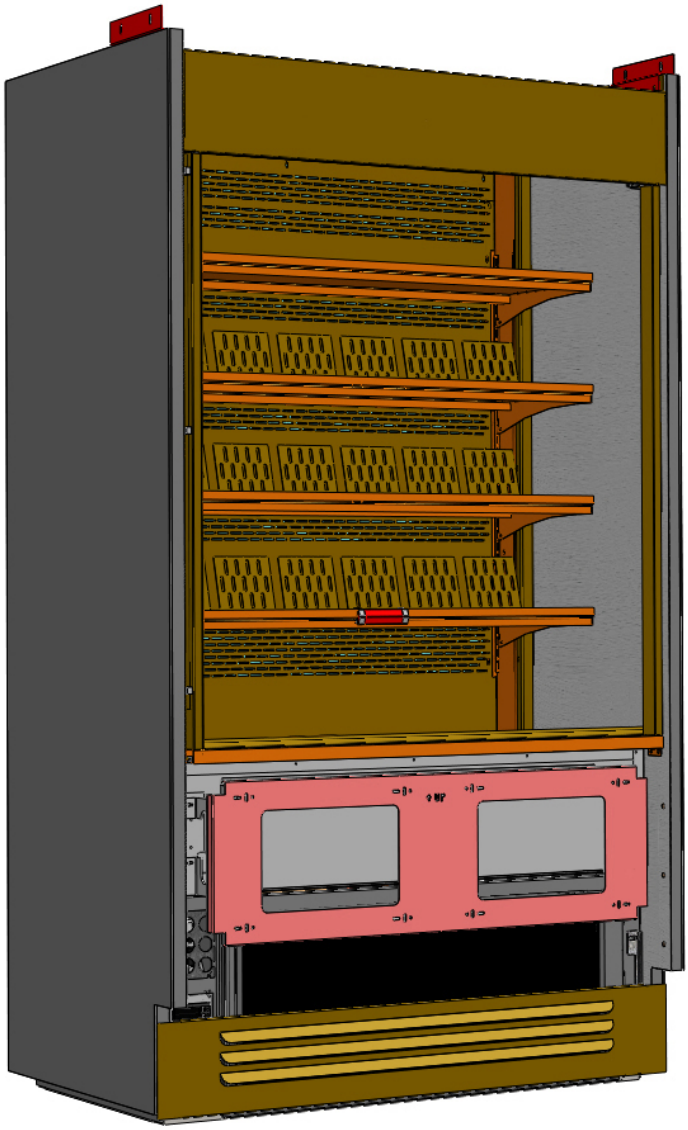
READ AND SAVE THESE INSTRUCTIONS

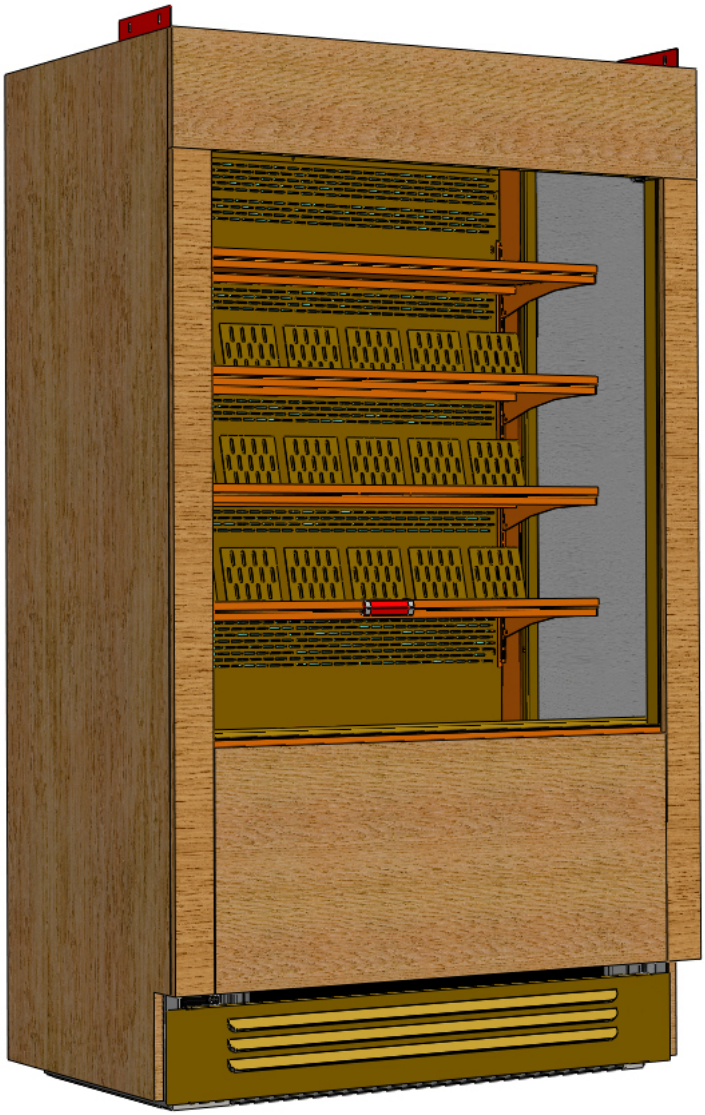
Oasis INSTALLATION AND OPERATING MANUAL

PN 20-00534

MODELS SBB45 & SBB45A CHILLED WALL CASES



Model SBB45 Without Wood Cladding



Model SBB45 After
Customer-Supplied Wood Cladding
Has Been Attached to Case

NOTE: SEE *LOAD LEVEL GUIDE / TEMPERATURE GUIDE* SECTION IN THIS MANUAL FOR GUIDELINES ON MAINTAINING PROPER PRODUCT TEMPERATURE DURING PRODUCT PLACEMENT.

Model SBB45……..46 5/8”L* x 27 3/4”D x 79 1/8”H~
Model SBB45A……..46 5/8”L* x 27 3/4”D x 79 1/8”H~

Includes End Panels ~ With Adjustable Levelers Extended 1 1/4” Below Base Frame

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

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OVERVIEW

- These Structural Concepts® Oasis Self-Service Refrigerated cases are designed to merchandise packaged bakery products at between 33 °F [1 °C] and 38 °F [4 °C] / product temperatures.
- This case should be installed and operated according to this Installation and Operating Manual to ensure proper performance.
- Improper use will void warranty.

NSF® TYPE

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

- For NSF® Type 1 Conditions (most cases): ambient conditions are to be at 55% maximum humidity and maximum temperatures of 75 °F [24 °C].
- For NSF® Type 2 Conditions: ambient conditions are to be at 60% maximum humidity and maximum temperatures of 80 °F [27 °C].
- If unsure if unit is NSF® Type 1 or 2, 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 compliance guideline.

WARNINGS

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

PRECAUTIONS and WIRING DIAGRAMS

- See next page for ***PRECAUTIONS*** and ***WIRING DIAGRAM*** information.

COMPLIANCE

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

WARNING

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

WARNING

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

WARNING

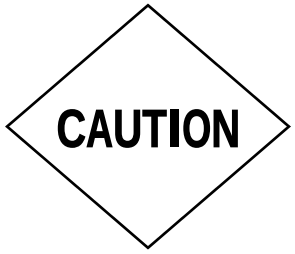
Hot gas condenser coils are very hot!
Turn main power switch OFF and allow to cool before servicing, cleaning or removing from case.

PRECAUTIONS

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

WIRING DIAGRAM

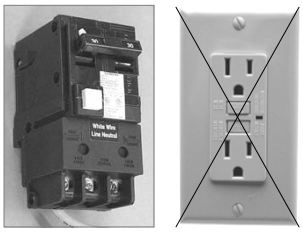
- Each case has its own wiring diagram folded and in its own packet.
- Wiring diagram placement may vary; it may be placed near ballast box, field wiring box, raceway cover, or other related location.



CAUTION! LAMP REPLACEMENT GUIDELINES

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

Fluorescent lamps have been treated to resist breakage and must be replaced with similarly treated lamps.

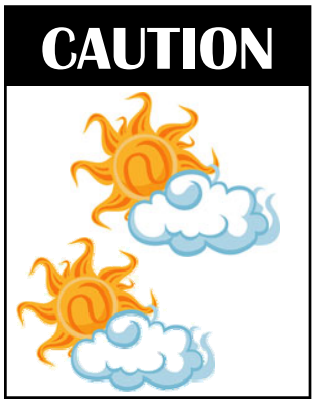


CAUTION! GFCI BREAKER USE REQUIREMENT

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

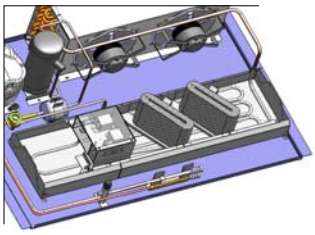
CAUTION! POWER CORD AND PLUG MAINTENANCE

Risk of electric shock. If cord or plug becomes damaged, replace only with cord and plug of same type.



CAUTION! ADVERSE CONDITIONS / SPACING ISSUES

- **Performance issues caused by adverse conditions are NOT covered by warranty.**
- **Seismic bracket MUST be properly attached to structure. See *SEISMIC BRACKET RETROFIT INSTRUCTION SHEET*** for installation specifics.
- **Unit must be kept at least 15-feet from exterior doors, overhead HVAC vents or any air curtain disruption to maintain proper temperatures.**
- **Unit must not be exposed to direct sunlight or any heat source (ovens, fryers, etc.).**
- **Keep at least 8-inch clearance above unit for air discharge.**



CAUTION! CHECK BOTH CONDENSATE PAN AND OVERFLOW PAN

Water on floor can cause extensive damage! Before powering up unit:

- **Condensate pan MUST BE positioned directly under condensate drain.**
- **Overflow pan MUST HAVE single plug connected to its box. Units with optional Clean Sweep™ MUST HAVE two plugs connected.**

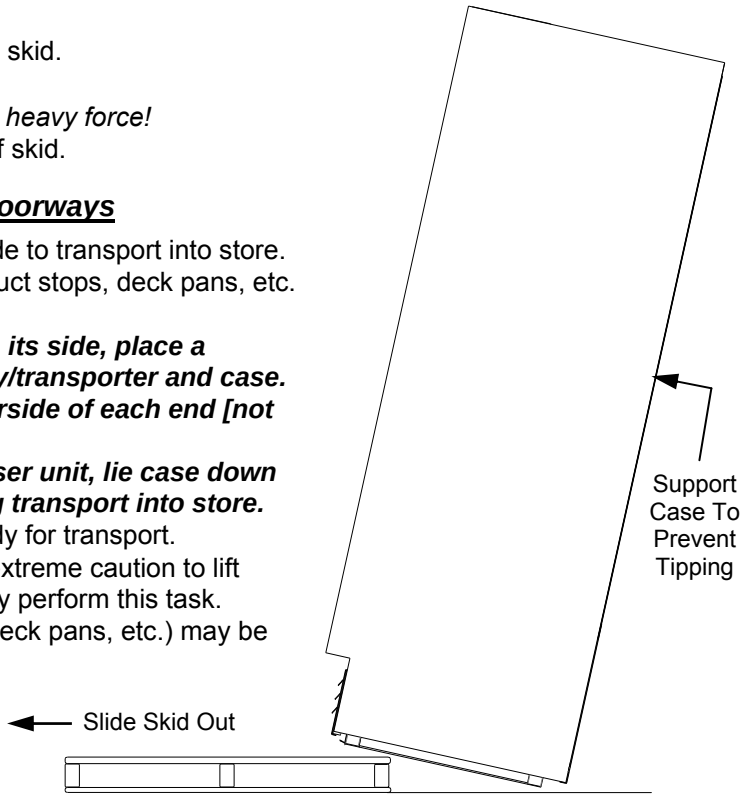
INSTALLATION: SKID REMOVAL / PLACING ON SIDE FOR FITTING THROUGH DOORWAYS

1. Remove Case From Skid (Rails)

- Remove shipping brace that may be securing case to skid.
- Support case to prevent tipping.
- *Caution! Rails can be damaged if case hits floor with heavy force!*
- Carefully slide unit to rear of skid and tip backward off skid.

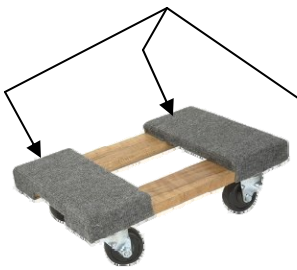
2. Placing Case on its Side for Fitting Through Doorways

- Due to case height, unit may need to be laid on its side to transport into store.
- Before laying case on its side, remove shelving, product stops, deck pans, etc. [any pieces or parts that may shift or fall].
- ***Caution Note 1: To avoid damaging case when on its side, place a protective blanket, felt or styrofoam between dolly/transporter and case.***
- ***Caution Note 2: Place dollys/transporters at underside of each end [not center] of case to prevent damage to case.***
- ***Caution Note 3: To avoid oil leaking from condenser unit, lie case down ONLY on its RIGHT SIDE [as shown below] during transport into store.***
- See below illustration for view of case on its side ready for transport.
- After case has been moved to general location, use extreme caution to lift case upright. Several people will be required to safely perform this task.
- After case is upright, parts (shelving, product stops, deck pans, etc.) may be placed in case.

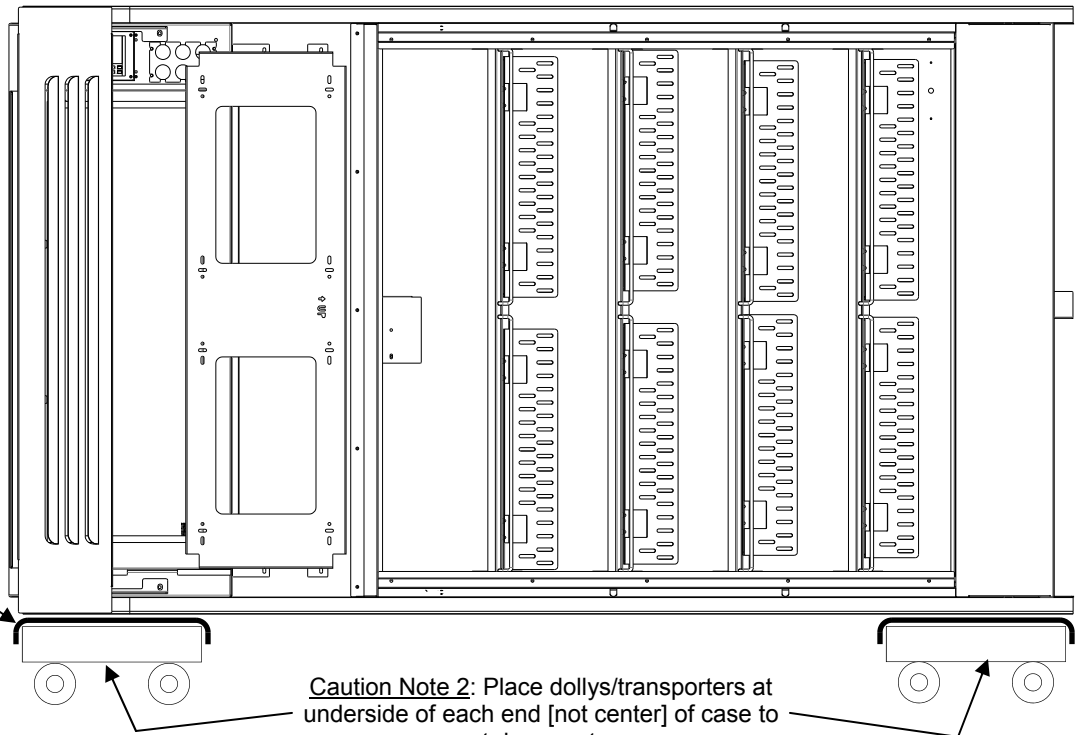


Caution Note 3: To Avoid Oil Leaking From Condenser Unit, Case is to Lie ONLY on its RIGHT SIDE [as Shown at Right] During Transport.

Caution Note 1: To avoid damaging case when on its side, place a protective blanket, felt or styrofoam between dolly/transporter and case.



Sample Dolly / Transporter With Felt/Fabric Protection Shown Above



View of Case on its Side For Transport Through Doorways

INSTALLATION, CONT'D.: REAR PANEL REMOVAL / SHIMMING / SEALING

Caution! Risk of electric shock! Only certified electricians are to access electrical components.

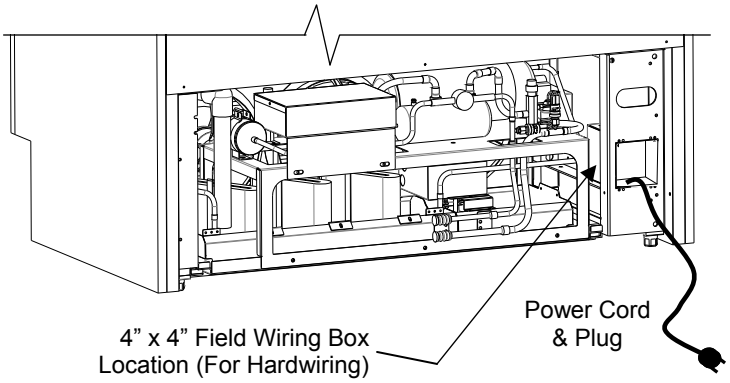
3. Rear Field Access

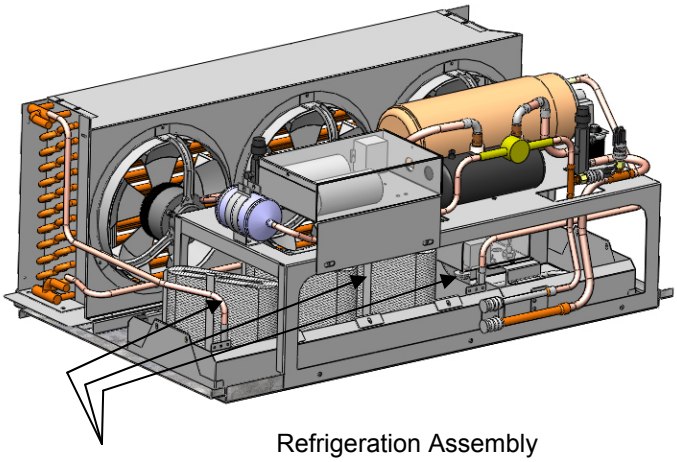
- Note: Access to case rear AFTER installation is extremely limited (without pulling case out from wall).
- To access components at rear of case, remove rear panel retaining screws (see illustration below). Lift panel up and off case rear.
- While rear panel is removed, (and before moving case into position), check that evaporator pan is positioned directly under condensate drain.
- Also, before moving case into position, plug cord into wall (or field wire). See illustration at right.
- Caution! To assure proper airflow, replace rear panel when done.
- Slide case into proper merchandising location.

4. Frame Support Rails Must Be Shimmed and Sealed To Floor

- Shims will be provided for all cases that have frame support rails.
- Use shims to level case.
- After case is in position and shimmed, it must be sealed to floor with continuous bead of silicone caulk to prevent entry or leakage of liquid or moisture.
- See below-right illustration of frame support rails.

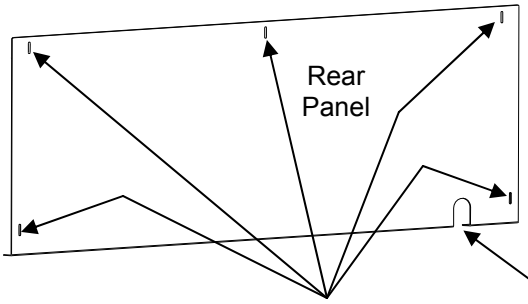
--- Case Rear View / Rear Panel Removed (Shown Below) ---

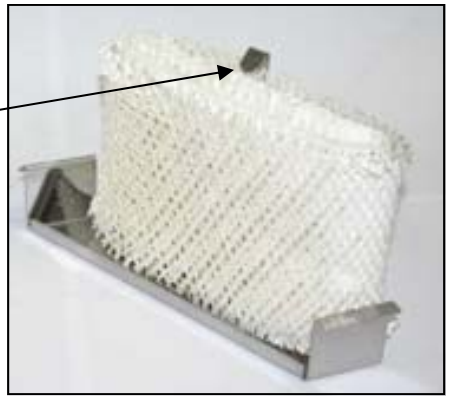


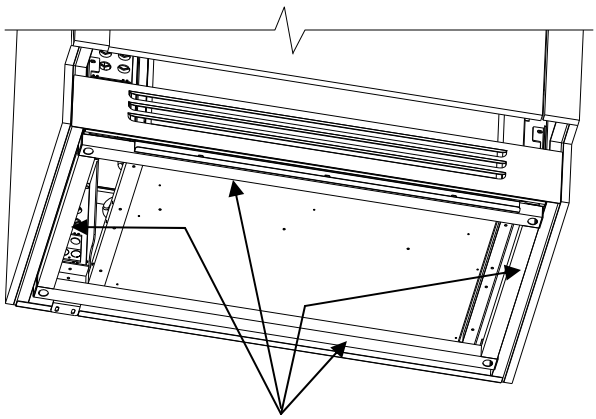


Wicking Material To Be Held in Place With Prongs

Refrigeration Assembly Rear View







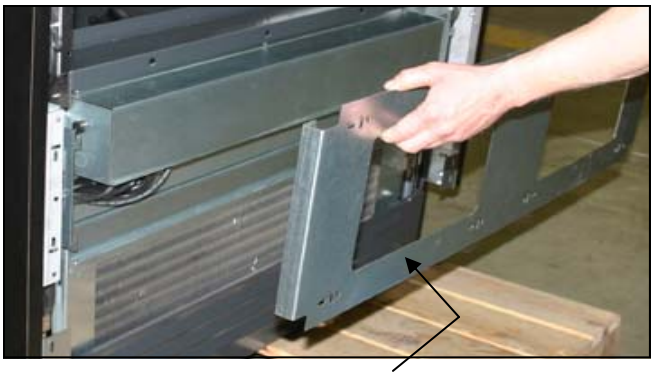
Note: After case is in position and shimmed, it must be sealed to floor with continuous bead of silicone caulk to prevent entry or leakage of liquid or moisture.

5. Remove Front Panel / Remove Lower Front Grille

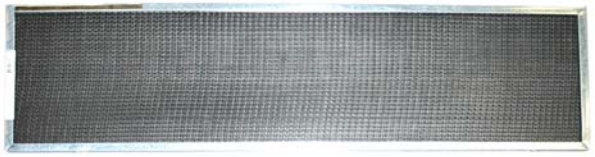
- Remove by lifting up and off hooks.
- No screw removal is required.
- See illustrations at top-right.
- Make certain that magnetic air filter is in place (as shown immediately below and at lower-right).

6. Check That No Shifting or Separation of Refrigeration Assembly Parts Has Occurred

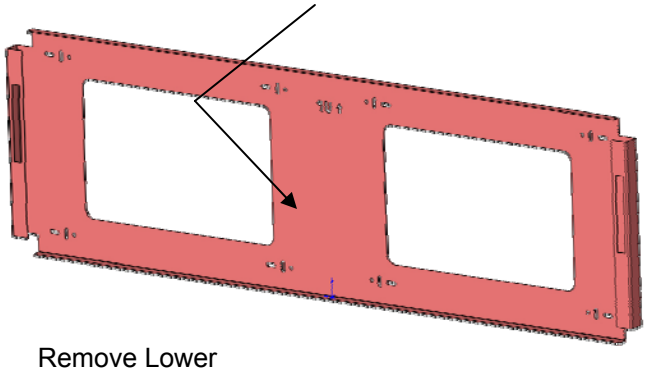
- To check refrigeration assembly, remove the (3) base rail screws keeping it secure during shipment.
- Refrigeration assembly pan rests on plastic glides.
- Slide refrigeration assembly out from under case, and check that no parts have shifted or separated from assembly.
- Also, confirm that wicking material is securely in place (held securely in upright prongs) as shown below-left.



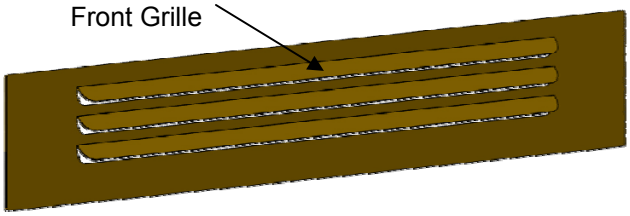
Remove Front Panel From Case
[Shown Rotated in Below Illustration]

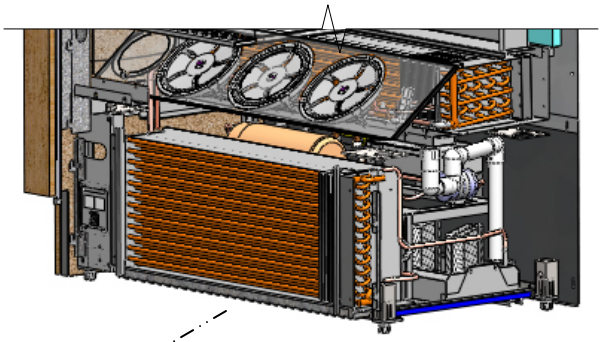


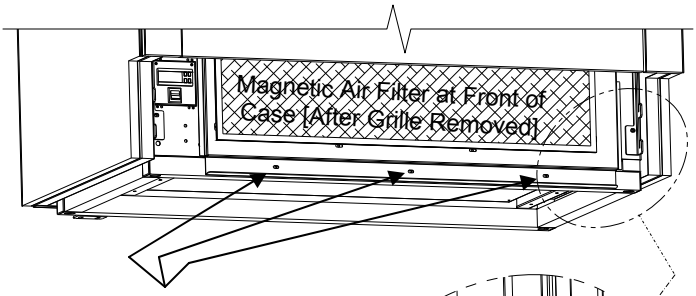
View of Magnetic Air Filter at Front of Case [After Grille Removed]

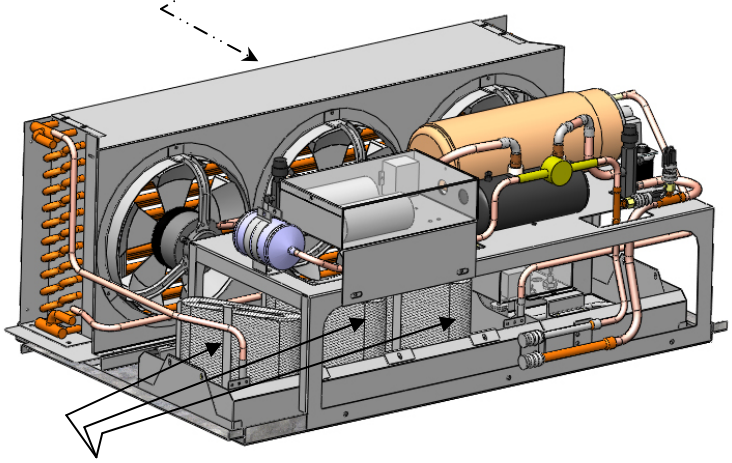


Remove Lower Front Grille





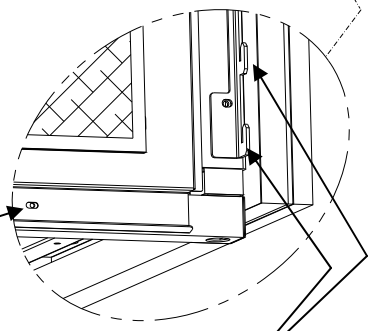




Wicking Material To Be in Place

Refrigeration Assembly [Shown Rotated] Slid Out From Under Front of Case

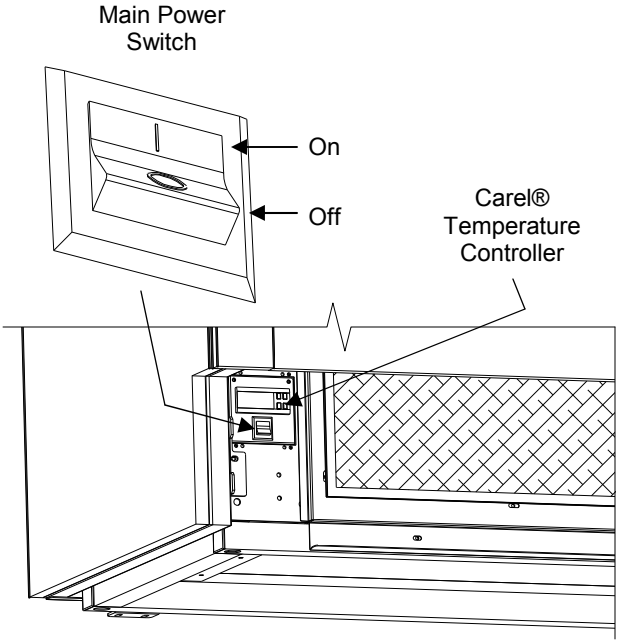
Remove 2 to 3 Base Rail Screws to Allow Refrigeration Package to Slide Out From Under Case



Lift Off Front Panel and Lower Front Grille From Hooks

7. Turn On Power To Case

- *Caution! Before turning on main power switch, confirm that no obstructions to fan blades or other moving parts exist. Lift up deck pans to check for obstructions.*
- Power cord [located at case rear] should already be plugged into outlet. See ***INSTALLATION*** section of this manual.
- If there is no power cord, case is to be field-wired at rear. See ***FIELD ACCESS [CASE REAR]*** section in this manual for specifics on field wiring.
- Access main power switch by removing front grille.
- Main power switch is located on main electrical box, below controller. See illustration at top-right.

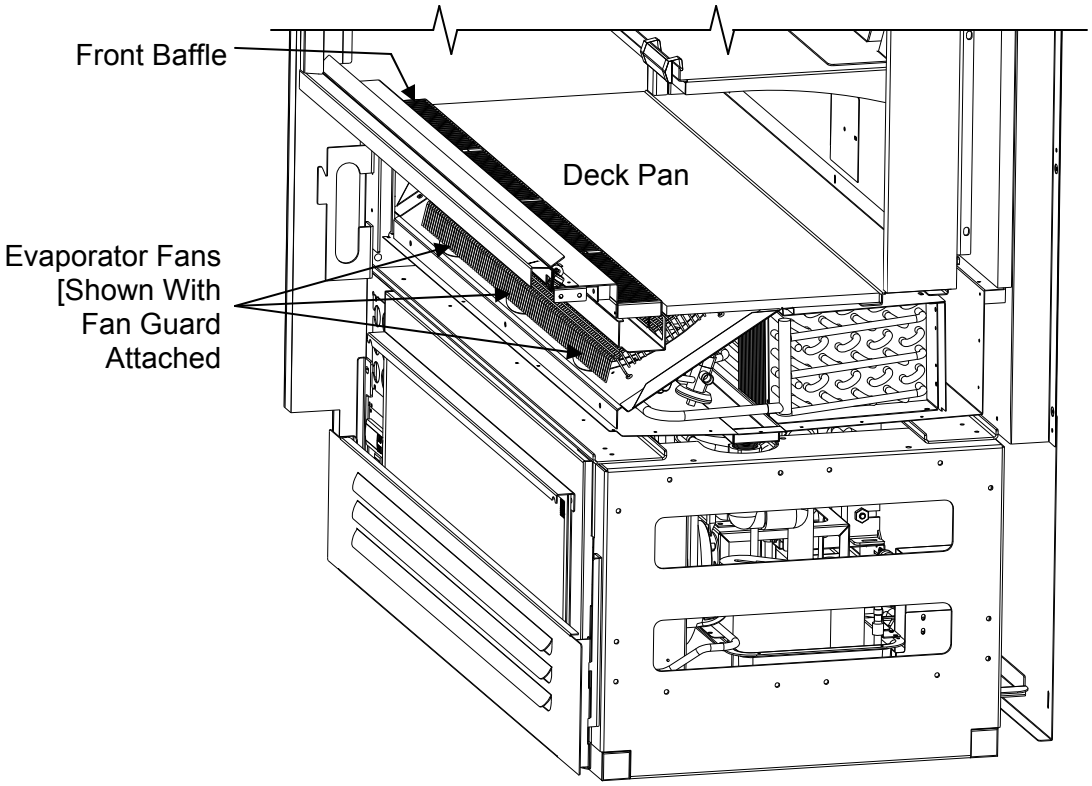


8. Confirm Evaporator Coil Fan Discharge

When main power switch is turned on, refrigeration assembly will energize (see ***CASE START-UP & REFRIGERATION ASSEMBLY ACCESS*** section).

- Evaporator coil fans should turn on.
- From inside of case, check for discharge air from front baffle (shown below), to confirm that fans are functioning properly.
- *Caution! Evaporator fans have protective fan guard to prevent injury caused by spinning fan blades. Do not remove fan guard!*
- Check that cold air is beginning to circulate.
- When the case is in a start up mode or has been idle for a long period of time, a 75 minute run time is required to fully achieve set point temperatures.
- See below illustration.

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

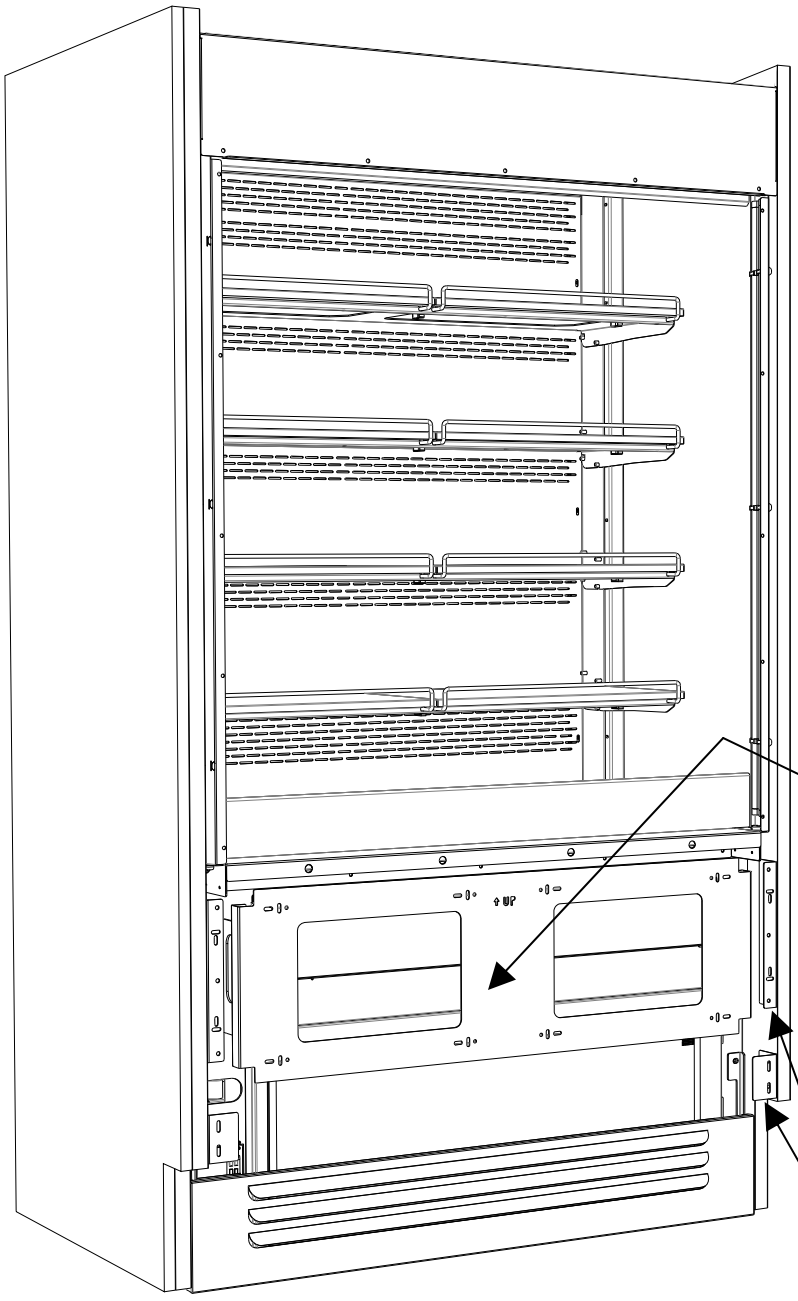


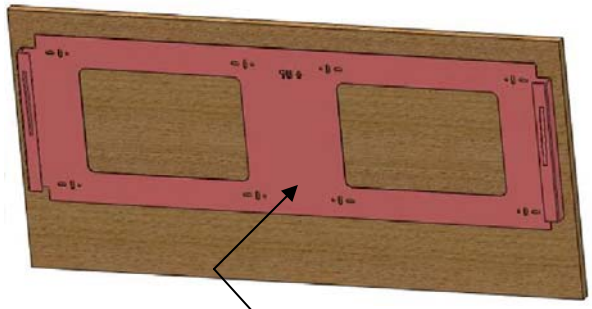
Case shown with End Panel Removed For Illustrative Purposes Only

INSTALLATION, CONT'D.: FRONT PANEL BRACKET REMOVAL & ATTACHMENT TO FRONT PANEL

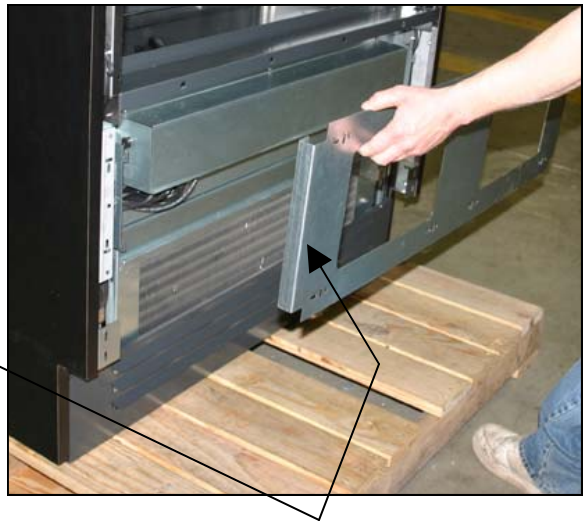
9. Front Panel Bracket Removal

- ***Assembly Note: Front panel bracket is to be removed and attached to front panel [or wood cladding] as part of setup.***
- Brackets with holes (for screws) are provided at specific locations to attach front panel (or wood cladding).
- Illustration and photo (below) shows various locations of brackets to which attach.
- Front panel support bracket is removable WITHOUT screw removal. Simply remove by lifting up and off hooks. See photo below.
- Screws hold lower side brackets in place.
- ***Depending Upon Front Panel (or Wood Cladding) Design, Lower Side Brackets May Be Unscrewed and Removed (To Attach Front Panel or Wood Cladding Pieces). Both Sides.***
- See illustrations below.
- See cover sheet of manual for sample illustrations of BOTH cladded and un-cladded cases.
- ***See more specific front panel attachment instructions on next page.***





View of Front Panel Support Bracket Attached to Front Panel

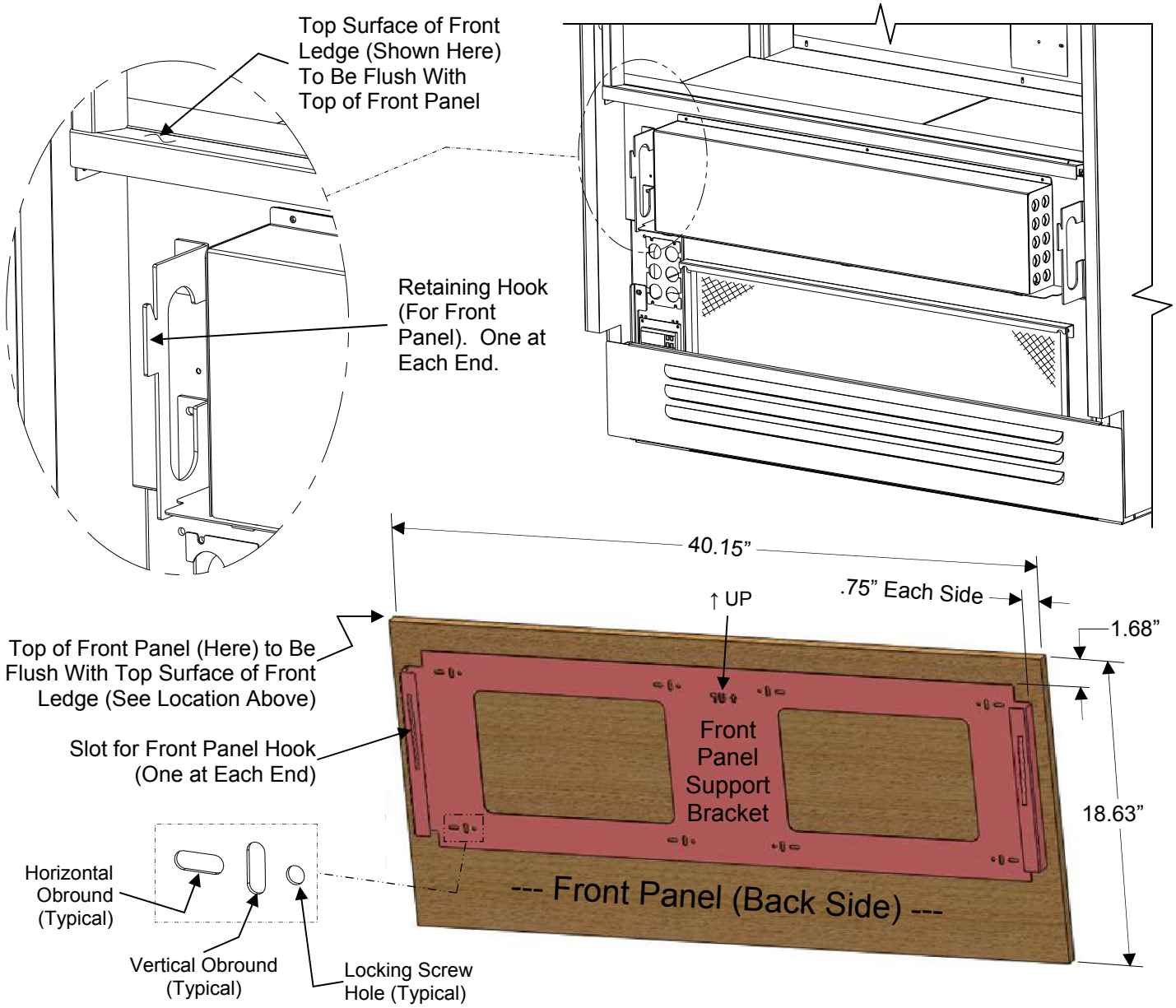


Removable Front Panel Support Bracket Shown Being Removed From Case (Wood Cladding To Be Attached to Bracket and Then Replaced).
Note: No screws required for removal!
See next page for attachment instructions.

Depending Upon Wood Cladding Design, These Lower Side Brackets May Be Unscrewed and Removed (To Attach Wood Cladding Pieces). Both Sides.

10. Front Panel Attachment Instructions, Cont'd

- ***Assembly Note: Case ships without front panel / wood cladding on exterior and is not included with the NSF Certification.***
- Panel brackets with holes (for screws) are provided to attach wood cladding.
- Illustrations show BACK SIDE of front panel being attached to front panel support bracket.
- Place screws into the wood cladding at the four (4) vertical or horizontal obrounds at each of the four (4) corners of front panel support bracket.
- Place the newly assembled front panel onto the four (4) retaining hooks.
- Check that the top edge of the front panel wood piece is FLUSH with the top surface of front ledge (as shown in illustration below).
- Remove and adjust accordingly.
- ***Important! Front panel must be easily removable from case (by lifting up and off retaining hooks). Easy removal is for access to both refrigeration package and base.***
- When proper fit is attained, place screws in the eight (8) LOCKING SCREW HOLES (as shown in illustration below).



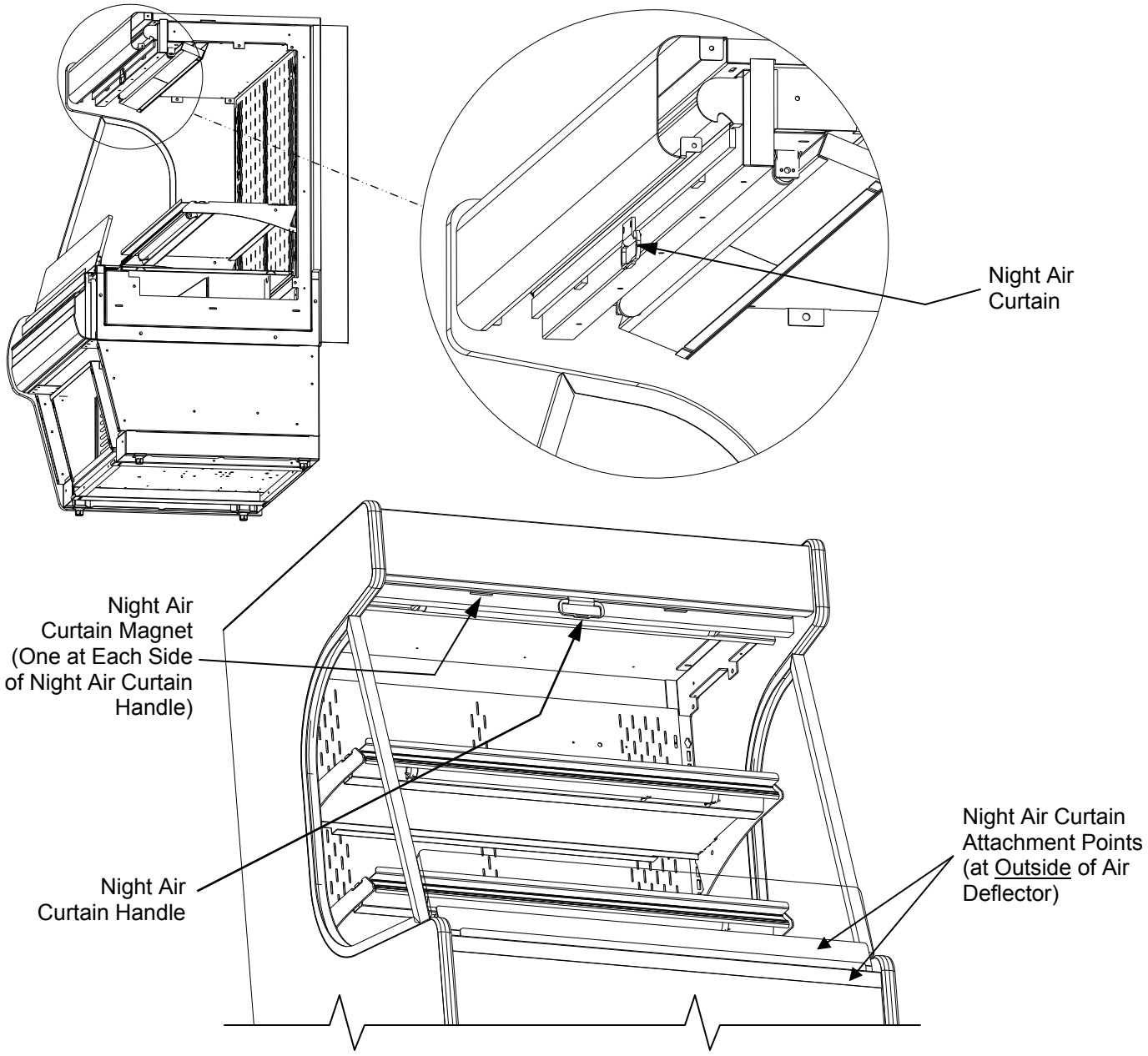
SETUP: OPTIONAL NIGHT AIR CURTAIN OPERATING INSTRUCTIONS

1. Night Air Curtain Operating Instructions

1. Use caution when handling Night Air Curtain.
2. Grasp the handle and pull downward to desired location (see illustration below).
3. Magnets will hold Night Air Curtain in place.
4. To return Night Air Curtain to its retracted position, grasp handle, lift up and away from its magnetic attachment and carefully wind Night Air Curtain back into roll.
5. Caution! Do not allow spring-loaded Night Air Curtain to freely snap back into roll. Doing so can eventually destroy Night Air Curtain's tension and retractability.
6. To entirely detach Night Air Curtain from case, slide Night Air Curtain toward rear of case, freeing it from its 'keyhole' slots. Lift upward and away from case.

Note: For cleaning instructions, see ***CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL*** section in this manual.

NOTE: MODEL SHOWN MAY NOT EXACTLY REFLECT EVERY FEATURE OR OPTION OF YOUR CASE. HOWEVER, GENERAL NIGHT CURTAIN PLACEMENT AND OPERATION IS THE SAME.



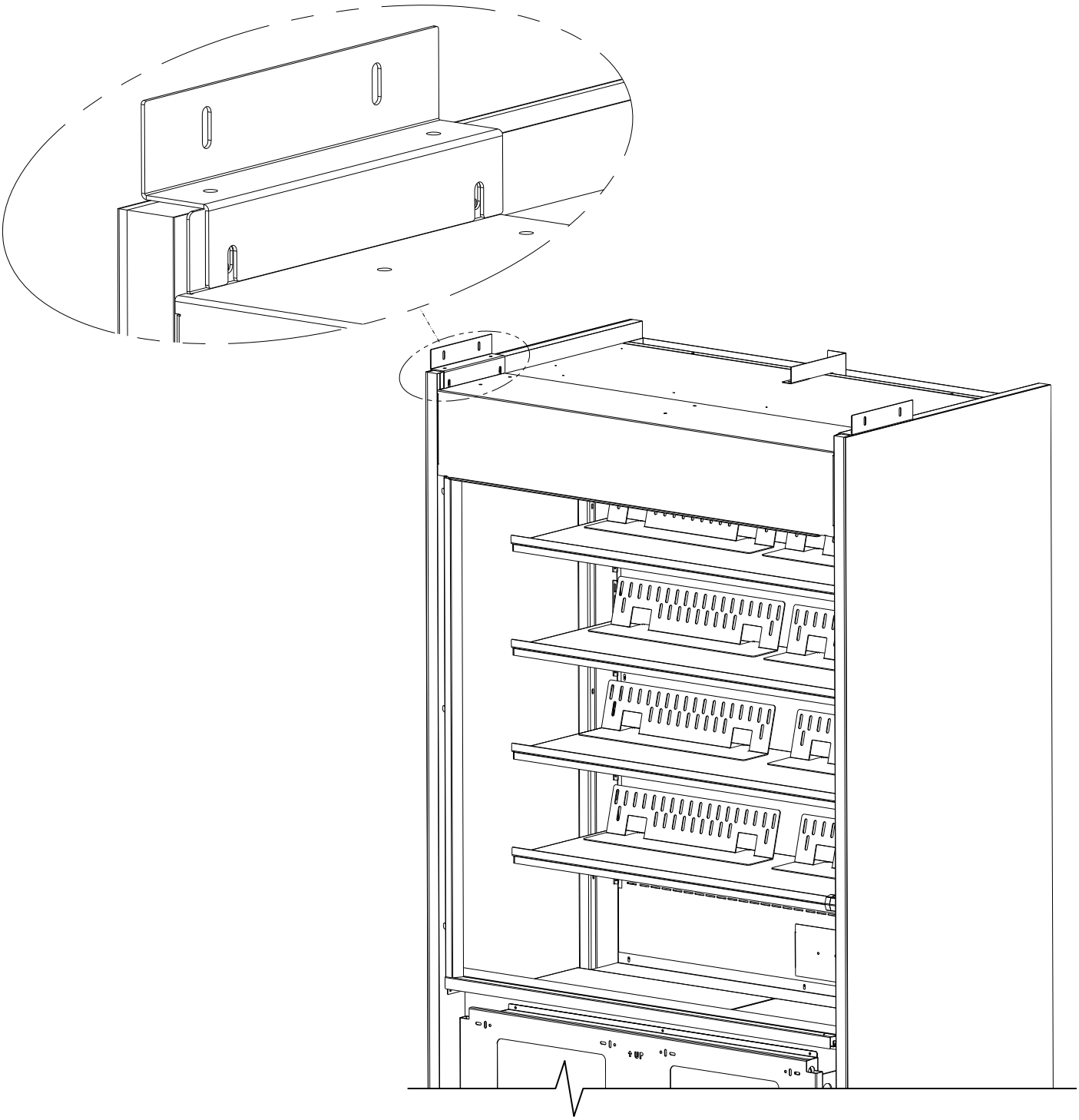
2. Seismic Bracket Retrofit Parts and Instructions

A. Each Kit Consists of the Following:

- Two (2) Brackets
- Eight Wood Screws

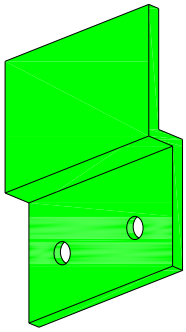
B. Retrofit Instructions:

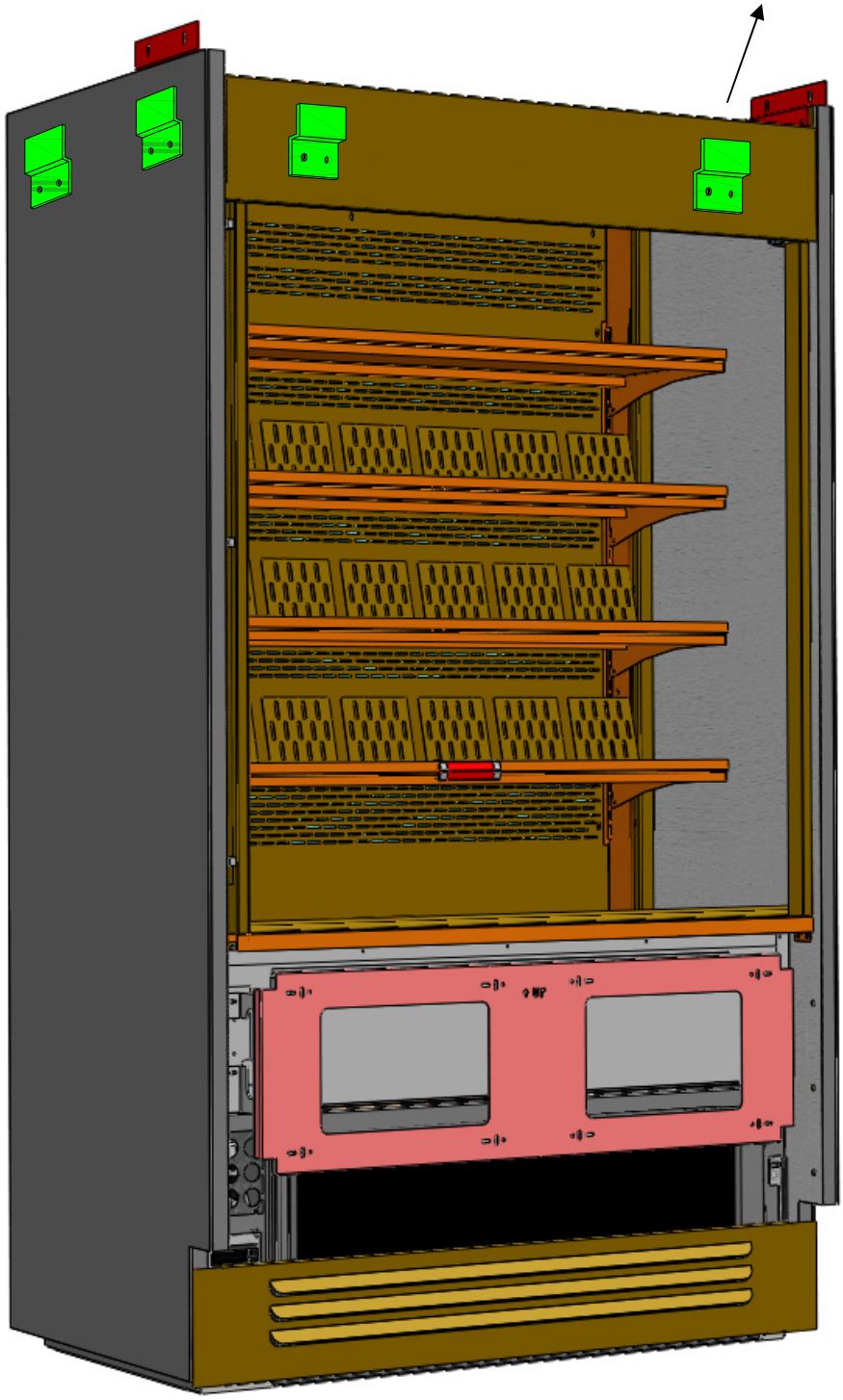
- Position as shown in illustration below (within 1" of front of end panel).
- Use SCC-supplied woodscrews to attach seismic brackets to inside of end panels and into sides of units positioned at left and right of case.
- See illustrations below.

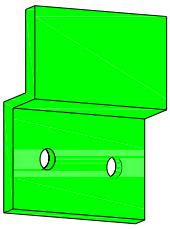


3. Monarch "Z" Clip Retrofit Instructions

- Monarch's "Z" Clip retrofit kit consists of six (6) brackets and their accompanying screws.
- Attach six (6) "Z" Clips to sides and top panel of case; see illustration below for general location.
- Also attach six (6) customer supplied "Z" Clips to the inner wood cladding pieces in corresponding location to those on the case.
- Carefully place wood cladding onto case (as shown locking together in illustration at lower-left).







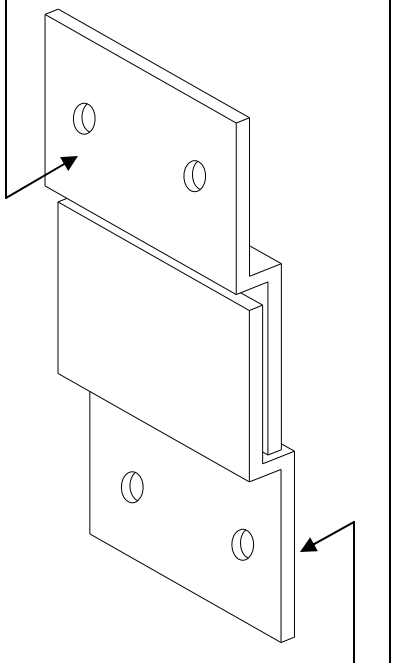
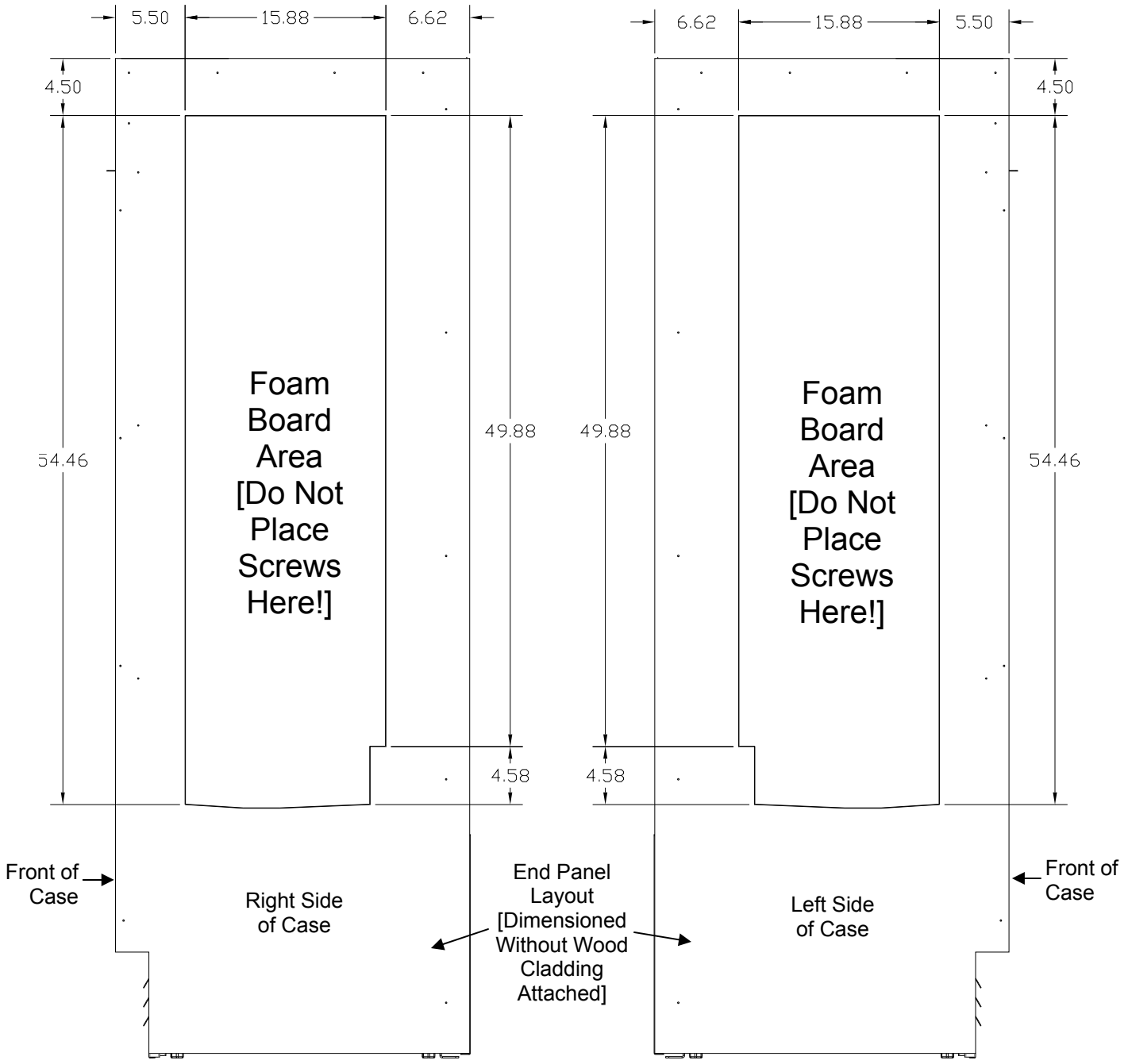


Illustration Above Shows How "Z" Clips Lock Together

4. Wood Cladding Instructions: End Panels

- ***Assembly Note: Case ships without wood cladding on exterior and is NOT included with the NSF Certification.***
- Wood cladding end panels are to be attached to case with adhesive.
- Should screws be required DO NOT SCREW INTO FOAM FILL (see below illustrations for both right and left side of case).
- Should screws be required, DO NOT HAVE SCREWS EXTEND BEYOND 3/4" into end panels. Doing so could pierce into the inner mirror of case and detrimentally affect case integrity..



5. Wood Cladding Instructions: Air Exhaust

- ***Assembly Note: Case ships without wood cladding on exterior and is not included with the NSF Certification.***
- Illustrations below show several cladding designs, but may not reflect your layout.
- Air exhaust from case MUST be allowed to escape unit or product will NOT hold proper temperature.

1. The first design configurations to consider:
- Open space above unit (shown below left).
- In this design, HEADER MAY COME ALL THE WAY UP TO SIDES OF CASE.
- This is acceptable ONLY IF OPEN SPACE ABOVE UNIT is provided for air exhaust.

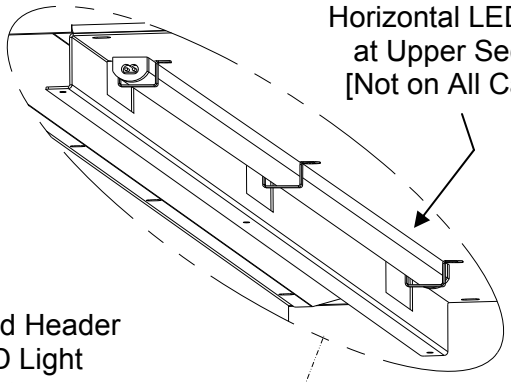
2. The second design configuration to consider:
- No open space above unit (shown below right).
- In this design, HEADER MUST NOT COME ALL THE WAY UP TO SIDES.
- Open space (dimensions listed below) will allow proper air exhaust EVEN IF THERE IS NO OPEN SPACE ABOVE UNIT.

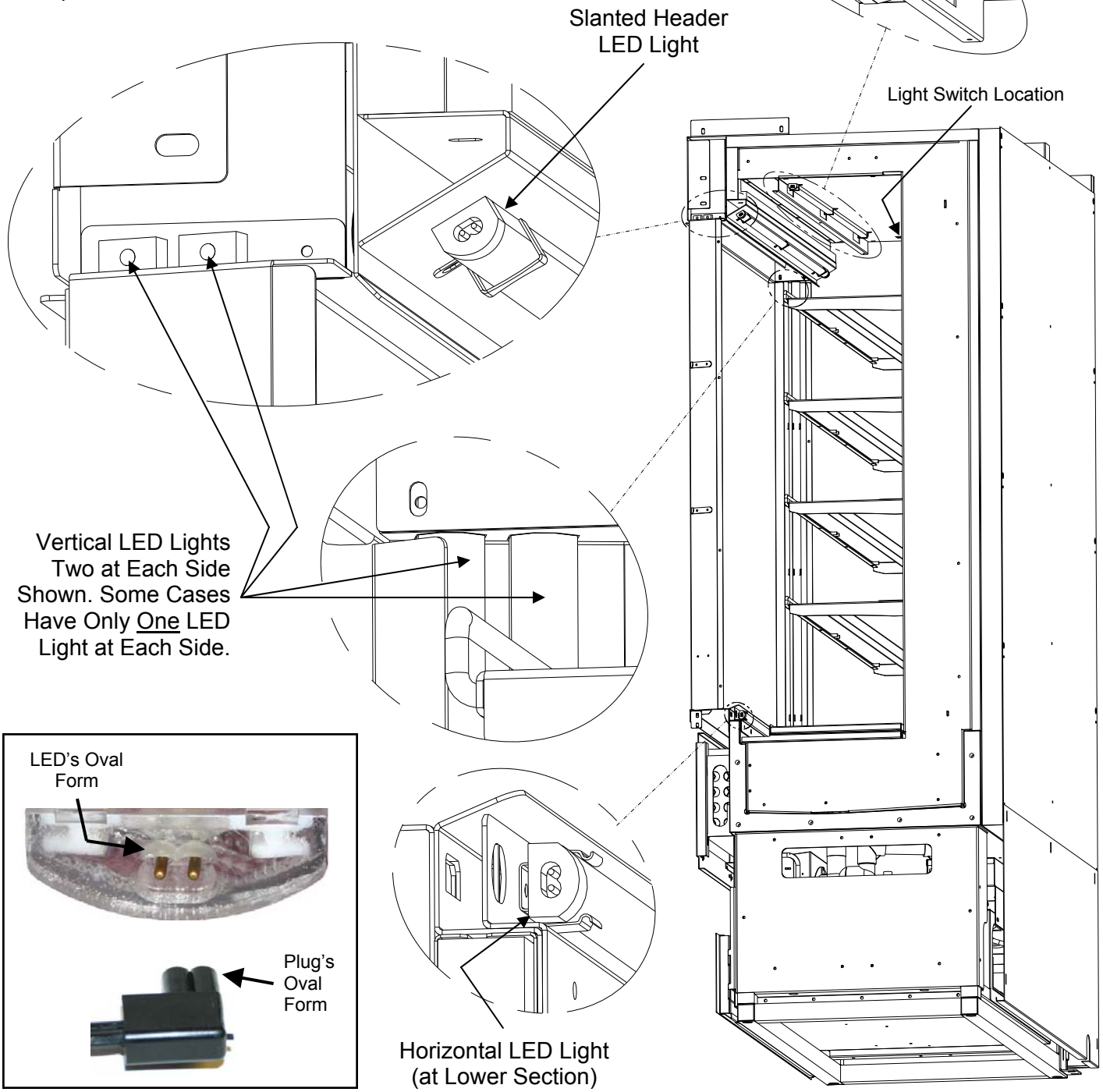
LED LIGHT FIXTURES / LIGHT SWITCH LOCATION

LED Style Light Fixtures

Note: Single light switch [located at upper plenum at top-left] will turn on all LED lights. See location at right.

- Turn light switch on.
- Check that all LED lights are working.
- Check that plugs are securely in sockets.
- See ***TROUBLESHOOTING - GENERAL ISSUES*** section in this manual for instructions on faulty lamp replacement.





SHELVING [REMOVAL & ADJUSTMENT] / PRODUCT STOPS / THERMOMETER

1. Shelving Bracket Removal & Adjustment

Adjusting Shelves

1. Lift Shelf Brackets Upward
2. Rotate Shelf Upward or Downward
3. Return Shelf Brackets To Upright At Notch Desired (To Achieve Desired Angle)

Removing Shelves

1. Unplug LED light fixture
2. Lift Shelf Brackets Upward
3. Remove From Uprights

Return Shelves To Uprights In Reverse Order They Were Removed.

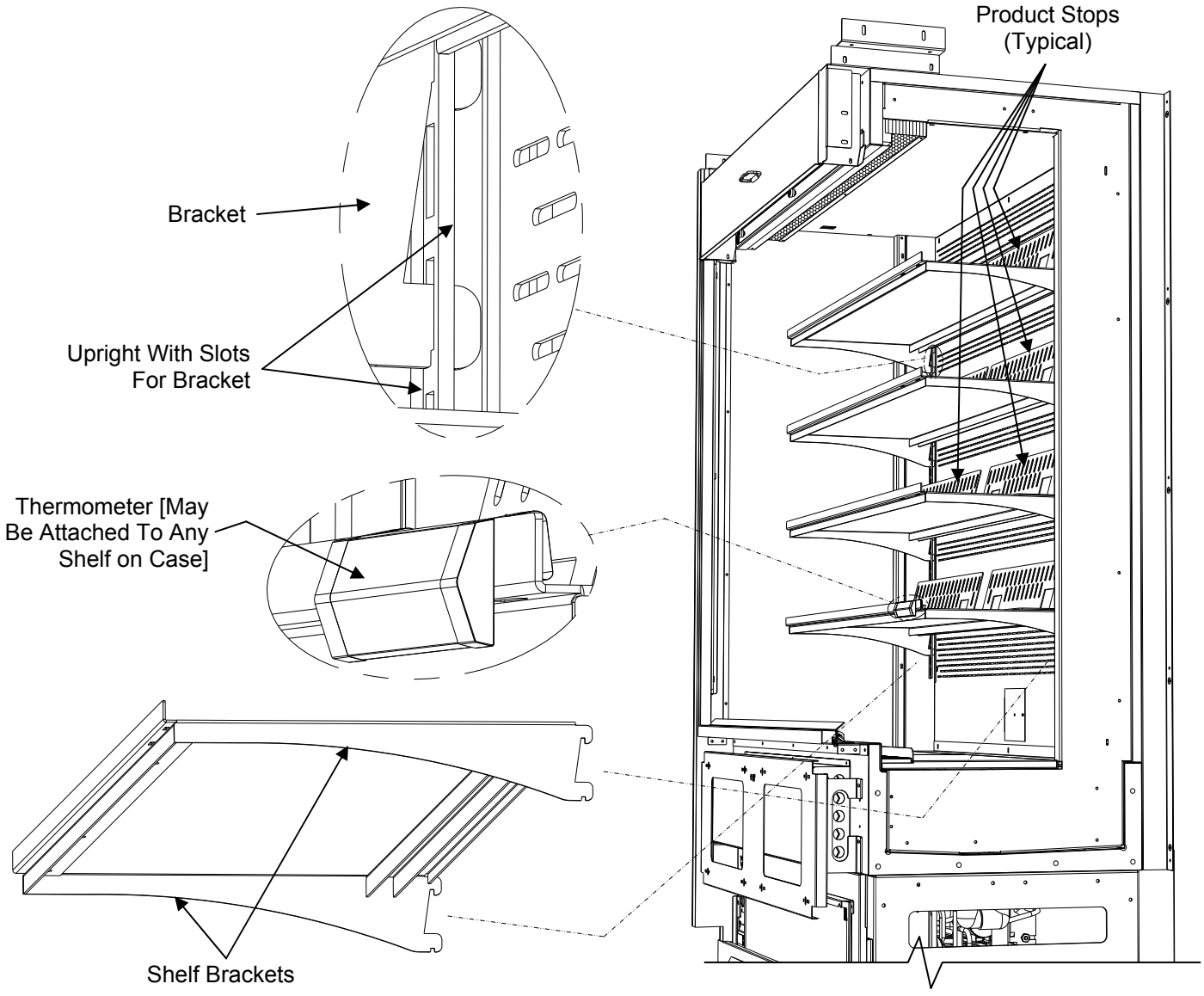
Note: Illustrations shown with end panel removed for illustrative purposes only.

2. Product Stops

- Product stops are designed to keep product at front of case for easy viewing and access.
- Product stops are able to be removed for cleaning.
- See *CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL* section in this manual.

3. Thermometer

- Thermometer is attached to front of shelf (may vary).
- Illustration below shows thermometer on lowest shelf.
- Thermometer may be moved from shelf to shelf.
- In general, it is advisable to place thermometers at center of mid to upper shelves.
- Thermometers reflect internal air temperature only [not actual food temperature]. Use probe thermometer to determine actual product temperatures.



LOAD LEVEL GUIDE / TEMPERATURE GUIDE

LOAD LEVEL & TEMPERATURE GUIDE

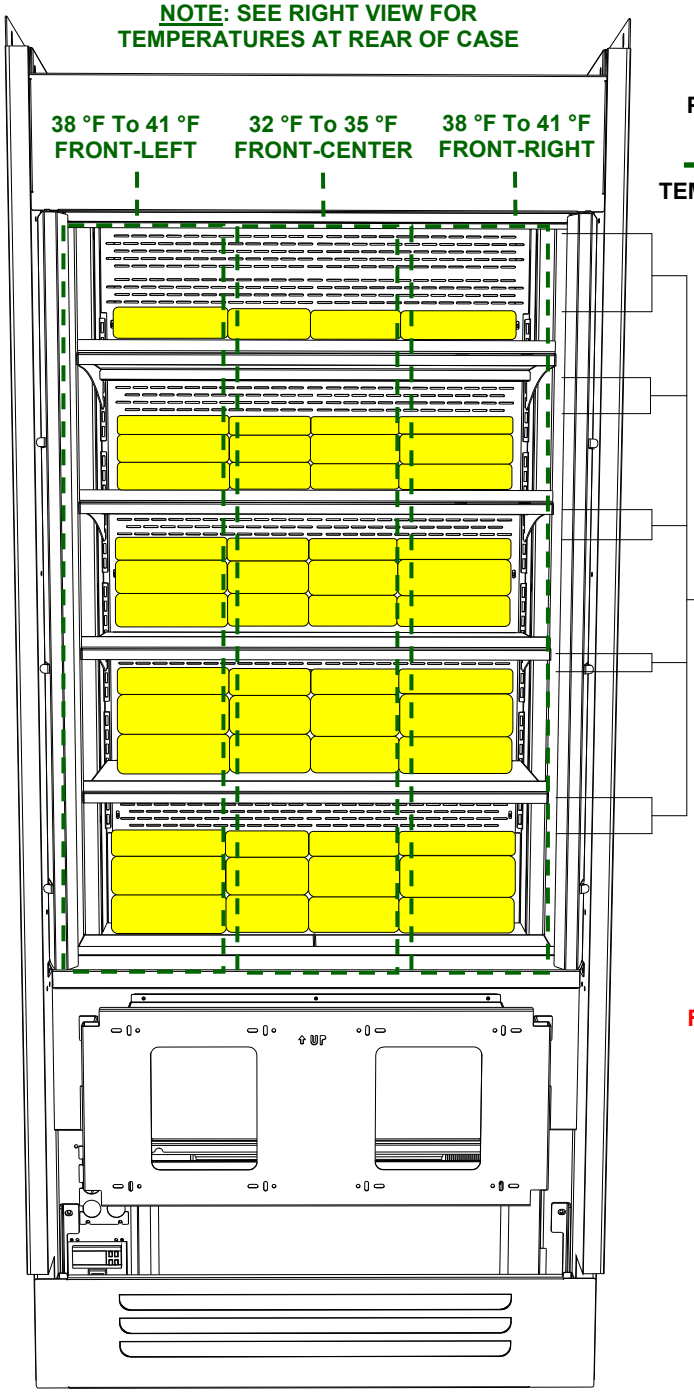
CAUTION 1: 130 POUND MAXIMUM WEIGHT LIMIT PER SHELF.

CAUTION 2: DO NOT BLOCK REAR PLENUM HOLES WITH PRODUCT.

CAUTION 3: DO NOT BLOCK AIR RETURN GRILLE WITH PRODUCT.

- IMPROPER PRODUCT PLACEMENT PREVENTS PROPER AIRFLOW CAUSING PRODUCT TO FREEZE OR BECOME OVERLY WARM.
- LIMIT ETHOS® WATER BOTTLES TO 70 MAXIMUM PER SHELF.
- FOLLOW THESE PRODUCT PLACEMENT GUIDELINES TO MAINTAIN DESIRED PRODUCT TEMPERATURES.
- MOVE PRODUCT STOPS FORWARD TO KEEP FOOD AT FRONT OF SHELVES.
- KEEP PRODUCT AT LEAST 3" FROM BACK OF SHELVES.

NOTE: SEE RIGHT VIEW FOR TEMPERATURES AT REAR OF CASE

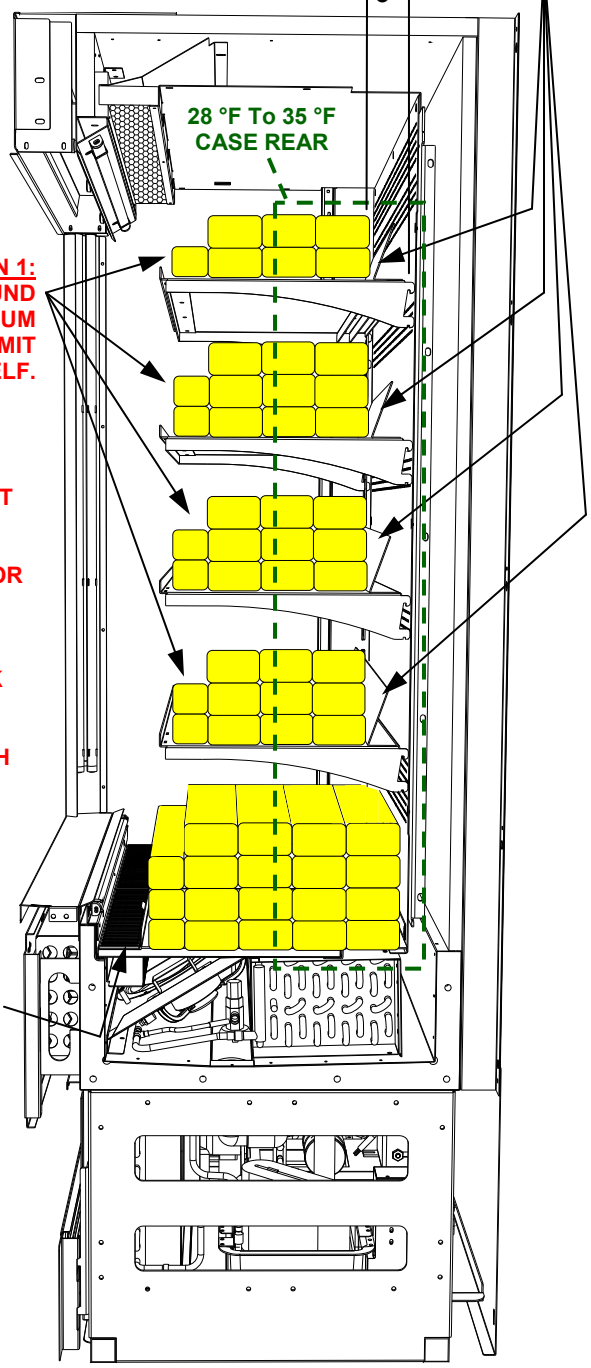


FRONT VIEW
[CASE IS FULLY ASSEMBLED AND FILLED WITH PRODUCT FOR ILLUSTRATIVE PURPOSES ONLY]

PACKAGED PRODUCT

TEMPERATURE RANGE

NOTE: SEE LEFT VIEW FOR TEMPERATURES AT CASE FRONT.



SIDE VIEW
[CASE IS PARTIALLY DISASSEMBLED AND FILLED WITH PRODUCT FOR ILLUSTRATIVE PURPOSES ONLY]

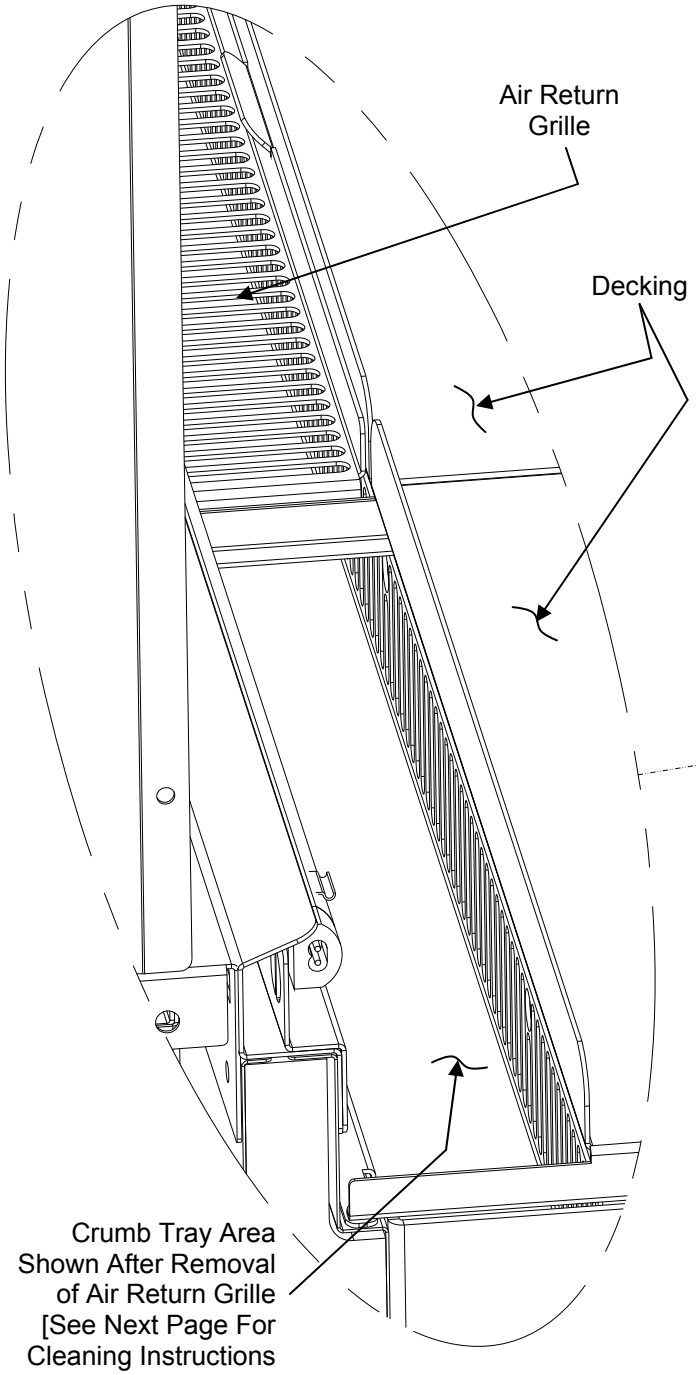
Data Culled & Modified From SCC P/N 20-12237 |||| Rev C Date: 11.20.2012

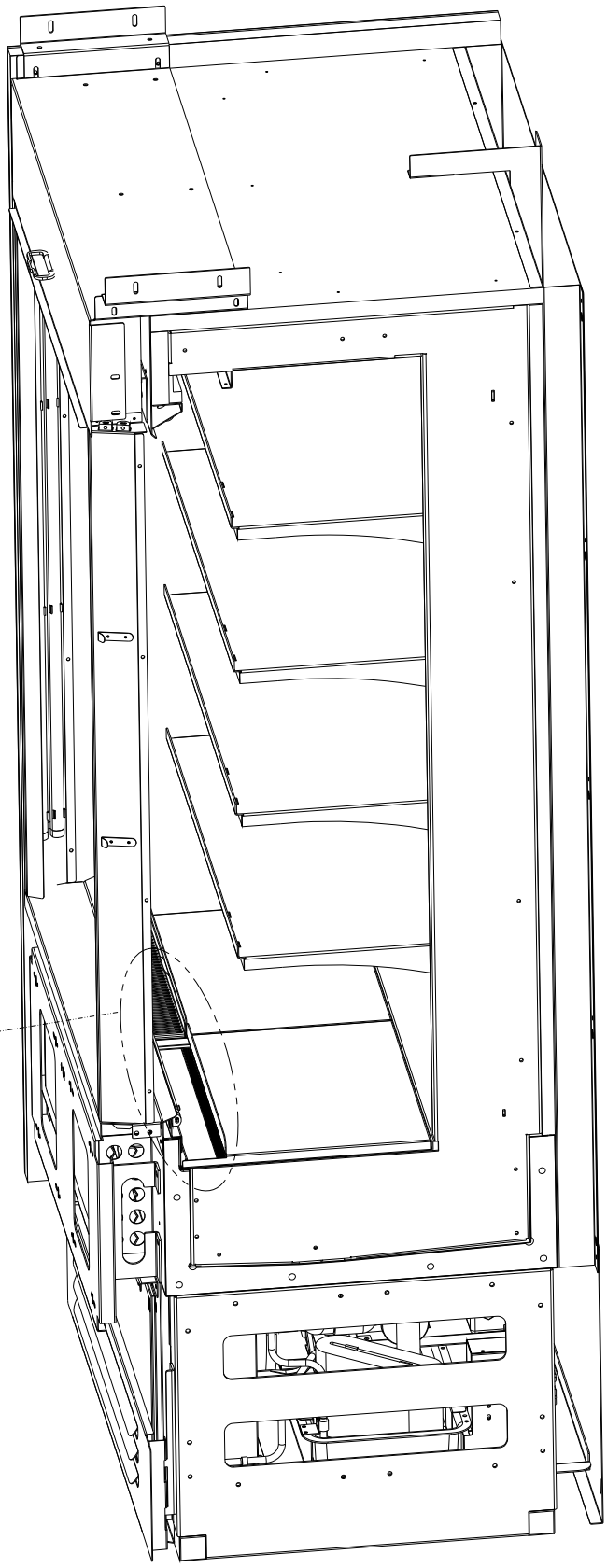
CRUMB TRAY [ACCESS & CLEANING]

Crumb Tray [Access Cleaning

Images on this page reflect partial disassembly of case for illustrative purposes only

- Air return grilles can be removed WITHOUT remove decking.
- Simply lift up and out to access crumb tray.
- See ***GENERAL CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL*** section in this manual for cleaning instructions.





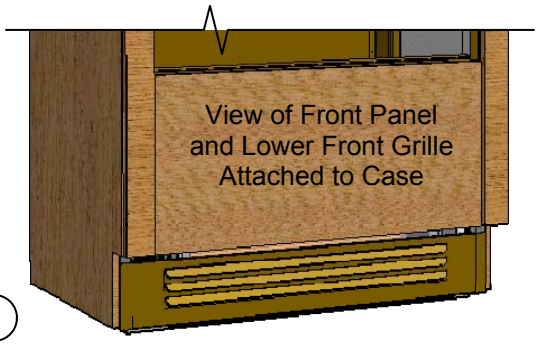
CONDENSER COIL CLEANING - TO BE PERFORMED BY STORE PERSONNEL

Condenser Coil Cleaning: Step-By-Step Instructions

1. Fully assembled case has front panel and lower front grille attached.
2. Front panel is to be lifted up and off front panel bracket hooks.
3. Place front panel out of traffic areas to prevent damage while cleaning.
4. Lift lower front grille up and off retaining hooks.
5. Place front grille out of traffic areas to prevent damage while cleaning.
6. Remove magnetic condenser coil filter from case by lifting up and off.
7. Use vacuum with brush attachment for removing loose particles of dust and other residue that has been dislodged by coil fin brush.

⇒ *Caution! Do not bend or compress fins against each other while cleaning!*

⇒ After cleaning, replace parts (filter, lower front grille and front panel) in reverse order they were removed.



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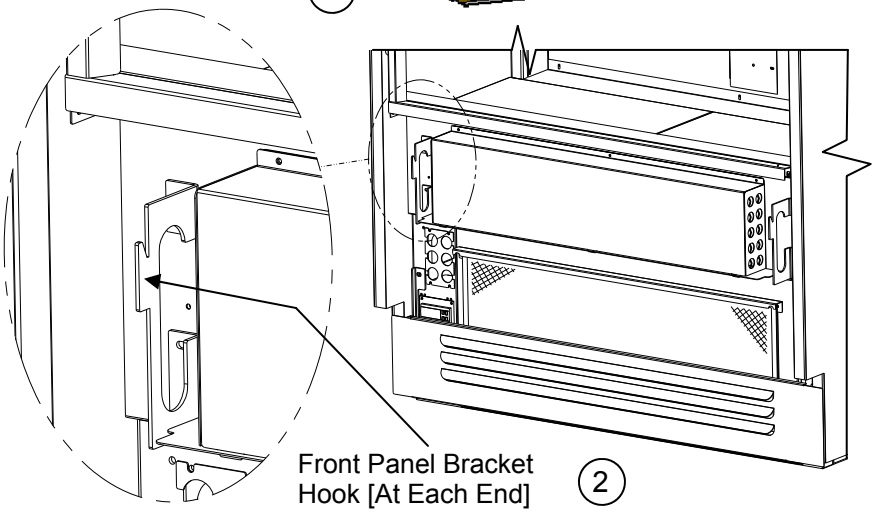

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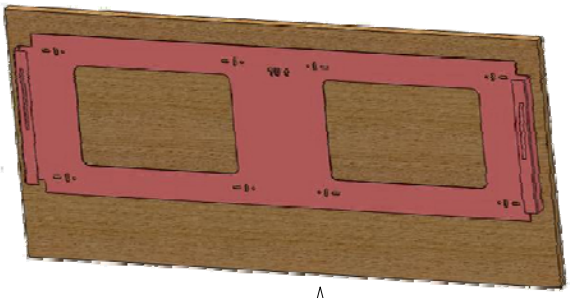

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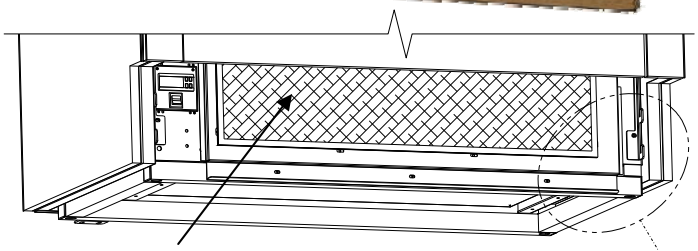

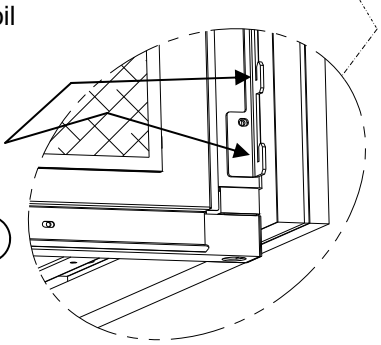

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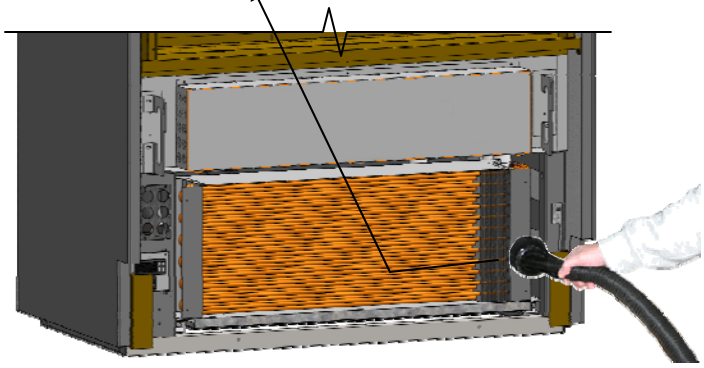

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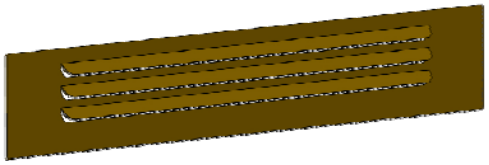
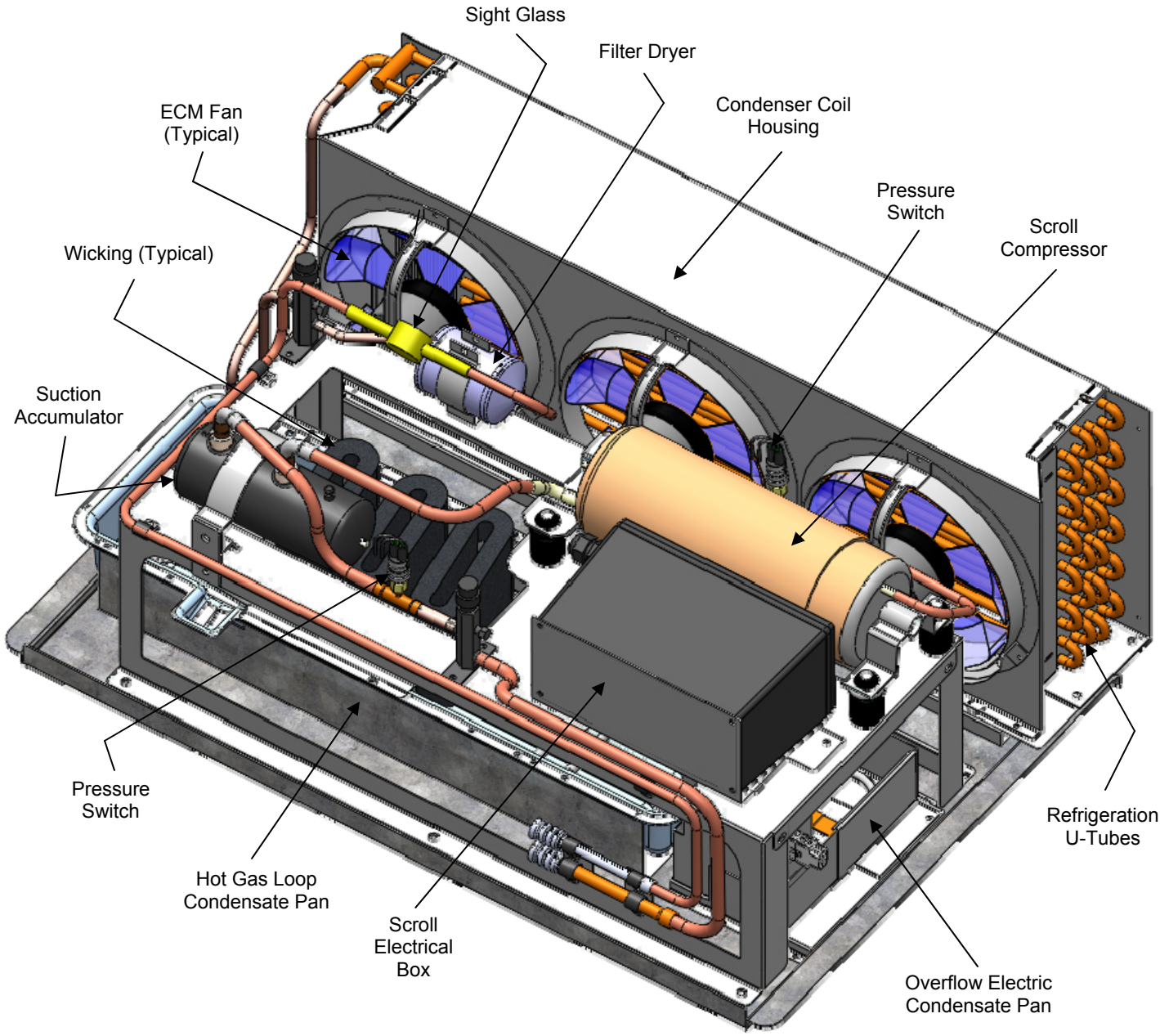


5

Remove Lower Front Grille

1. Refrigeration Package Layout [Design #1]

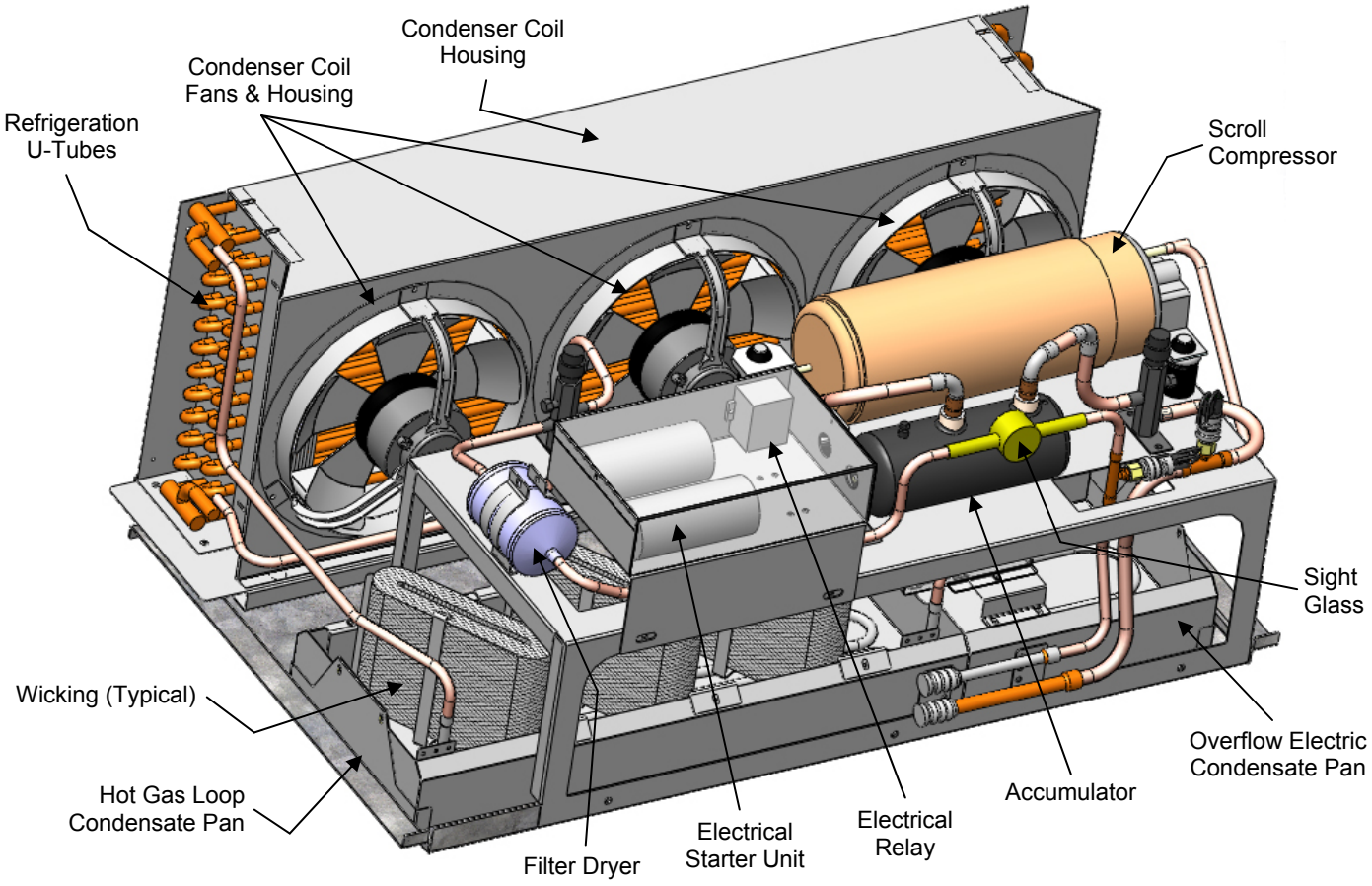
- ***Note: Due to design variables, refrigeration package layouts can slightly vary in both components and their locations.***
- Illustration below reflects the second of two refrigeration package design configurations.
- See previous page for slightly different refrigeration package design configuration.



2. Refrigeration Package Layout [Design #2]

- ***Note: Due to design variables, refrigeration package layouts can slightly vary in both components and their locations.***

- Illustration below reflects the first of two refrigeration package design configurations.
- See next page for slightly different refrigeration package design configuration.



GENERAL CLEANING SCHEDULE - TO BE PERFORMED BY STORE PERSONNEL

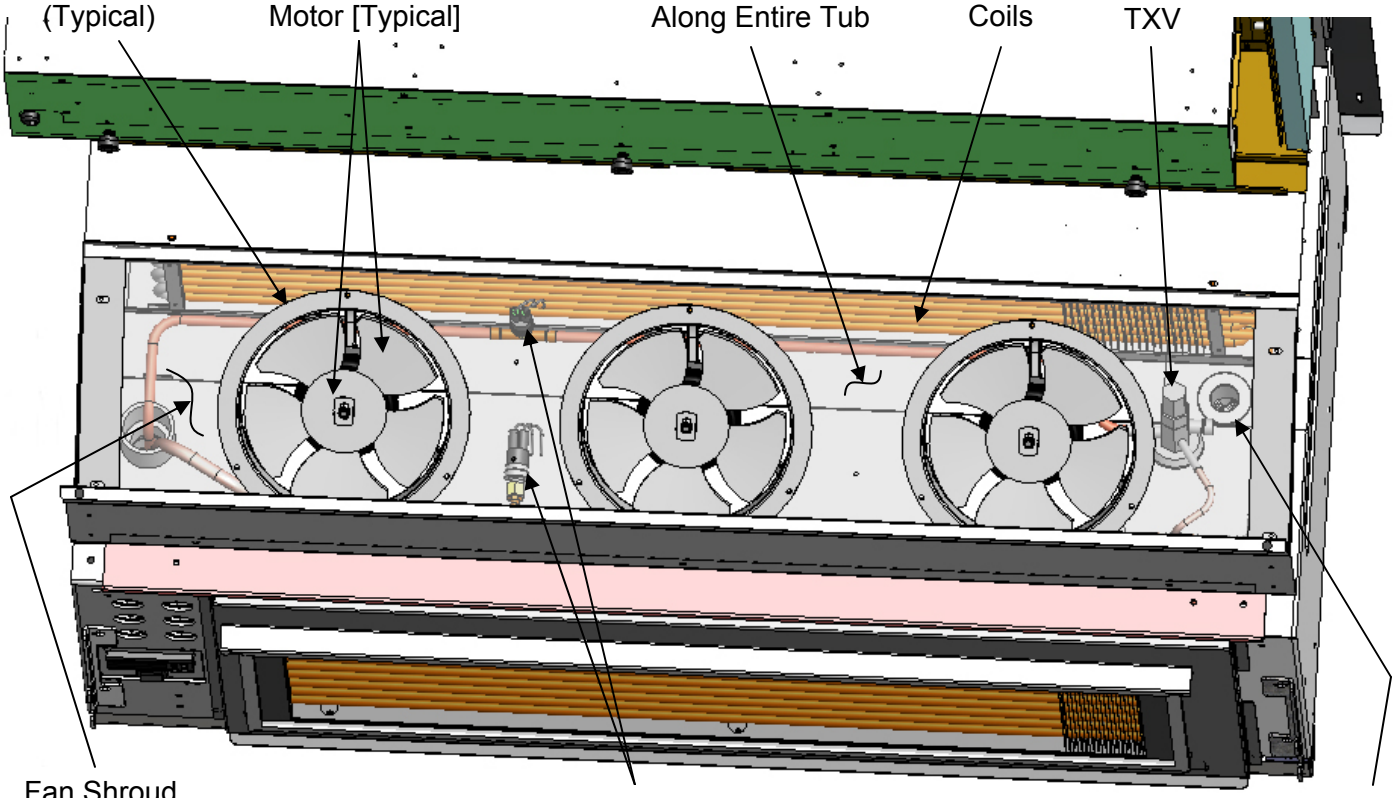
AREA TO CLEAN	FREQ.	INSTRUCTIONS
Case Exterior	**Daily**	**Wood Cladding:** Structural Concepts is NOT the provider of the wood cladding on this case. Contact the provider of wood cladding for instructions on cleaning and maintenance.

	Daily	**Condenser Coil Filter [With Magnetic Retaining Strip]:**
		• Condenser coil filter is located at case.
		• It is accessible by removing front panel [wood cladding] and front grille and lower front grille. See ***FRONT PANEL & GRILLE REMOVAL*** section in this manual for instructions on removing front panel. Front grille may simply be lifted up and off without screws.
		• Clean filter daily with a vacuum. If dirt and dust is not completely removed from filter by vacuum, take the following steps:
		  • Remove condenser coil filter from case.
		  • Submerse in warm, soapy water.
		  • Use soft-bristled brush to remove dust, dirt, grease and grime that collects on filter.
		  • Rinse thoroughly.
		  • Dry filter with soft cloth or paper towel [as shown below].
		  • Return to case.
		• See ***CASE STARTUP & REFRIGERATION ASSEMBLY ACCESS*** section in this manual for illustrations.
		 

	Weekly	**Condenser Coil:** Vacuum or brush condenser coil grille at case front. • It is accessible by removing front panel [wood cladding] and front grille. • See next page for step-by-step instructions.
	Weekly	**Air Curtain [Optional]:** • Wipe down air curtain fabric with moist cloth. • Do not use abrasive cleaning solutions on fabric. • See ***OPTIONAL NIGHT AIR CURTAIN OPERATING INSTRUCTIONS*** section in this manual for access instructions.
Case Interior	**Weekly**	**Shelves & Decks:** Wipe off with moist cloth.
		Product Stops: Wipe off with moist cloth. Stubborn stains or residue may be removed by removing from case and submersing in hot, soapy water. Use cloth or brush with soft bristles to remove hardened residue.
	Monthly	**Crumb Trays:** Crumb tray is located under air return grilles. Remove air return grilles from case. Use vacuum to remove crumbs and other residue that collects in tray. Wipe down with moist cloth. Return air return grilles to case.

WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

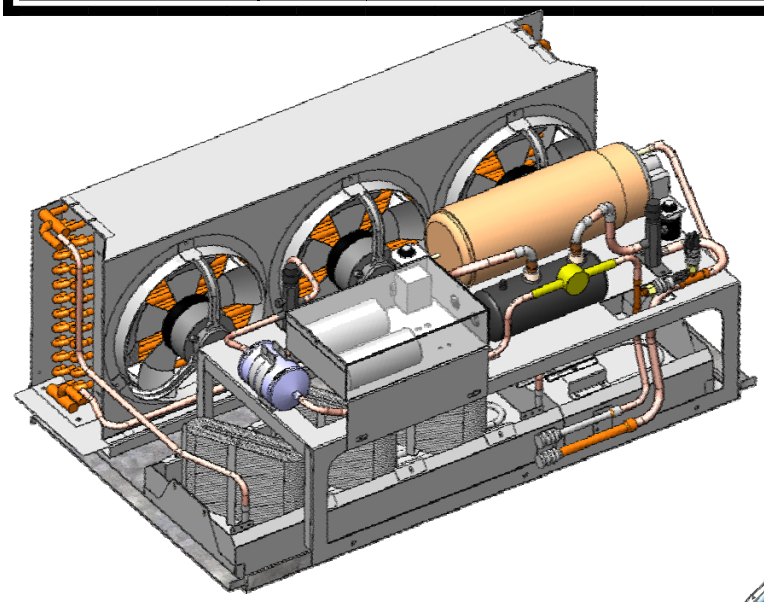
PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Interior	**Quarterly**	**<u>Evaporator Coil Area [Tub, Coil, Drain, Fan Blades, Motors, Brackets, etc.]</u>:** *To prevent injury, turn main power switch OFF before accessing the tub, coil, fan, motor and drain area.* • Remove decking, sub-deck (if any) and fan shroud. • Use wet/dry vacuum to clean residue/standing water in tub area. • Clean tub, coil and drain with spray bottle of water, clean cloth, soft-bristled brush, mild soap solution and sponge. • Caution! Remove debris that may clog drain. *However, DO NOT allow water to flow down drain and into hot gas loop condensate pan. This could cause an overflow of pan contents onto floor!* • Wipe down fan blades, motors and brackets with moist cloth. • ***Caution! DO NOT get fan motors wet while cleaning!*** • Replace fan shroud, sub-deck (if any) and decking.



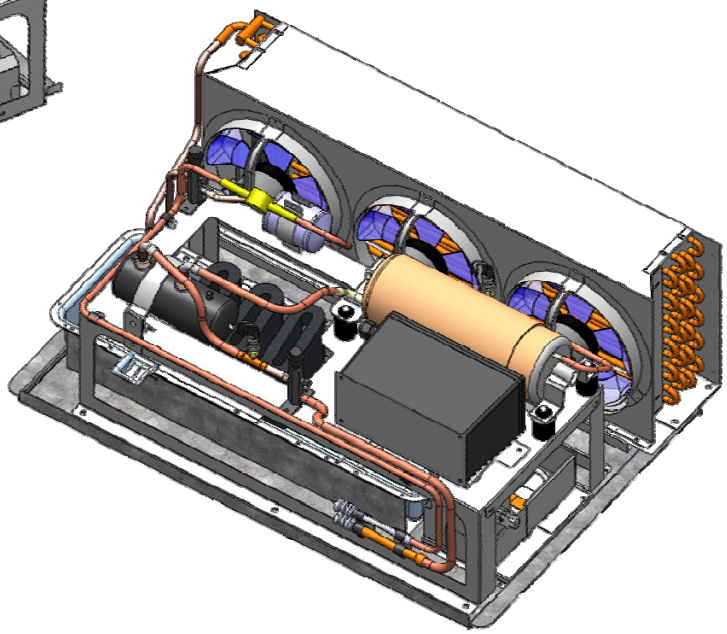
Above Illustrations (With TXV at Customer-Right) Reflects Cases With EnergyWise Refrigeration Package (and Hot Gas Loop Evaporator System)

WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

PREVENTIVE MAINTENANCE	FREQ.	INSTRUCTIONS
Case Exterior	**Qtly**	**Under Case Cleaning:** When refrigeration package is removed from under case, vacuum (or broom) under case to remove all dust, debris and dirt that collects.
	Qtly	**Refrigeration Assembly:** *Turn main power switch OFF before cleaning!* • Remove front panel and lower front grille (by simply lifting up and off). • Slide out refrigeration assembly. Note: Initially, it may be necessary to remove (2) compressor pan shipment screws for refrigeration assembly to slide out. • Remove the wicking material from pan. See below for illustration. • Use a clean cloth and hot water with soap solution to wipe down all the dust and residue that forms on parts. • ***Caution! DO NOT get fan motors wet while cleaning!*** • Hot gas coils and pans (including overflow pan): Use clean cloth and warm water with CLR® (to prevent calcium, lime and rust from forming). • After hot gas coils and pans are thoroughly cleaned, rinse thoroughly with a spray bottle filled with clean water and a sponge to absorb remaining residue. • DO NOT leave residue in hot gas pan or overflow pan before starting back up! • Place new wicking material on prongs. To order wicking material, call Structural Concepts Technical Service [see last page of this manual]. • Slide refrigeration unit assembly back under case. • Replace front grille to case (no screws required).



Refrigeration Package Layout #1



Refrigeration Package Layout #2

TRAINED SERVICE PROVIDERS: HOT GAS LOOP CONDENSATE PAN ACCESS / TXV

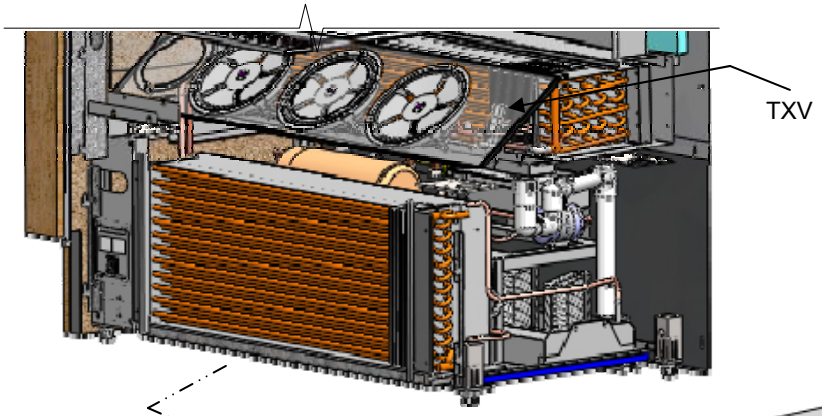
1. Hot Gas Loop Condensate Pan Access [To Be Accessed By Trained Service Providers Only]

Warning! Turn main power switch OFF before providing maintenance and service to unit.

- Remove the front panel and toe-kick and turn main power switch OFF.
- After main power switch has been turned OFF, slide out the refrigeration package.
- See ***CASE START-UP & REFRIGERATION ASSEMBLY ACCESS*** for instructions.
- Cases with EnergyWise refrigeration packages (as shown here) have stationary (non-removable hot gas evaporator systems).
- When done servicing or cleaning, return and reconnect in reverse order it was removed.
- See ***PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)*** section in this manual for specific instructions.
- Return front panel and toe-kick to case after servicing or cleaning refrigeration package.

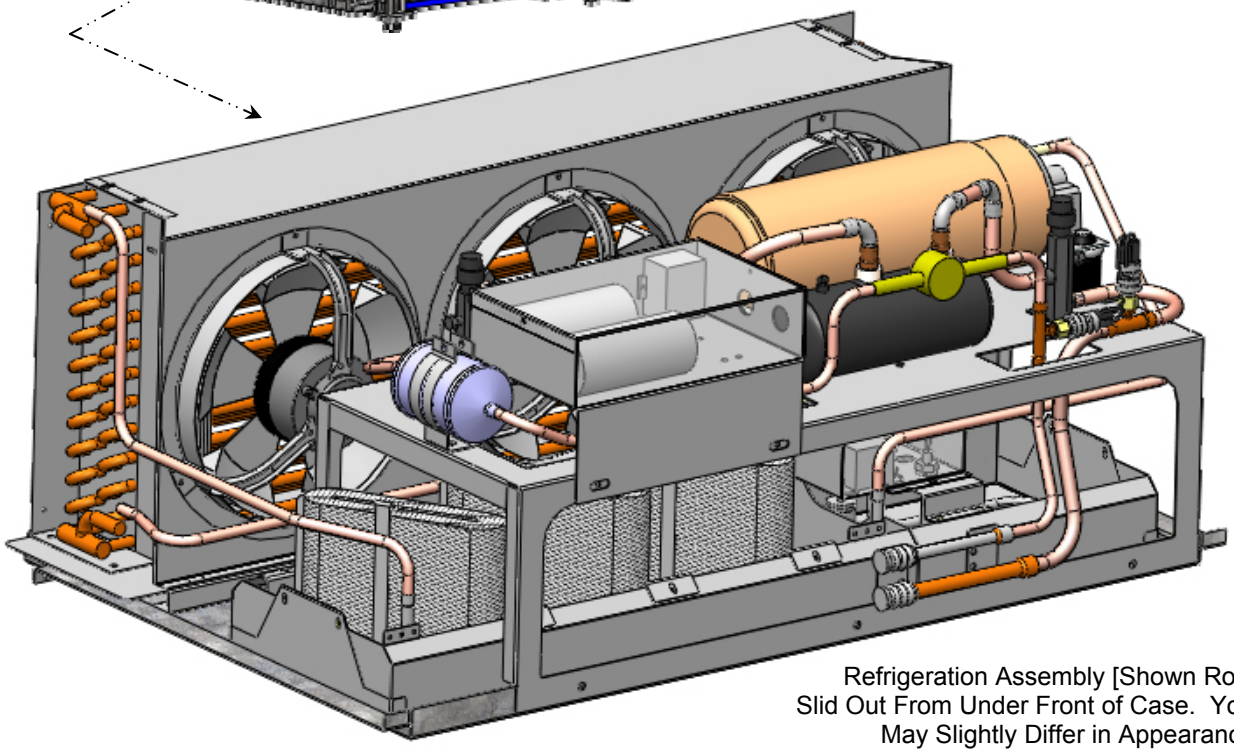
2. TXV [Thermostatic Expansion Valve]

- TXV is under access panel.
- Decking must be removed for access.
- TXV cover must also be removed for access (remove two thumb screws).
- See illustration below.
- Note: TXV is at customer-right on cases with EnergyWise refrigeration packages.



Refrigeration Package

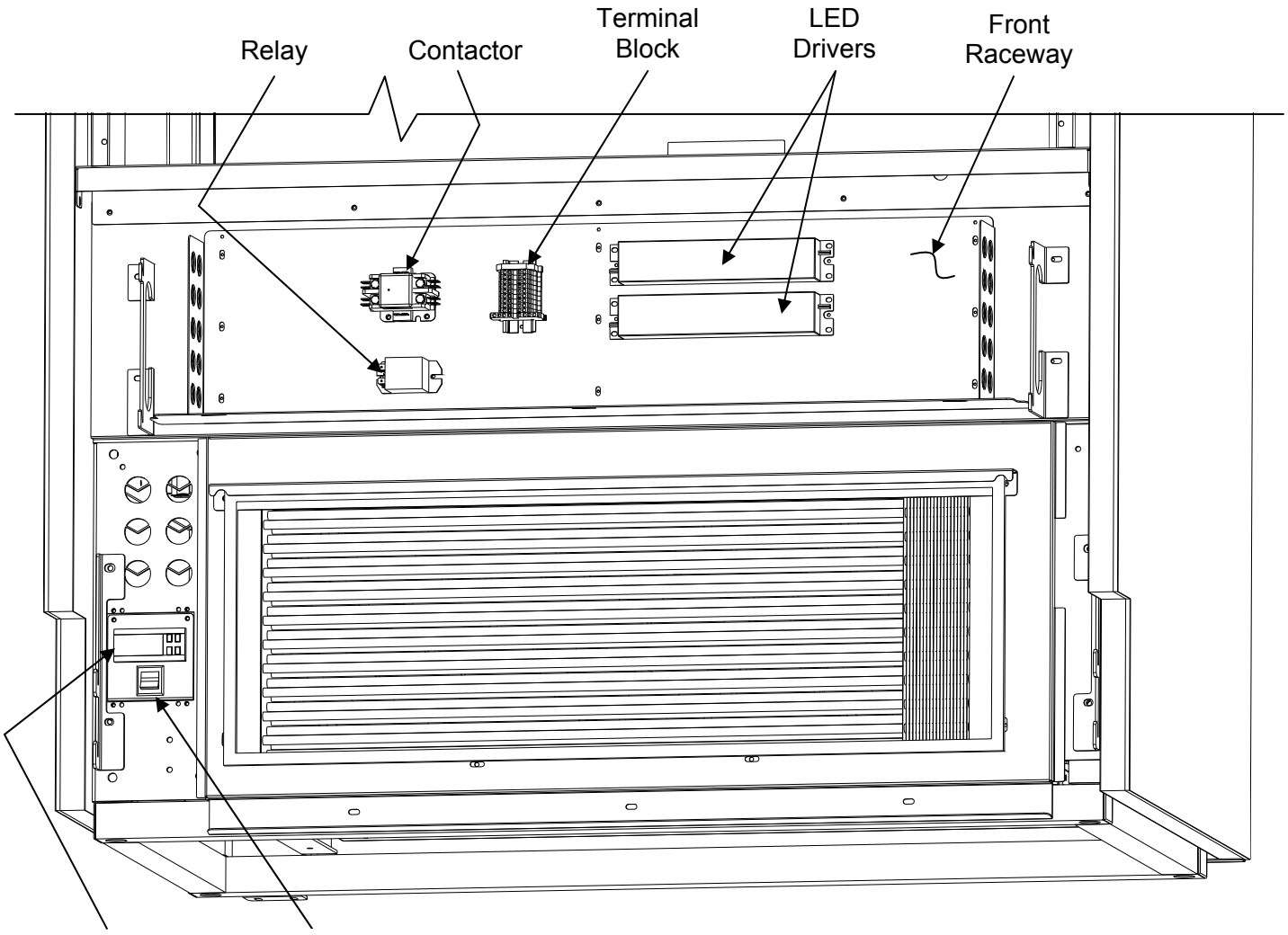
EnergyWise refrigeration packages DO NOT have a removable electric-coil evaporator pan. Energywise packages use a 'hot gas' evaporator system (sometimes with wicking as shown in this illustration).



Refrigeration Assembly [Shown Rotated]
Slid Out From Under Front of Case. Your Layout May Slightly Differ in Appearance.

3. Front Electrical Raceway Layout

- Illustration below is shown after removal of front panel and raceway plate.
- Caution! Only trained service providers are to access front electrical raceway.



--- Case Front View After Front Panel/Grille Removal ---

TROUBLESHOOTING - GENERAL ISSUES

CONDITION	TROUBLESHOOTING
Water Is On The Floor	Check that the drain trap is free of debris. *Caution! TSP* only!*
	Check that the drain hose is correctly positioned over condensate pan. *Caution! TSP* only!*
	Check store conditions. • For NSF® Type 1 Conditions (most cases): ambient conditions are to be at 55% max. humidity / 75 °F. • For NSF® Type 2 Conditions: ambient conditions are to be at 60% maximum humidity / 80 °F.
	Check that the hot gas condensate pan (and overflow pan) is properly connected. *Caution! TSP* only!*
	Check that condensate pan is heating properly. *Caution! TSP* only!*
Case Is Not Holding Temperature [Too Warm]	Only pre-chilled product is to be put in case. If a large amount of warm product was added to the case, it will take time for the temperature to adjust.
	Temperature changes during defrost mode but will return to normal. Thermometer may show higher than acceptable readings during defrost cycle (4 times daily). After defrost, check that thermometer reading has gone back down to acceptable levels.
	Check that condenser coil has been cleaned.
	Check that air return grilles are not obstructed.
	If case is still too warm (after following above procedures) refrigeration settings may be too high. Call service provider. *Caution! TSP* only!*
	Case may be experiencing adverse conditions or spacing issues. See ***OVERVIEW / NSF® TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING*** section in this manual for information on the following: • Distance from exterior doors, overhead HVAC vents or air curtain disruption. • Exposure to direct sunlight or heat source (ovens, fryers, etc.). • Clearance distance above unit for air discharge.
	Check sight glass for flashing and/or low charge. *Caution! TSP* only!*
Case Is Not Holding Temperature [Too Cold]	If case is still too cold (after following above procedures) refrigeration settings may be too low. Call service provider.
	Check set point temperature; it may be adjusted too high. *Caution! TSP* only!*
Control Display Is Flashing	See ***CAREL® CONTROLLER OPERATING INSTRUCTION*** section in operating manual. *Caution! TSP* only!*

*Trained Service Providers ONLY are to perform these tasks.

CONDITION	TROUBLESHOOTING
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motors. Check motor shaft for excessive bearing wear. *Caution! TSP* only!*
	Check that fan motors are securely mounted in brackets. Caution! *TSP* only!*
	Verify that fan blades are securely mounted to fan motor. Caution! *TSP* only!*
	Check that nothing is preventing blade rotation. Also, check that fan blades are not bent out of shape. *Caution! TSP* only!*
	Check that the fan shroud is properly secured. *Caution! TSP* only!*
Fans Are Not Working	Check that the MAIN power switch is on.
	Check that fans are plugged in at the fan shroud. *Caution! TSP* only!*
	Check for foreign material obstructing fan performance. *Caution! TSP* only!*
	Check that fan blades freely rotate within fan shrouds. *Caution! TSP* only!*
	Check that power is going to fans. Caution! TSP* only!
	Check that fan wiring is connected on terminal blocks. *Caution! TSP* only!*
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 MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
Condensing Unit Is Not Operating	Check that main power switch is turned ON.
	Carefully review temperature controller's settings for accuracy. *Caution! TSP* only!*

*Trained Service Providers ONLY are to perform these tasks.

CONDITION	TROUBLESHOOTING
Case Lights Are Not Working	Check that light switch is in the ON position. See ***LIGHT FIXTURES / LIGHT SWITCH LOCATION*** for location.
	Check that **ALL** of the light cords and plugs are properly connected. See ***LIGHT FIXTURES / LIGHT SWITCH LOCATION*** section in manual.
	LED Light may be burned out. • LED lights will rarely require change-out. However, should it become necessary to do so, follow these instructions. • Contact Structural Concepts' Technical Service Department for replacement parts (see the Technical Service section of this operating manual). • Simply disconnect the existing LED light from its brackets. Replace. • Note: Connect LED lights and plugs in a specific manner or they will not work. • Oval pattern of plug MUST be connected to oval pattern of LED light. • See ***LED LIGHT FIXTURES / LIGHT SWITCH LOCATION*** section in manual.
	Check voltage at LED drivers. If voltage is entering but not exiting, LED driver may be faulty. *Caution! TSP* only!*

*Trained Service Providers ONLY are to perform these tasks.

TROUBLESHOOTING - CONDENSING SYSTEM [TRAINED SERVICE PROVIDERS ONLY]

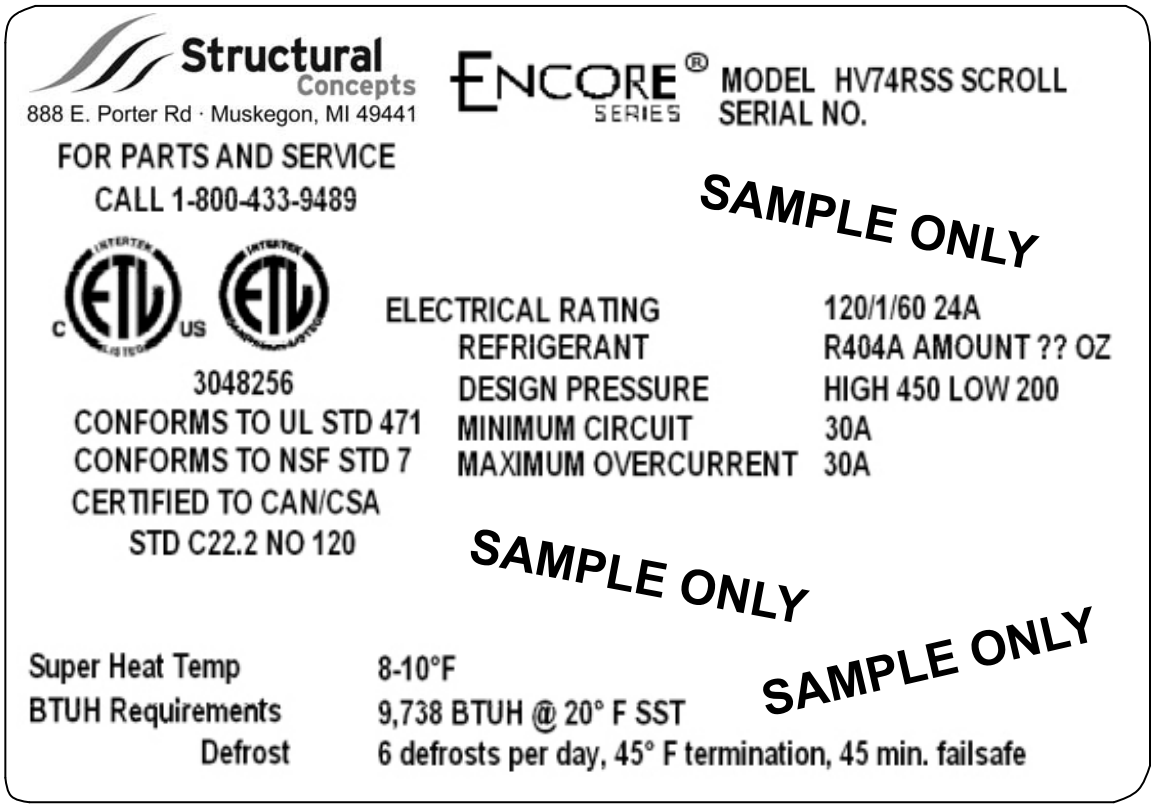
CONDITION	TROUBLESHOOTING
Head Pressure Too High	Check that the Condensing Coil is not dirty or covered.
	Check that Condensing Fans are working.
	Check that refrigerant is not overcharged.
	Check to verify that a non-condensable is not in the system.
	Check that Liquid Line Drier is not plugged.
	Check that there are no close-offs around Condensing Coil.
	Check Set Point Temp.; it may be adjusted too high.
	Check System Operating Temperatures.
	Check that Store Ambient Temperature isn't above maximum allowed. See *Overview and Warnings* Section.
Head Pressure Too Low	Check that Refrigerant Charge isn't too low.
	Check that Suction Pressure isn't too low.
	Check to verify that Compressor Valves aren't bad.

TROUBLESHOOTING - EVAPORATOR SYSTEM [TRAINED SERVICE PROVIDERS ONLY]

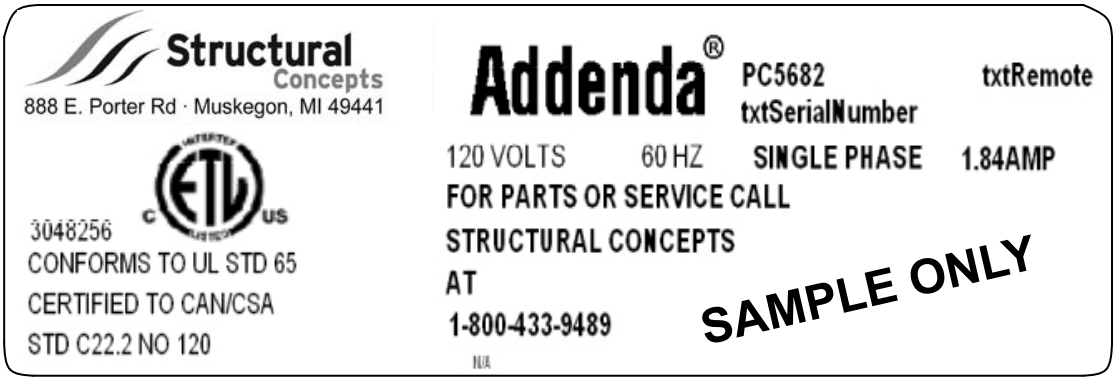
CONDITION	TROUBLESHOOTING
Low Suction Pressure	Check that the Refrigerant doesn't have a low charge.
	Check that the Thermostatic Expansion Valve (TXV) isn't restricted.
	Check that Liquid Line or Filter isn't restricted.
	Check that Evaporator Motors are working.
	Check that High Superheat doesn't need adjusting.
	Check that the Thermostatic Element charge isn't depleted.
	Check that there is air no seepage of air around Condensing Coil.
	Check that the Coil is not iced up.
High Suction Pressure	Check that Refrigerant Charge isn't too high.
	Check that Compressor Valves aren't bad.
	Check that the Cooling Load isn't high.
	Check that Superheat Adjustment isn't low.
	Check TXV Bulb Installation a. Poor thermal contact. b. Warm location.
	Check Compressor: Low capacity means it is undersized for its application.

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 -----

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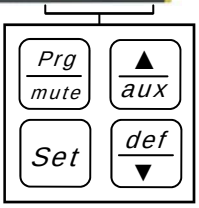

Programming The Instrument

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, 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" (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 "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.

Oper Manuals - PUB\Templates\Carel Controller\Carel Controller IR33.pub
This data derived from Carel Material: ir33 +030220441 - rel. 2.0 - 01.05.2006

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User Interface - Display

ICON	FUNCTION	DESCRIPTION	Normal operation ON	Normal operation OFF	Normal operation BLINK	Start up
	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

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Summary Table of Operating Parameters

CODE	PARAMETER	UOM*	TYPE	MINIMUM	MAXIMUM	DEFAULT
/5	Select Celsius (°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

STRUCTURAL CONCEPTS CORPORATION
TECHNICAL SERVICE PHONE NUMBER: 1.800.433.9489

Starbucks Limited Warranty

All sales by Structural Concepts Corporation (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 ONLY to Starbucks Corporation in the United States, Canada, Mexico and Puerto Rico. Equipment sold elsewhere may carry modified warranty.

Warranty; Remedies; Limitations. SCC warrants that if any Goods are found by an authorized representative of SCC not to be of good material or workmanship within one year of the date of shipments SCC will, at its option after inspection by an authorized representative, replace any defective Good or pay the reasonable cost of replacement for any such defective Goods, provided that written notice of the defect is given to SCC within 30 days of the appearance of such defect. If notice is not given within such period, any claim for breach of warranty shall be conclusively deemed to have been waived and SCC shall not be liable under this warranty. If SCC is unable to repair or replace the defective Goods, SCC shall issue a credit to the Purchaser for all or part of the purchase price, as SCC shall determine. The replacement or payment in the manner described above shall be the sole and exclusive remedy of 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 PURCHASE 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 and shall be 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.

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 this obligations under this Agreement without prior written 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 assigns.

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.

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 the Customer Service Department in writing or call 1.800.433.9489.

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 may 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.

Limit of Liability. The limit of liability of SCC toward the exchange cost of the original compressor motor is one year parts and labor. A motor-compressor replaced during the warranty shall not exceed manufacturer's current established wholesaler’s exchange price.