3/4"L
NE6035RSSV	35 1/4"	54 5/8"	33"D* x 59 3/4"L
NE7213RSSV	13 5/8"	32 7/8"	33"D* x 71 3/4"L
NE7220RSSV	20 3/8"	39 5/8"	33"D* x 71 3/4"L
NE7227RSSV	27 7/8"	47 1/8"	33"D* x 71 3/4"L
NE7235RSSV	35 1/4"	54 5/8"	33"D* x 71 3/4"L

OVERVIEW / WARNINGS / PRECAUTIONS

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 the 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 the 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 the compliance guidelines.

COMPLIANCE

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

WARNING

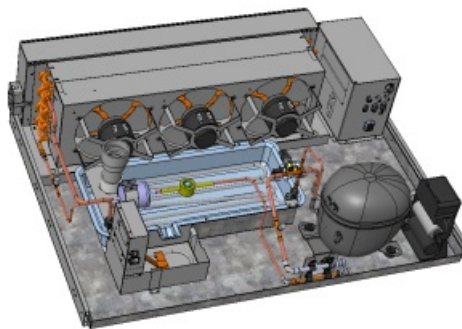
Risk of electric shock. Disconnect power before servicing unit.

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.

CAUTION! IF YOUR UNIT IS SELF-CONTAINED, YOU MUST



CHECK CONDENSATE PAN POSITION AND PLUG! Water on flooring can cause extensive damage! Before powering up unit, check and confirm that:

- Condensate pan is **DIRECTLY UNDER** condensate drain.
- The condensate pan plug is securely plugged into the 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.
- Please read carefully!

WIRING DIAGRAM

- Each case has its own wiring diagram folded and in its own packet.

- Wiring diagram placement may vary (near ballast box, field wiring box, raceway cover, or other related location).

REFRIGERANT DISCLOSURE STATEMENT

- This equipment is prohibited from use in California with any refrigerants on the “List of Prohibited Substances” for that specific end-use, in accordance with California Code of Regulations, title 17, section 95374.
- This disclosure statement has been reviewed and approved by Structural Concepts and Structural Concepts attests, under penalty of perjury, that these statements are true and accurate.

CAUTION! LAMP REPLACEMENT GUIDELINES

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

CAUTION! GFCI BREAKER USE REQUIREMENT



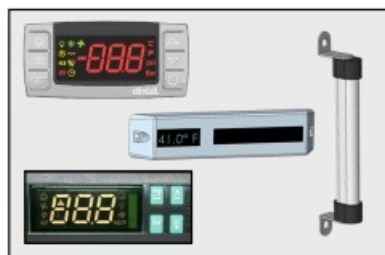
If N.E.C. (National Electric Code) or your local code requires GFCI (Ground Fault Circuit Interrupter) protection, you **MUST** use a GFCI breaker in lieu of a GFCI receptacle.

CAUTION! ADVERSE CONDITIONS / SPACING ISSUES

- Performance issues caused by adverse conditions are NOT 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!

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.

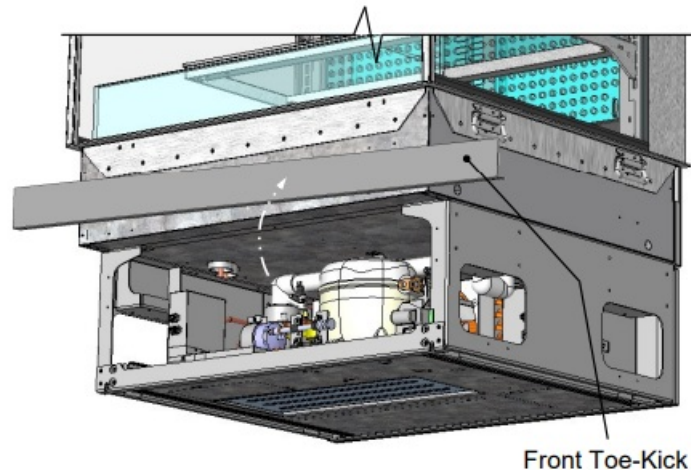
CAUTION!

- 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

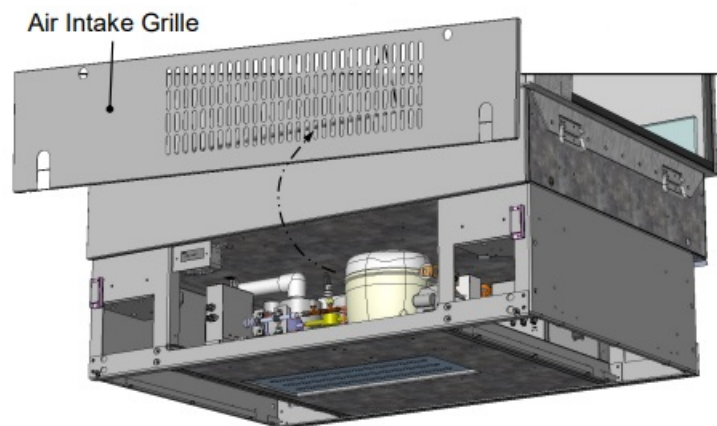
TOE-KICK & GRILLE REMOVAL / CASE DISONNECTION & PALLET REMOVAL

1. Remove Front Toe-Kick From Case



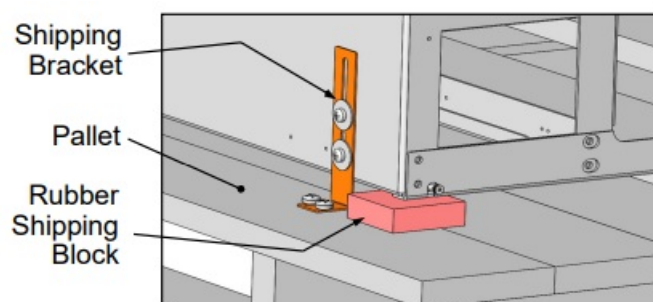
- To prevent damage to case, remove front toe-kick from case before removing from pallet.
- Toe-kick is held in place by magnets only. No screw removal is required.
- Place front toe-kick in secure location while removing case from pallet.

2. Remove Air Intake Grille From Case



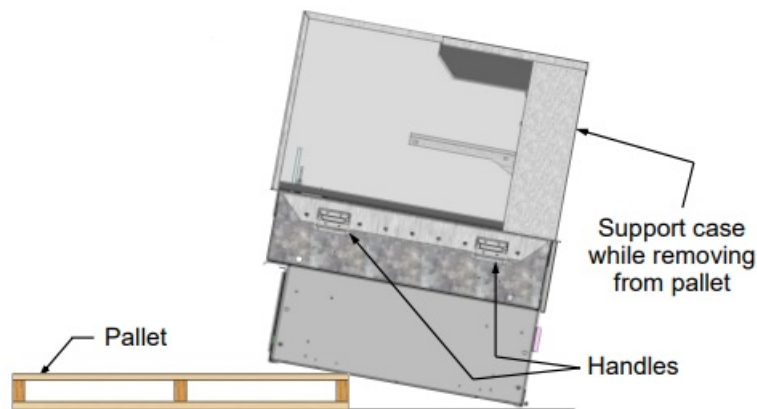
- To prevent damage to case, lift air intake grille UP and OFF case.
- Air intake grille is held in place by magnets. No screw removal is required.
- Place air intake grille in secure location while removing case from pallet.

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; remove rubber shipping blocks.

4. Carefully Remove Case From Pallet



- 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. Slide pallet from under case.
- Maintain support of case at all times or center of gravity may cause case to fall.

5. Prepare Case For Counter: Rear Panels

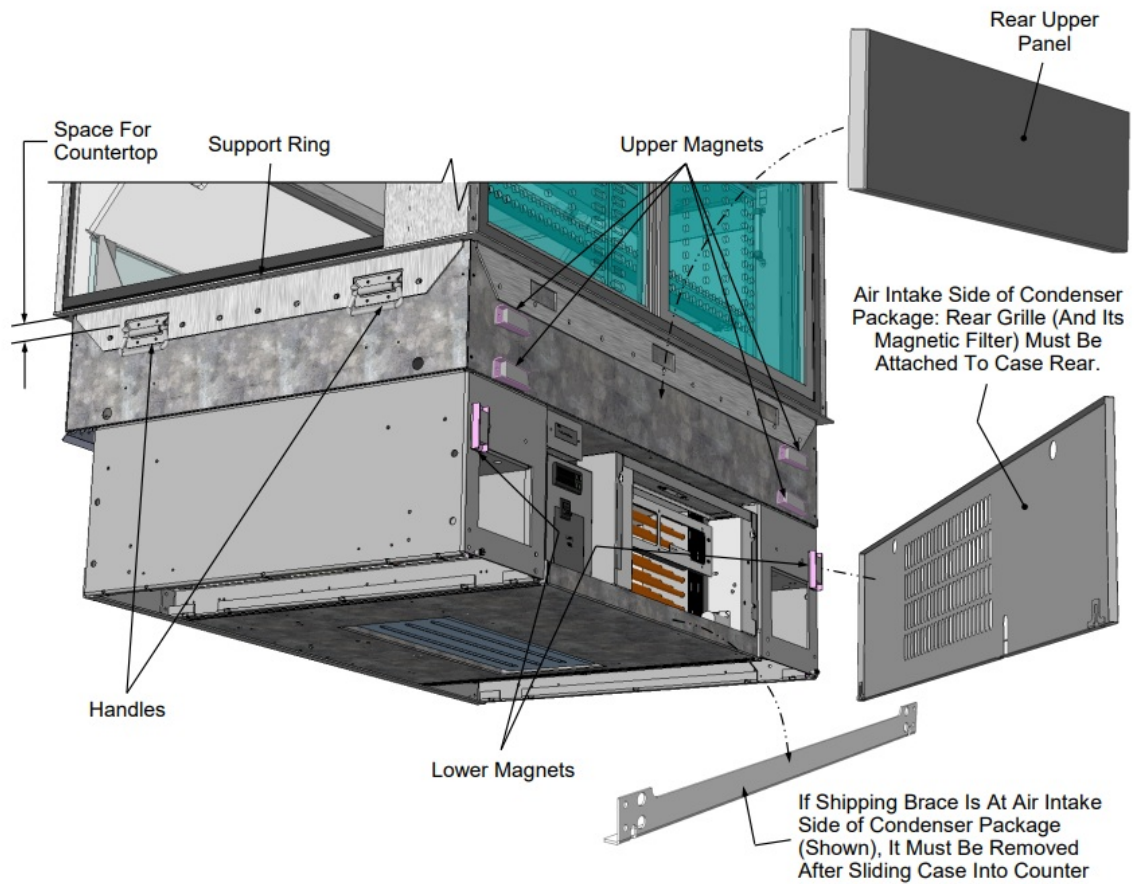
1. Upper rear panel and rear grille must remain OFF case while it is slid in (or dropped into) counter.
2. Panel and grille may be damaged if they remain on the case while placed in counter.

6. Prepare Case For Counter: Magnets

- Slide-In Units: All rear magnets may remain on case while SLIDING INTO counters.
- Drop-In Units: Due to space restraints, rear magnets MAY NEED TO BE REMOVED from case for case to fit into counter. Measure carefully!
- Lower set of magnets MAY BE REATTACHED to case to hold rear grille in place.

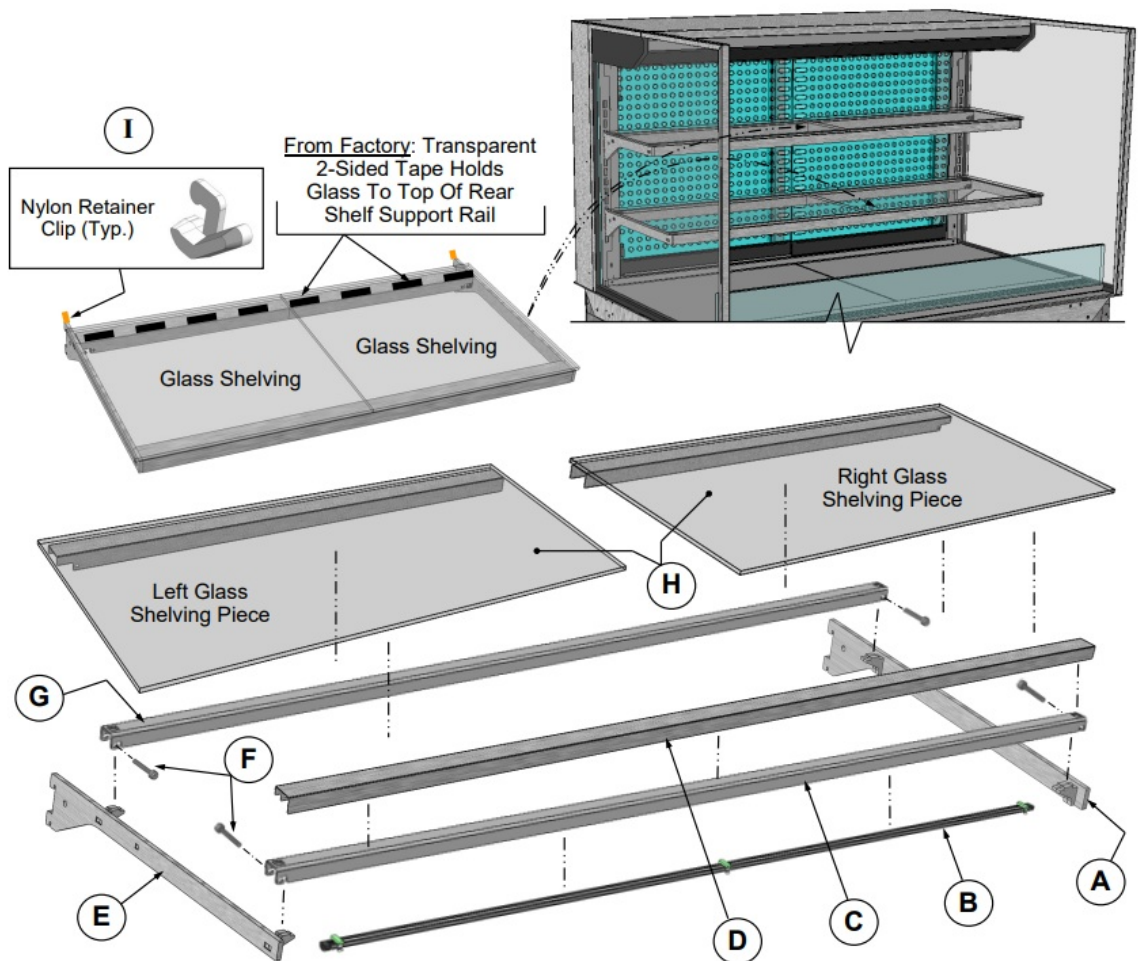
7. Prepare Case For Counter: Side Handles

- Slide-In Units: Side handles MAY remain on case if space allows. Otherwise, remove them.
 - See "Space For Countertop" shown in illustration below.
 - Keep handles in safe place for future possible relocation use.
- Drop-In Units: Due to space restraints, REMOVE SIDE HANDLES to allow case to fit into counter.
 - Keep handles in safe place for future possible relocation use.
 - See illustration below.



8. Shelving Assembly Components

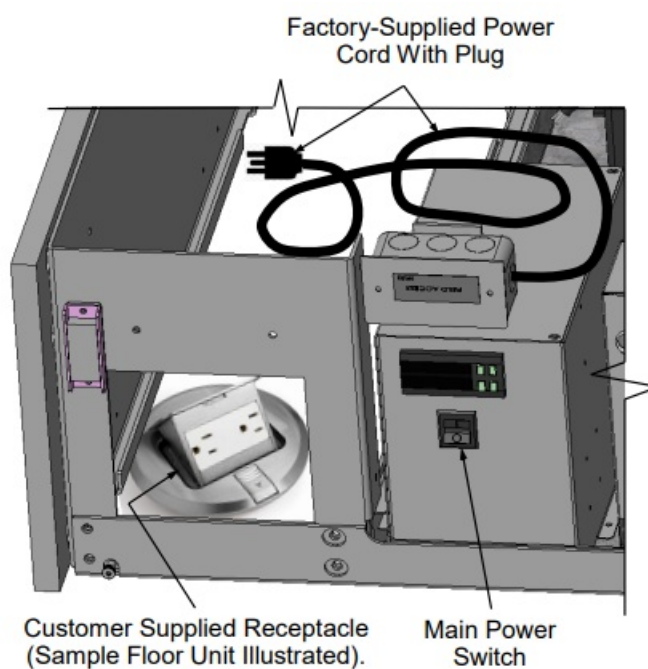
- Check that glass shelving is in proper position before placing product in case
- Shelves may be adjusted vertically or entirely removed from the merchandiser.
- Metal shelving brackets ARE NOT able to be angled.
- They are at a fixed 90° position. There are 12 components comprising each shelf assembly: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

- Shipping brace keeps condenser package secure during shipment and while moving case into position.
- After case is ready to slide in counter, remove shipping brace that is just below condenser package by removing (2) screws.
- **Note:** Shipping Brace Is ONLY To Be Removed From Air Intake Side of Condenser Package!

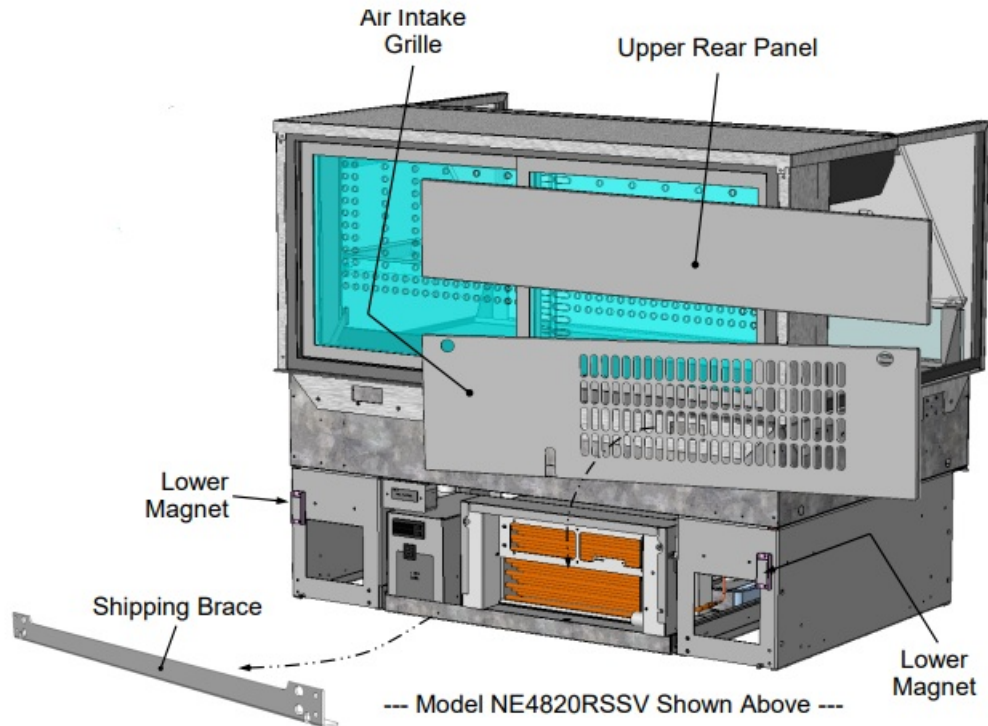
10. Plug Case In/Turn Main Power Switch On



- 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).
- Turn on LED light switch at front-left header.

11. Air Intake Grille / Upper Rear Panel

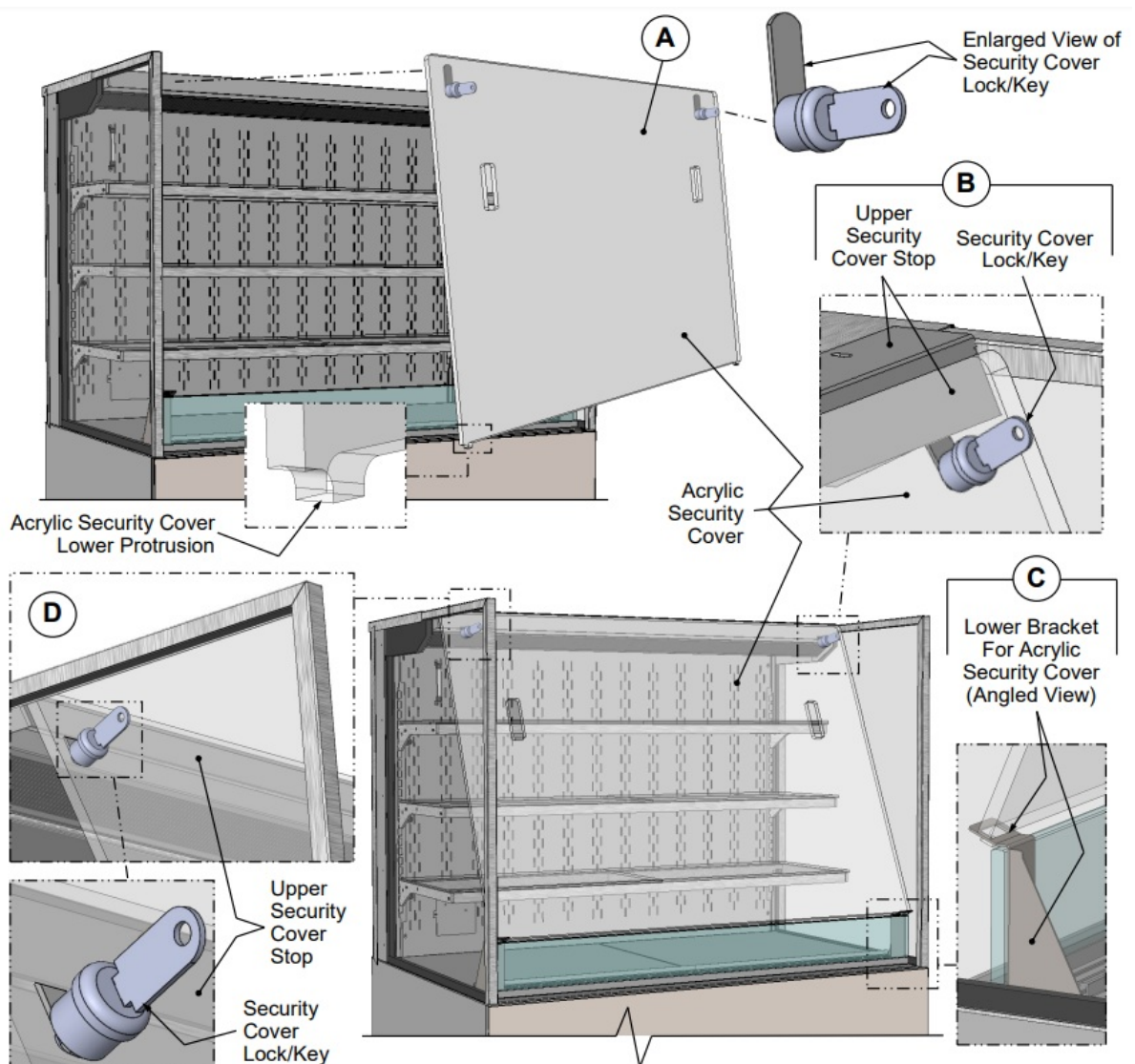


- If rear magnets were removed (due to unit being placed in drop-in counters) you must reattach LOWER magnets to case.
- Air intake grille (and magnetic air filter) must now be reattached to case.
- Rear upper panel may be reattached for units placed in slide-in counters (as upper magnets would not have been removed from case).
- Do not reattach upper rear panel to drop-in case.

12. Optional Acrylic Security Cover

Note: Illustrations reflects random model; it may not reflect every feature or option of your case.

- **A.** View of optional acrylic security cover with holes for grasping (for removing and replacing), enlarged lock/key and lower protrusion.
- **B.** Acrylic security cover rests against upper security cover stop.
- **C.** Acrylic security cover's lower protrusions are to rest in lower bracket slots (one in each bracket).
- **D.** Upper acrylic security cover must rest against upper security cover stop. Lock at both ends of cover with locking mechanism.
 - Important! After locking in place, store keys in safe yet accessible place.
 - If removing acrylic security cover, store in safe location away from foot traffic or work areas that could lead to scratching or marring of acrylic surfaces.
 - See CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL) for cleaning information.

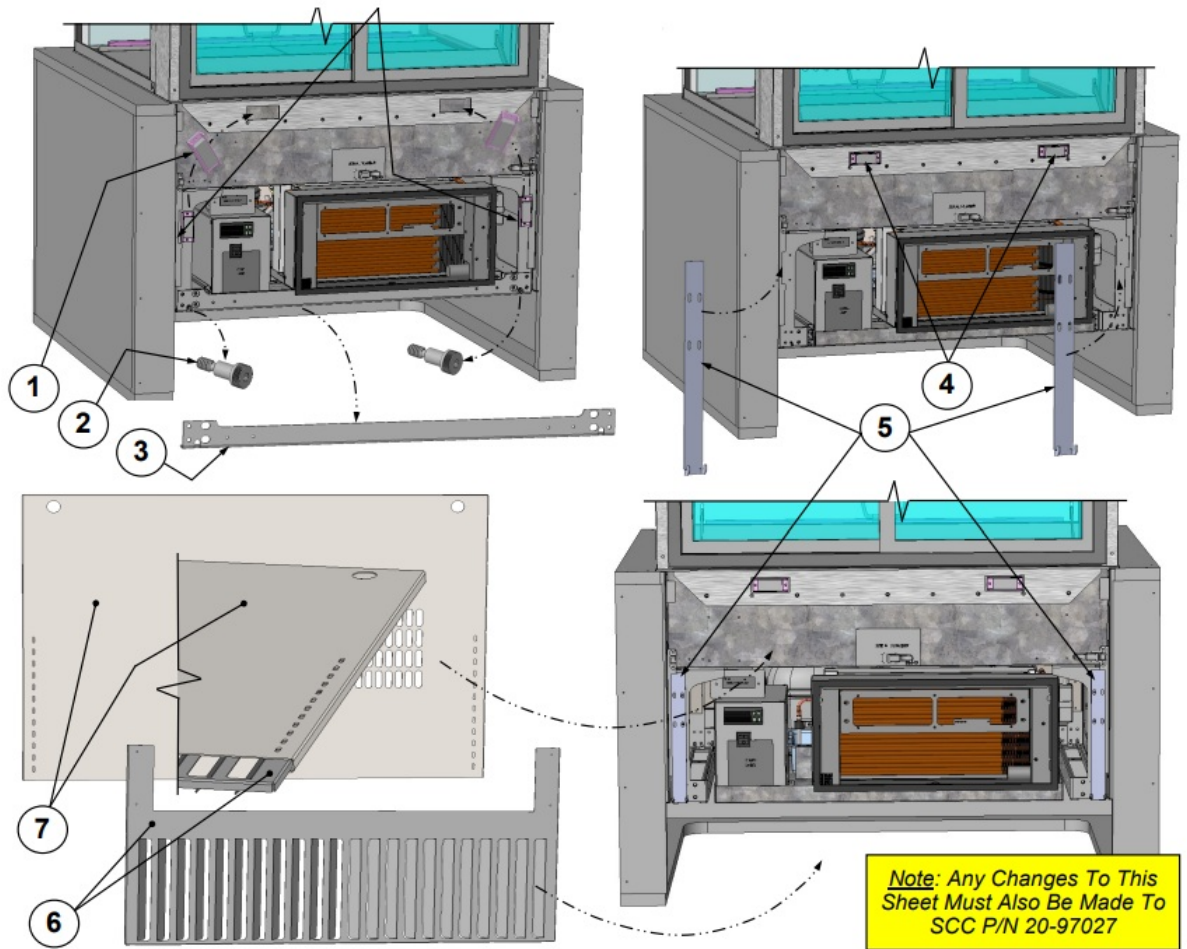


13. Optional Rear Vented Panel Assembly

Important! Carefully follow these step-by-step instructions for proper component attachment. This document depicts Model NE3635RSSV with rear vented panel option; it is applicable to both NEXXXXRSSV and NEXXXXRSSV models.

- If magnet assemblies are attached to frame uprights, relocate them to openings in upper plate (item #4). To attach, drill pilot holes and use self-tapping screws.
- Remove (2) Allen® head standoff screws.
- Remove shipping brace (and its screws).
- View of magnet assemblies at proper location.
- Attach SCC-supplied side brackets to case where shown with screws into pre-tapped holes; prongs facing out; edge of brackets must line up with outside Edges of frame.
- Insert lower vented panel into upper vented panel.
- Attach upper vented panel to case rear via side bracket hooks (item #5) and upper magnets (item #4).
 - Adjust (item #6) until flush to floor/cabinet. Remove item #6 AND #7 (holding item #6 in 'flush to floor/cabinet' position).
 - Rotate item #6 and #7 assembly so screw locations of item #6 are viewable. Mark (4) locations onto item #7's knockouts.
 - Separate item #7 from item #6. Use screwdriver or similar instrument to remove all four (4) marked knockouts (to allow proper lineup with screws of item #6).
 - Insert item #6 back into item #7.

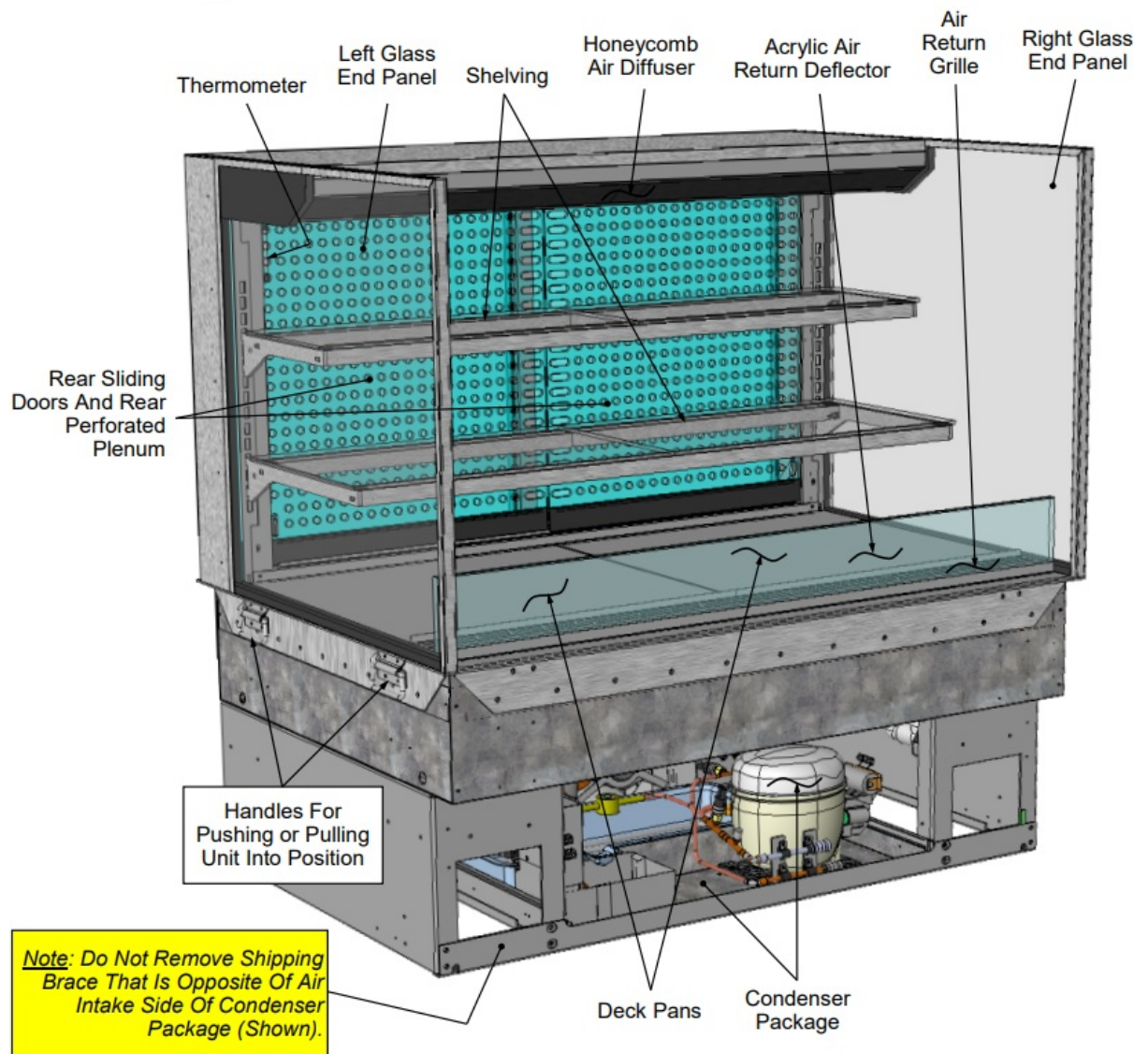
- Reattach item #7 (with #6 inserted at underside) to case via side bracket hooks (item #5) & upper magnets (item #4).
- Adjust item #6 until it is at the proper 'flush to floor/cabinet' position again. Attach item #7 to #6 with (2) screws at each end of item #6 through the (2) obround knockouts at each end.



CASE DESIGN

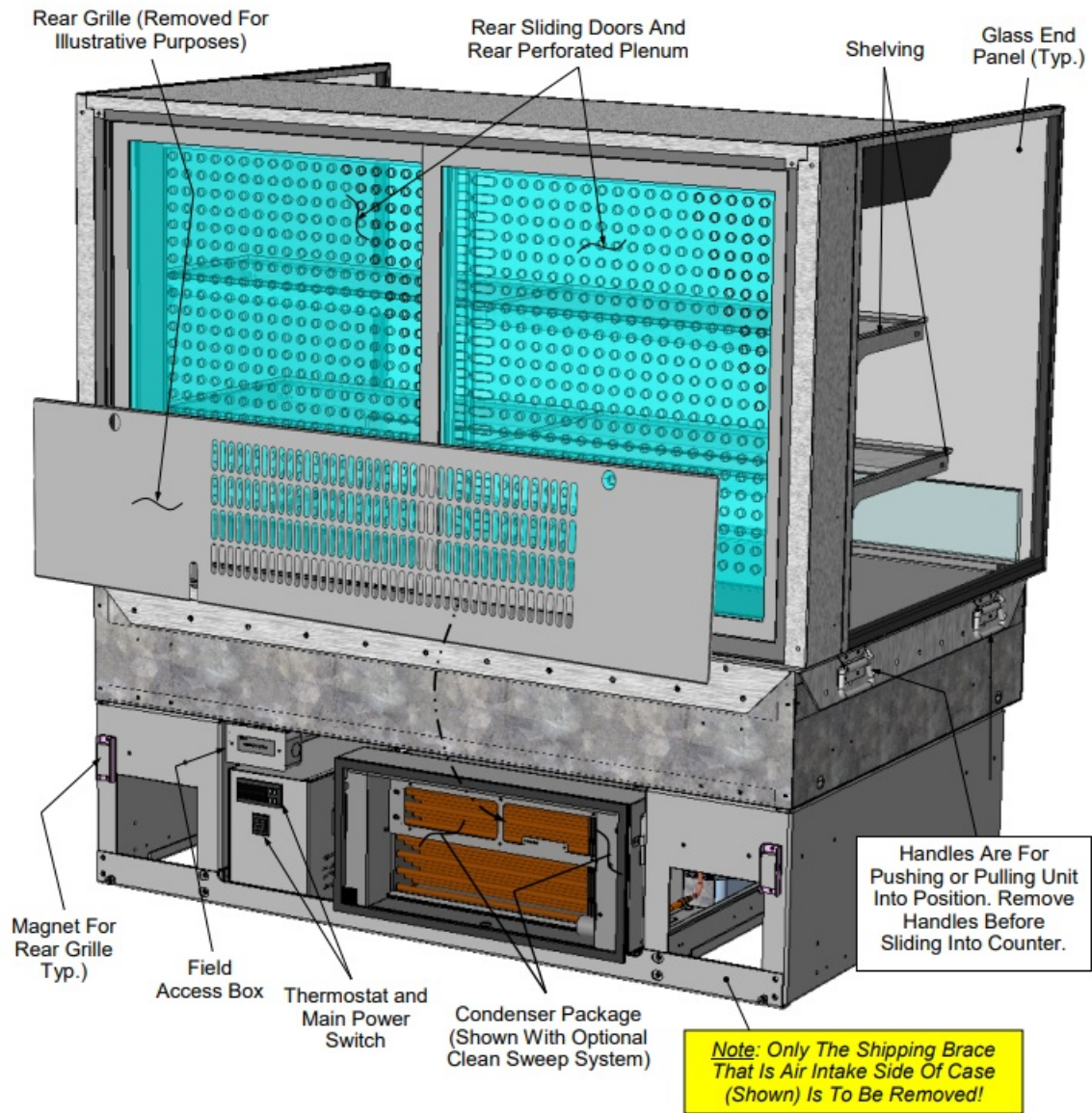
1. Front View Of Slide-In, Self-Service Merchandisers

- Model NE4827RSSV is illustrated below.
- Front toe-kick has been removed for illustrative purposes only.
- See next page for rear view.



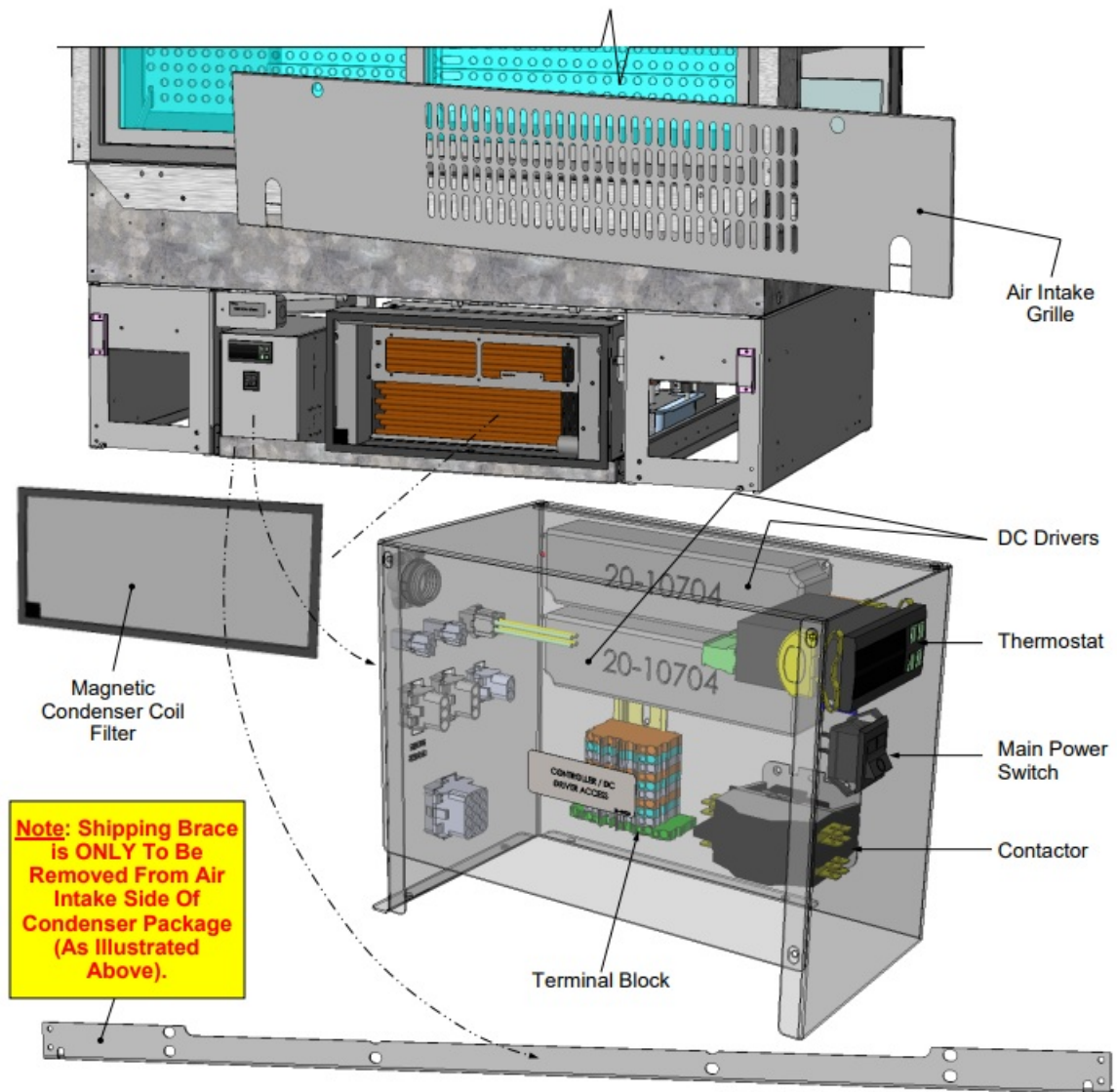
2. Rear View Of Slide-In, Self-Service Merchandisers

- Model NE4827RSSV slide-in unit is illustrated below.
- Handles (at both ends of case) are for pushing/pulling into position.
- Remove handles before sliding into counter.
- See previous page for front view.



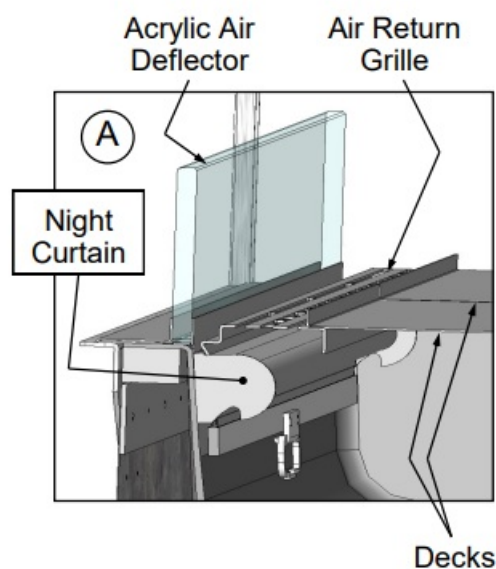
3. Controller / DC Driver Access / Components

- Remove air intake grille with slot/hook method; 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 removing 4 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. Night Curtain: Access and Operation

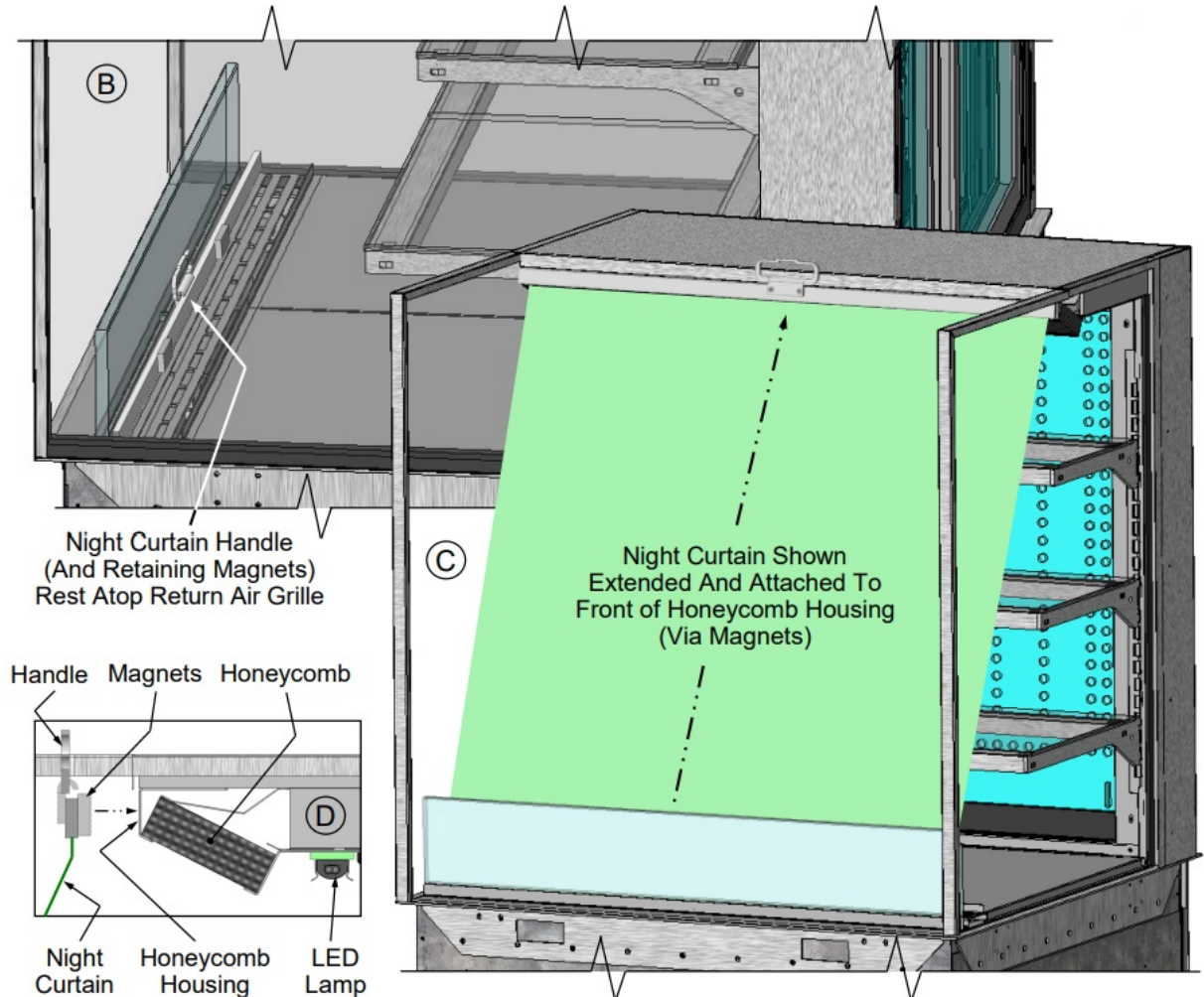
The night curtain saves energy by preventing outside ambient air from entering case. Use night curtain whenever possible.



- **A.** Night curtain is attached to inside of case at underside of air return grille and decks (at case front).
- **B.** Night curtain handle (and retaining magnets) is to rest atop air return grille (as shown in illustration). If not, remove decking; remove (2) screws holding return air grille in place. Reach in, grasp handle and pull

night curtain upward. Replace grille. Reattach screws.

- **C.** Firmly grasp handle and slowly extend night curtain (shown green for illustrative purposes). Attach magnets to front of honeycomb housing.
- **D.** Side view of night curtain attachment to honeycomb housing.
- **Caution!** To retract curtain, carefully break magnet's hold on front of honeycomb housing; slowly rewind curtain until it rests back on return air grille. If allowed to 'snap back' to return air grille, it could be damaged!

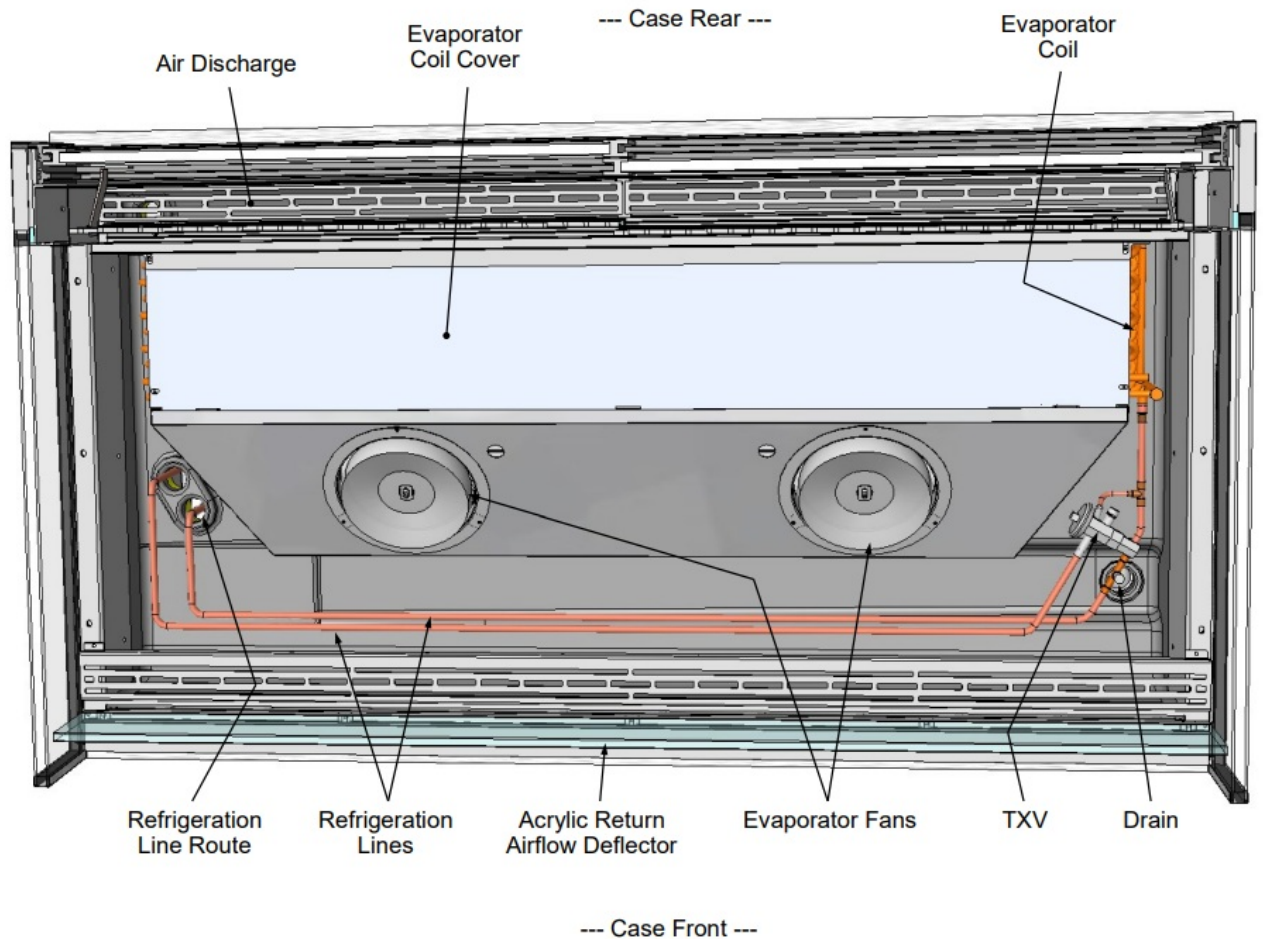


5. Tub Area After Deck Pan Removal

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

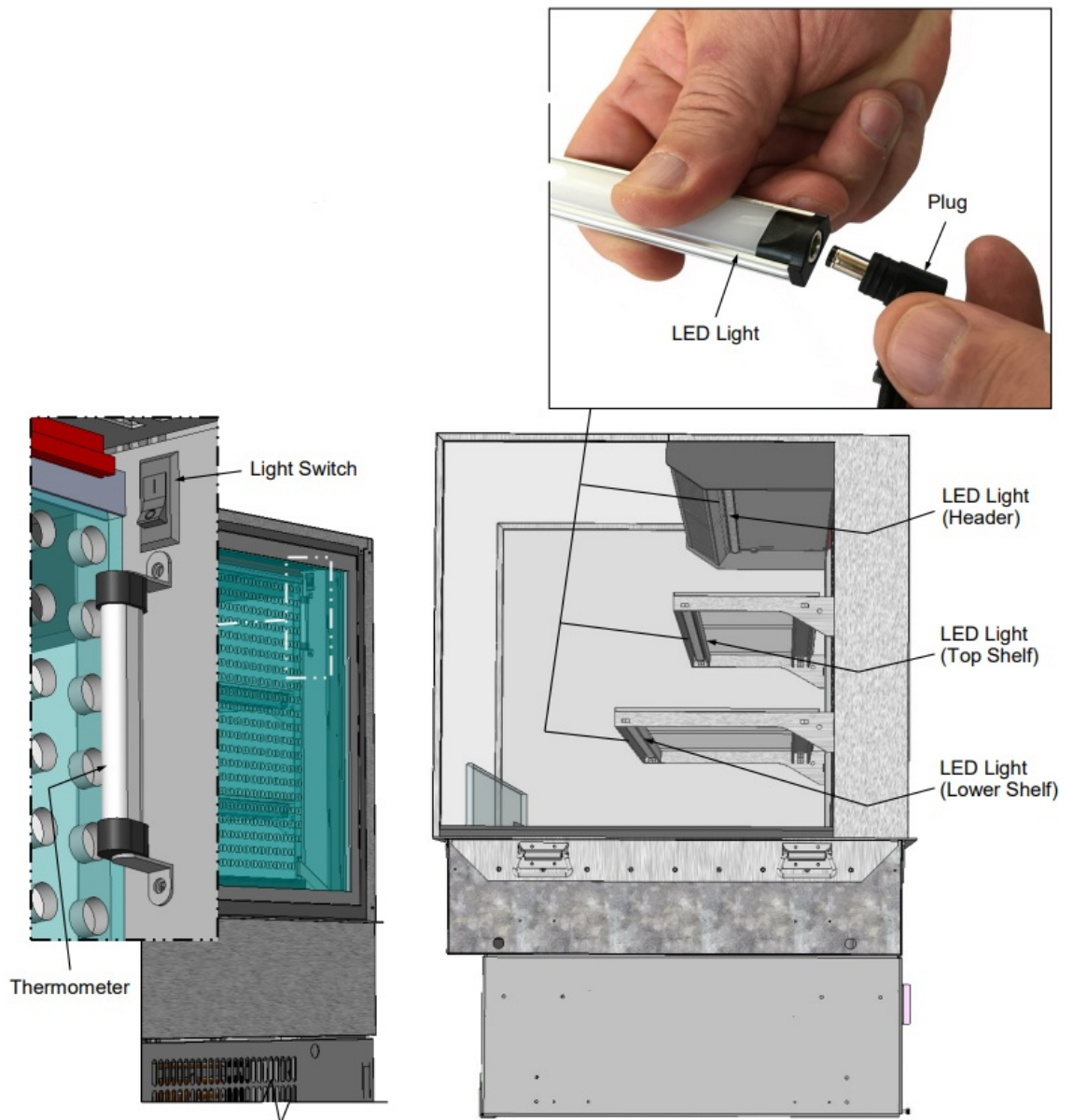
Caution! Turn main power off before accessing tub area.

- 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.



6. LED Light Switch Locations

- Cases with rear sliding doors have light switch in column cover (for easy access at case rear).
- Cases with solid back rear plenums have light switch in header.
- See illustrations below.



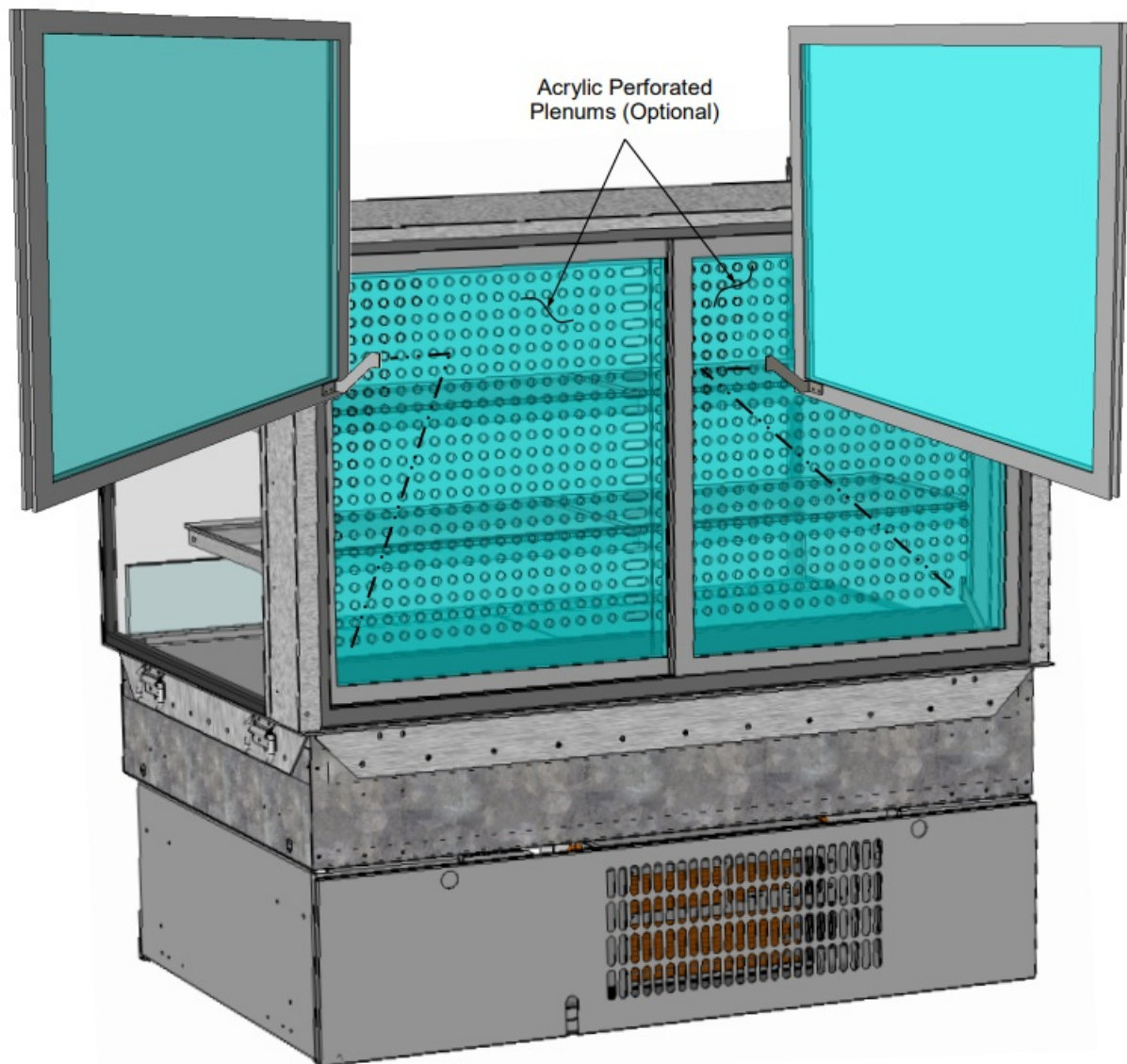
7. LED Lights

- LED lights are located at both header and shelving of case (as shown below-right).
- 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.

8. Thermometer Function & Placement

- Thermometer provides temperature of refrigerated section of case.
- Thermometers reflect warmest air

9. Rear Sliding Door Removal



- 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.

10. **Rear Perforated Plenum Control**

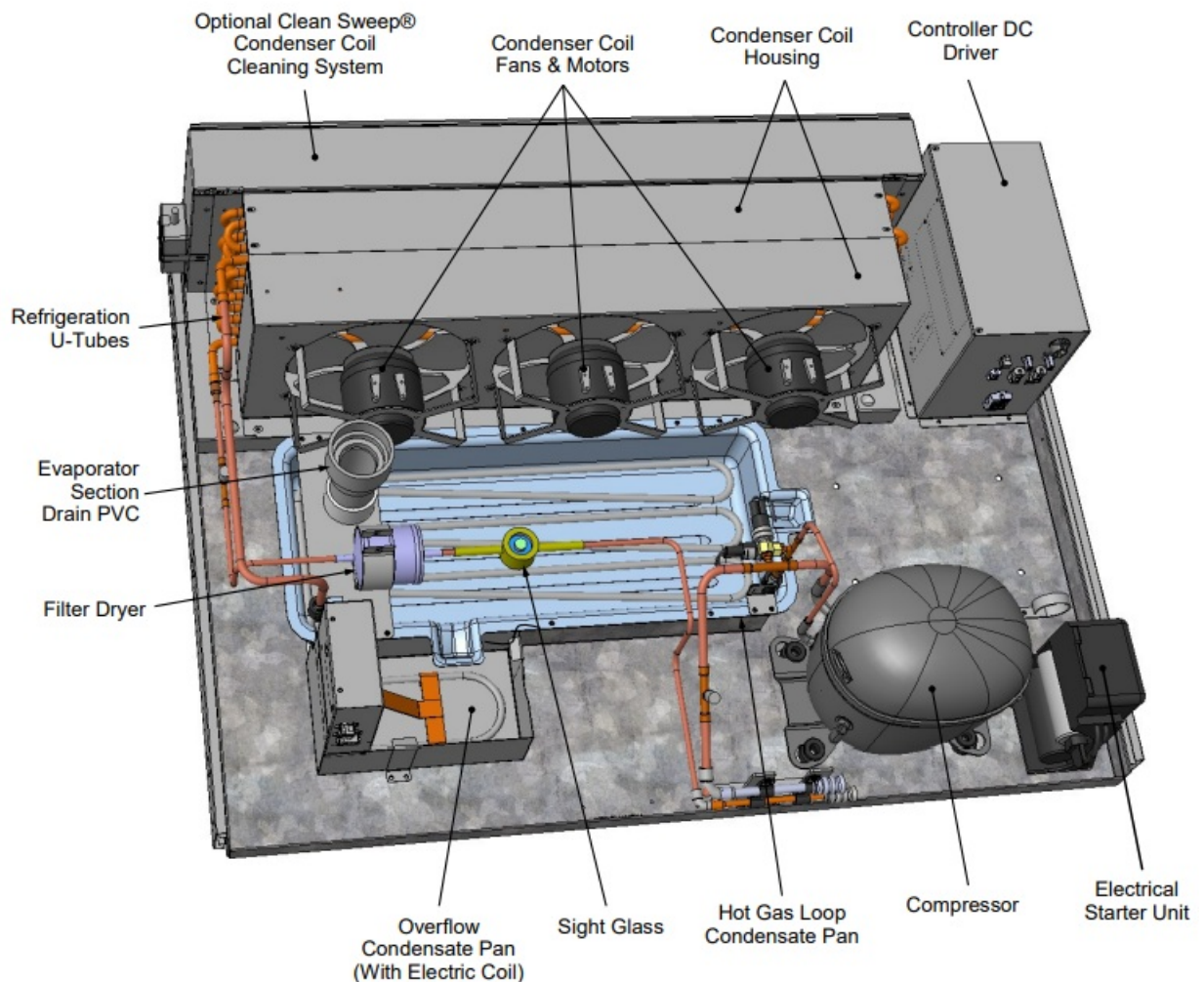
- Optional acrylic perforated plenums are shown. Your unit may have solid back panel.
- Units with acrylic perforated plenums have sliding doors with angled brackets that insert into acrylic perforated plenum slots (as shown below).
- As doors open and close, acrylic perforated plenums follow.

11. **Condenser Package (Self-Contained Units Only)**

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

Condensate Package Configuration

- Illustration below may not reflect every feature or option of your particular merchandiser.



PRODUCT PLACEMENT

PRODUCT PLACEMENT / HONEYCOMB AIRFLOW CONSIDERATION / LOAD LINES

- **Product Placement**

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

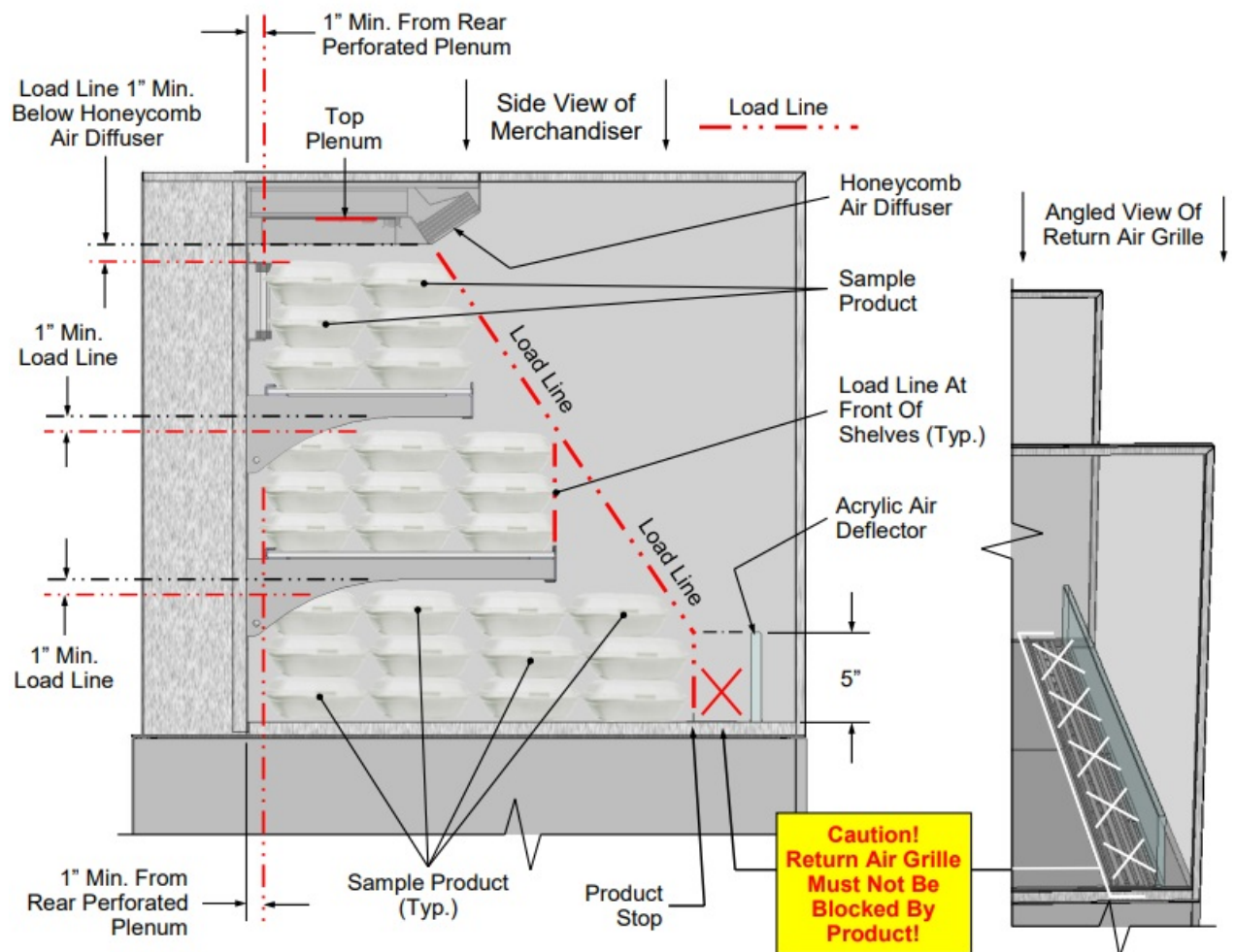
- **Honeycomb Airflow Consideration**

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

- **Load Lines**

- Load lines limit where product can be placed and/or stacked in case.
- Do not allow product to break load line between honeycomb air diffuser and return air grille.
- Do not stack product nearer than 1" to underside of honeycomb air diffuser.
- Do not stack product nearer than 1" to underside of shelves.
- Do not stack product nearer than 1" from rear plenum.
- Do not stack product on return air grille.
- Do not allow product to hang over front of shelves.

- Do not allow product on decks to hang over product stop.
- See illustration below.



CLEANING SCHEDULE

CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)

FREQ.	
Daily	Glass Surfaces: Clean side glass 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	Rear Panels, 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	<p><u>Acrylic Surfaces (Sneeze Guard/Optional Security Cover and/or Perforated Plenums) :</u></p> <ul style="list-style-type: none"> · <u>Clean</u>: 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. · <u>Rinse</u>: Use pure water in spray bottle to rinse. · <u>Dry</u>: Use soft, clean cloth (rather than abrasive paper towel). · <u>Avoid</u>: 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. · <u>Polishing</u>: Buff with light coat of automobile paste wax or plastic cleaner/polish. · <u>Scratches</u>: Use high quality buffing compound. Carefully follow instructions.
Daily	<p><u>Stainless Steel Surfaces :</u></p> <ul style="list-style-type: none"> · Wash with a solution of hand dishwashing liquid detergent and water or a solution of baking soda and water. Rinse and polish dry with paper towel or soft cloth. · Never use scouring powders or steel wool as they will scratch stainless steel. · 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	<p><u>Magnetic Condenser Coil Filter (Self-Contained Units Only):</u></p> <ul style="list-style-type: none"> · 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: <ol style="list-style-type: none"> 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. Submerge 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.

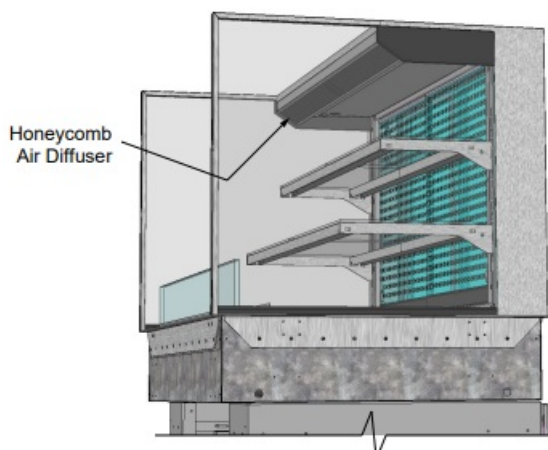
Quarterly	<p><u>Under Case Cleaning:</u></p> <ul style="list-style-type: none"> · If there is adequate space between underside of case and floor (or base of cabinetry), thoroughly clean as directed below. · If there is NOT adequate space between underside of case and floor (or base of cabinetry) to thoroughly clean, remove lower rear grille (held to case by magnets). > If unit is remote, clean as directed below. > If unit is self-contained, slide condenser package out from under case for greater access and clean as directed below. · Use vacuum with brush to remove all dust, dirt, food particles or residue from underside of case · · Replace lower rear grille when cleaning process is complete.
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PREVENTIVE MAINTENANCE

FREQ.	INSTRUCTIONS
Quarterly	Condensing Coil: <ul style="list-style-type: none"> Remove rear grille to access area. Simply lift up and off. Roll/slide out condenser package. Note: 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	Condenser Package: <i>Caution! Disconnect power from case before cleaning!</i> <ul style="list-style-type: none"> 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 rear 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. Replace rear grille to case (no screws required).
Quarterly	Under Case Cleaning: See previous page for instructions.
Quarterly	Tub Area (Evaporator Coil, Drain, Fans, Brackets, Etc.): Caution! Disconnect power from case before cleaning tub area. <ul style="list-style-type: none"> 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.
Quarterly	Honeycomb: Check honeycomb air diffuser to determine if it is dirty. If dirty, remove from case. See next page for cleaning specifics.

WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

NOTE: PREVENTIVE MAINTENANCE IS TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ON-LY. Preventive maintenance should be performed quarterly (unless conditions warrant a more frequent replacement cycle).



- **Honeycomb Air Diffuser Removal**

- **A.** Wedge non-metallic device of suitable strength (such as a ballpoint pen or stylus) between honeycomb and end panel.

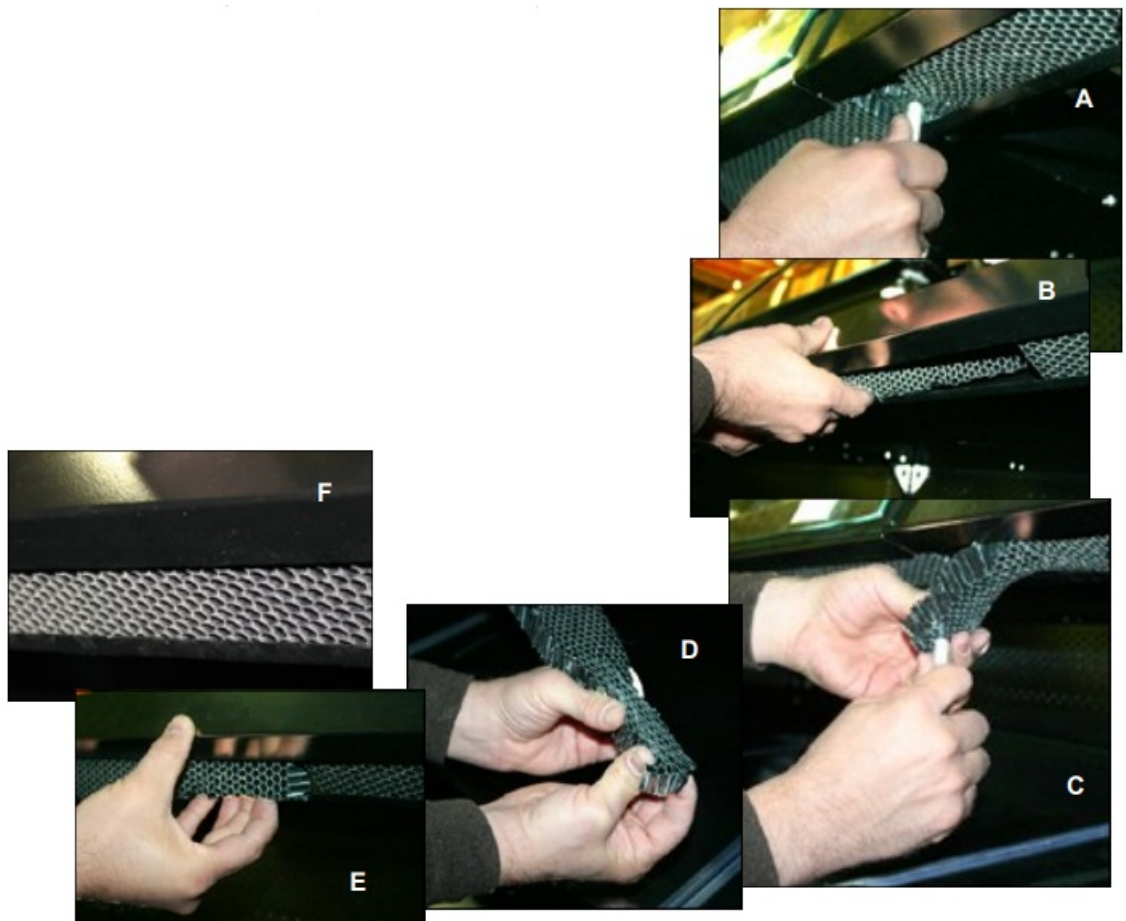
Caution! Use care not to dislodge the heating wire (that prevents condensation on the honeycomb retainer).

- **B.** Apply pressure to collapse the honeycomb to allow it to be pulled out of honeycomb retainer.
- **C.** Pry downward & away from honeycomb retainer.

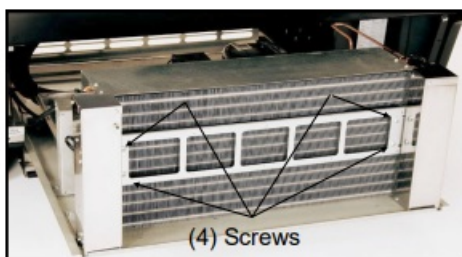
Clean honeycomb with warm water and soap solution. Submerge if necessary. Use brush to dislodge stubborn or sticky residue. Dry by using vacuum's 'blow mode'.

Honeycomb Air Diffuser Installation

- **D.** Squeeze honeycomb into the honeycomb retainer.
- **E.** Carefully slide honeycomb into place.
- **F.** Adjust honeycomb so that it fits flat against retainer. It must not be wavy or out of position.



FREQUENCY	INSTRUCTIONS
Quarterly	<p><u>Optional Clean Sweep™ Condensing Coil Cleaner:</u> <i>Disconnect power from case before servicing the Clean Sweep™ Condenser Coil Cleaner!</i></p> <ul style="list-style-type: none"> Remove rear 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. <i>Caution! Coil fins are sharp. Handle with care!</i> Reattach Clean Sweep™ rail to condensing unit (4 screws). Slide/roll condensing package back under case. Replace rear grille to case (4 screws). See photos below.

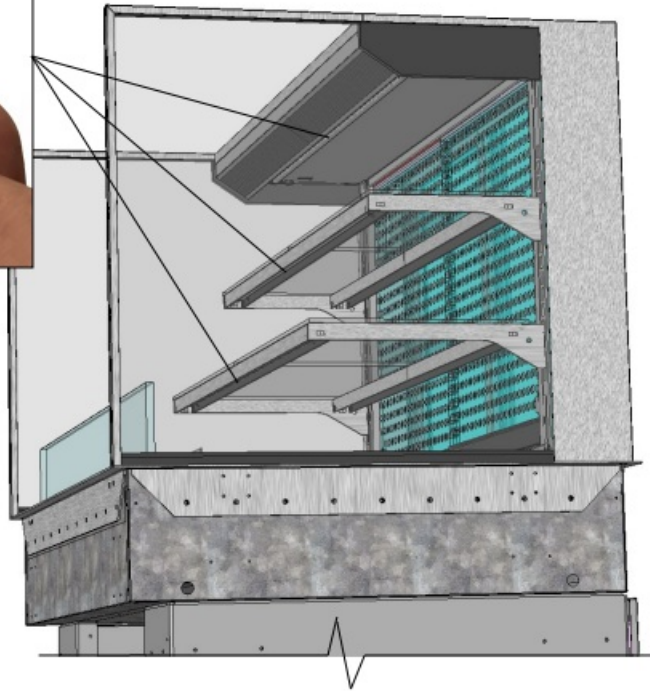
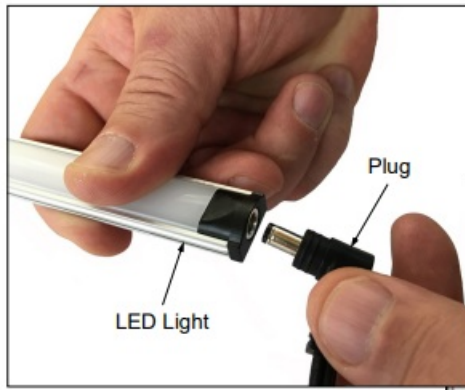


--- Above photos are taken after rear grille has been removed from case ---

TROUBLESHOOTING

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 / NSF® TYPE / 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.
	<ul style="list-style-type: none"> • 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	<p>Check that light switch is in the <i>ON</i> position.</p> <ul style="list-style-type: none"> • See CASE DESIGN, CONT'D: LED LIGHT SWITCH / 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.
	<p>Check that ALL of the light plugs are properly connected to the LED light.</p> <ul style="list-style-type: none"> • Plug must be inserted ALL THE WAY into the LED light orifice (with no gap). • See illustrations below-left.
	<p>Power may not be reaching the case.</p> <ul style="list-style-type: none"> • Contact store management to have trained service provider perform troubleshooting. • Troubleshooting to be performed by trained service providers only is on next page.
	<p>If case light still do not come on, it may need to be replaced.</p> <ul style="list-style-type: none"> • 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	<p>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:</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. • 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 environments, maximum conditions are to be 55% humidity / 80° Fahrenheit. See serial label (at case rear near main power switch) for NSF® Type of your case.
	Check that electric coil overflow condensate pan is properly plugged in or connected.

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 <i>TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)</i> section in manual (previous sheet) for most common troubleshooting solutions.	
	<p>Check power.</p> <ul style="list-style-type: none"> · 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.	
	<p>Check that magnetic air filter (attached to rear grille) has been cleaned.</p> <p>See <i>CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)</i> section in operating manual for instructions.</p>	
	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.	

CONDITION	TROUBLESHOOTING
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.
	<p>Determine if temperature controller settings are properly set. <i>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.</i></p>

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.

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

Serial Label Location & Information Listed / Technical Information & Service

- Serial labels are affixed at a wide range of places (on the header, near the thermostat, at case rear, behind panels/toe-kicks, on electrical boxes, etc.).
- Serial labels contain electrical, temperature and refrigeration information, as well as regulatory standards to which the case conforms.
- Sample serial label shown below.
- For additional technical information and service, see the TECHNICAL SERVICE page in this manual for instructions on contacting Structural Concepts' Technical Service Department.

Structural Concepts®

888 E. Porter Rd - Muskegon, MI 49441

Reveal

Blend

Harmony

Impulse

Oasis

Fusion

Addenda

Grocerant



3048256

Conforms to UL Std. 471

Conforms to NSF/ANSI Stds. 2 & 7

CERTIFIED TO CAN/CSA

STD C22.2 NO 120

Super Heat Temp

Defrost

6-8 °F

6 defrosts per day, 45 °F

ELECTRICAL RATING

REFRIGERANT

DESIGN PRESSURE

MINIMUM CIRCUIT AMPACITY

MAXIMUM OVERCURRENT

120/1/60 16 A

R513A AMOUNT 50 OZ

HIGH 186 LOW 88

20A

20A

FOR PARTS AND SERVICE

CALL 1-800-433-9490

SCAN FOR PRODUCT LITERATURE



SAMPLE ONLY

SAMPLE ONLY

TYPE II DISPLAY REFRIGERATOR: THIS EQUIPMENT IS INTENDED FOR USE IN AN AREA WHERE THE ENVIRONMENTAL CONDITIONS ARE CONTROLLED AND MAINTAINED SUCH THAT THE AMBIENT TEMPERATURE DOES NOT EXCEED 80 °F (27 °C).

PROGRAMMABLE CONTROLLER



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



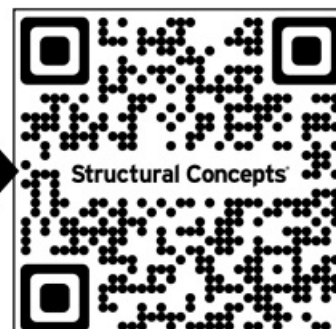
Carel® iJF Platform



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

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

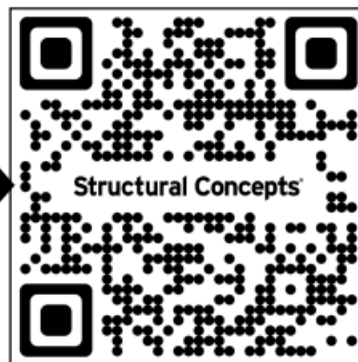
DAYS/HOURS AVAILABLE: MONDAY – FRIDAY (CLOSED HOLIDAYS) 8:00 a.m. TO 5:00 p.m. EST

YOU MUST HAVE THE FOLLOWING INFO AVAILABLE BEFORE CONTACTING STRUCTURAL CONCEPTS:
SERIAL NO. / MODEL NO. / STORE NO. / STORE ADDRESS / DETAILS (PHOTOS, LEAK LOCATIONS,
DAMAGE, STORE'S AMBIENT CONDITIONS, ETC.)


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

> If Viewing This Document on Smart Phone, Tablet or Computer, Select/Click On The QR Code at Right.

> If Viewing This Document In Print (Hard Copy), Scan The QR Code at Right With Your Smart Phone or Tablet.



Documents / Resources

	<p>Structural Concepts NE4827RSSV Slide In Self Service Merchandisers [pdf] User Manual NE4827RSSV Slide In Self Service Merchandisers, NE4827RSSV, Slide In Self Service Merchandisers, Service Merchandisers, Merchandisers</p>
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References

- [P65Warnings.ca.gov](https://www.p65warnings.ca.gov/)
- [SC Delivering Fresh. Always. | Structural Concepts](#)
- scnv.io/6nkQ
- scnv.io/Qixy