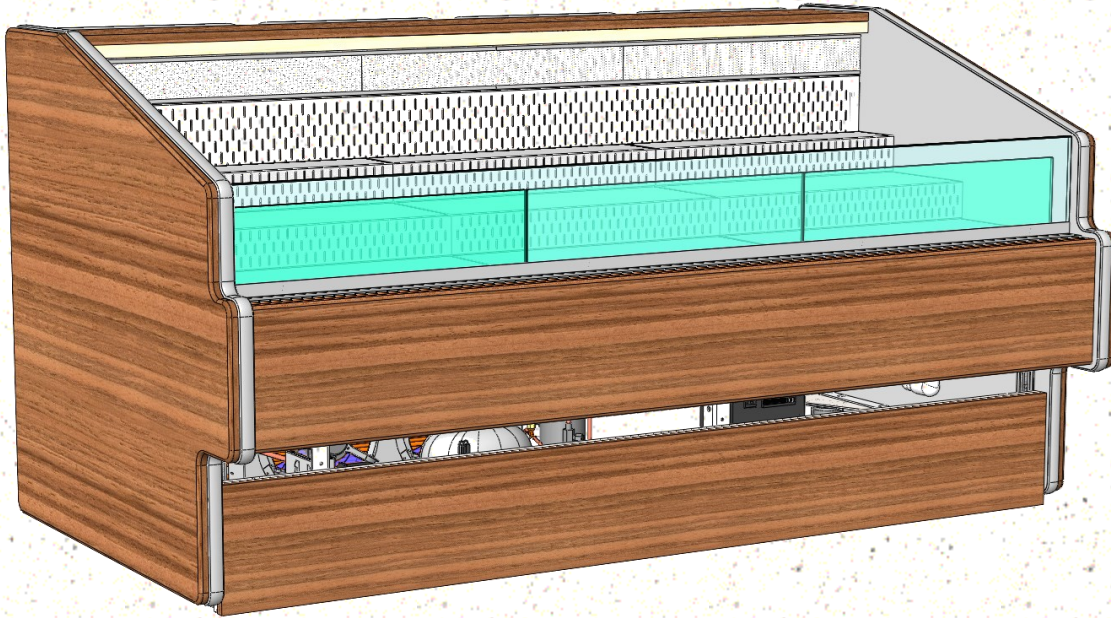


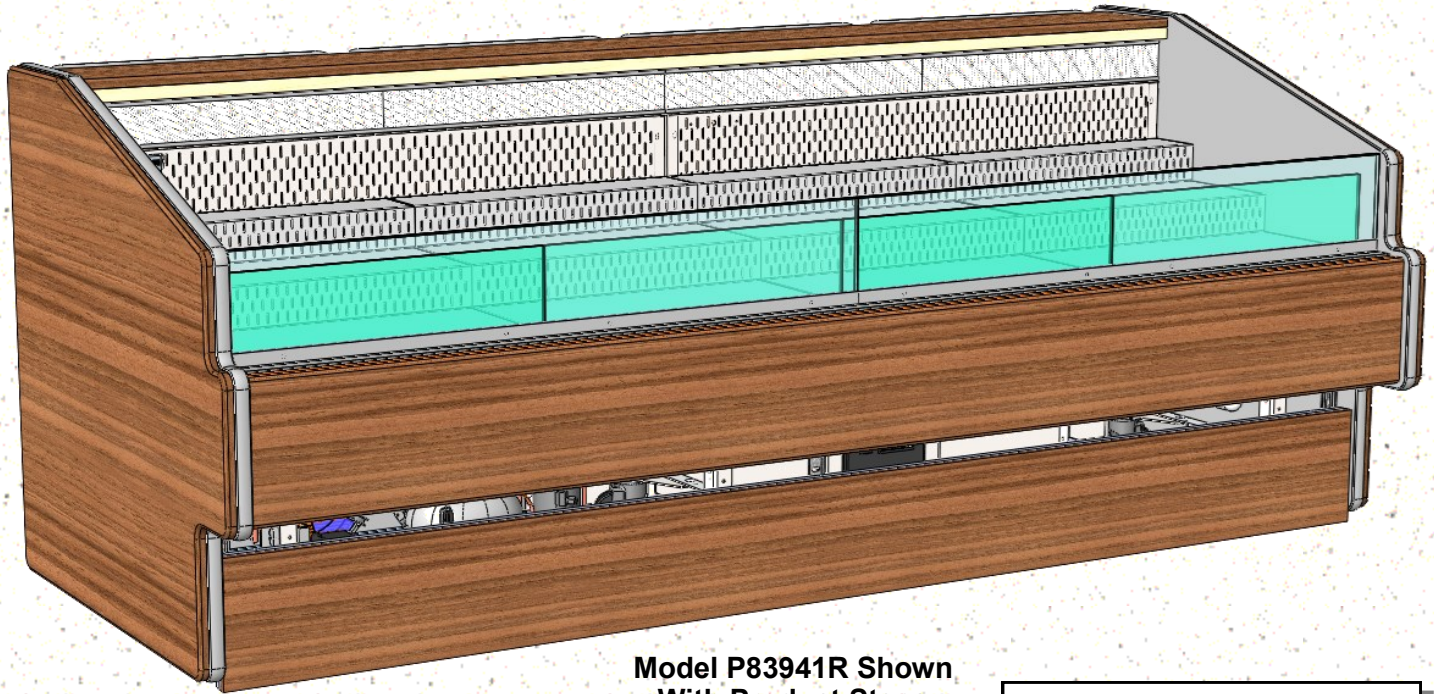
Oasis[®] USER MANUAL

SCC P/N
20-26341

SELF-SERVICE REFRIGERATED SINGLE DECK OPEN MERCHANDISER (SELF-CONTAINED & REMOTE UNITS)



Model P63941R
Shown With
Product Steps



Model P83941R Shown
With Product Steps

Note: This Manual is Applicable
to Models P43941, P63941,
P83941, and Possibly Other
Models Not Depicted Herein.

Structural Concepts[®]

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

TABLE OF CONTENTS / MODEL APPLICABILITY

TABLE OF CONTENTS	2
OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / CORDS / WIRING / PLUGS	3-4
SKID REMOVAL	5
INSTALLATION: POSITIONING & ALIGNING / CASTERS / LEVELERS	6
ELECTRICAL CONNECTIONS (SELF-CONTAINED UNITS)	7
START-UP AND OPERATION / ELECTRICAL CONNECTIONS - REMOTE UNITS	8
START-UP AND OPERATION - SELF-CONTAINED UNITS	9-11
MAINTENANCE FUNDAMENTALS - REMOTE UNITS (TRAINED SERVICE PROVIDERS ONLY)..	12
MAINTENANCE FUNDAMENTALS - SELF-CONTAINED UNITS (PERFORMED BY TRAINED SERVICE PROVIDERS ONLY)	13-15
MAINTENANCE FUNDAMENTALS - ALL UNITS (TRAINED SERVICE PROVIDERS ONLY)	16
SERIAL LABEL INFORMATION & LOCATION	17
CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)	18
PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)	19-20
TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDERS ONLY)	21-23
TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - CONDENSING SYSTEM ...	24
TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - EVAPORATOR SYSTEM ..	25
PROGRAMMABLE CONTROLLER INFORMATION.....	26
TECHNICAL SERVICE CONTACT INFORMATION / WARRANTY INFORMATION	27

OVERVIEW

- These Structural Concepts merchandisers are designed to merchandise packaged products at 41 °F (5 °C) or less product temperatures (unless custom cases with wire rack shelving).
- Cases should be installed and operated according to this operating manual's instructions to ensure proper performance.
- Improper use will void warranty.

TYPE 1 vs. TYPE 2 CONDITIONS

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

- For Type 1 Conditions (most cases): ambient conditions are to be at 55% maximum humidity and maximum temperatures of 75 °F (24 °C).

- 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 designed for Type 1 or Type 2 conditions, see tag on case. Location varies depending upon model.

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!



**ATTENTION
CONTRACTORS**

COMPLIANCE

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

WARNING

**ELECTRICAL
HAZARD**



WARNING

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

WARNING

**KEEP
HANDS
CLEAR**



WARNING

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

WARNING

**HOT
SURFACE**



WARNING

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



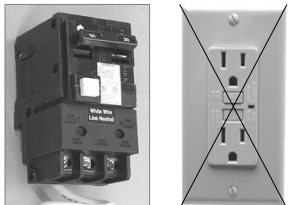
WARNING: This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to P65Warnings.ca.gov.

PRECAUTIONS

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

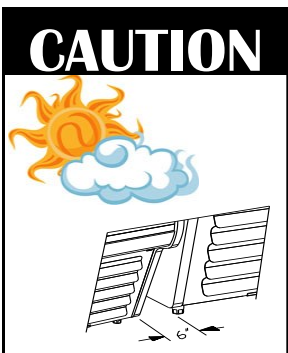
WIRING DIAGRAM FORMAT & LOCATION

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



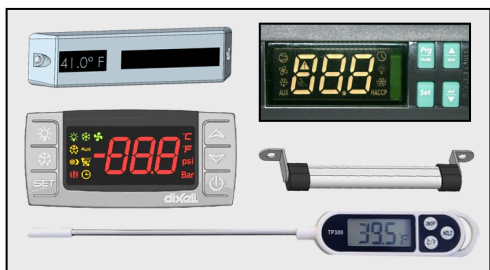
CAUTION! GFCI BREAKER REQUIREMENT

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.



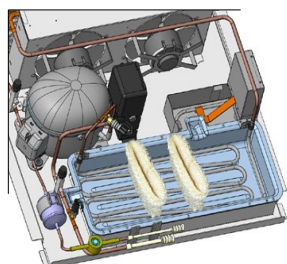
CAUTION! ADVERSE CONDITIONS / SPACING ISSUES

- 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 and structures. Rear panels must also be kept at least 6" from walls and structures.
- Case must not be exposed to direct sunlight or any heat source.
- To maintain proper case temperature, keep case at least 15-feet from exterior doors, overhead HVAC vents or any air curtain disruption.
- Self-contained case clearance: 6" min. air intake / 6" min. air discharge.



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

- Thermometers & thermostats reflect air temperatures **ONLY**.
- For **ACTUAL** product (food) temperatures, use a calibrated food probe thermometers **ONLY**.
- For accurate readings, **DO NOT** use infrared food thermometers.



CAUTION! CHECK CONDENSATE PAN, ITS POSITION & PLUG!

Water on flooring can cause extensive damage!

- Before powering up case, check that condensate pan is positioned directly under case's condensate drain.
- Before powering up case, check that condensate pan's electrical plug is **SECURELY** connected to condensate system's receptacle.
- If wicking material is used in condensate pan, check that it is secure.



CAUTION! POWER CORD AND PLUG MAINTENANCE

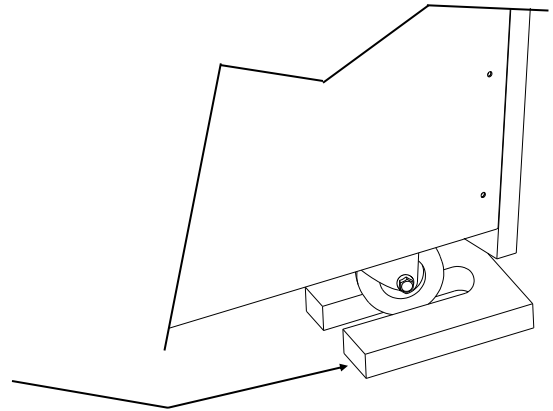
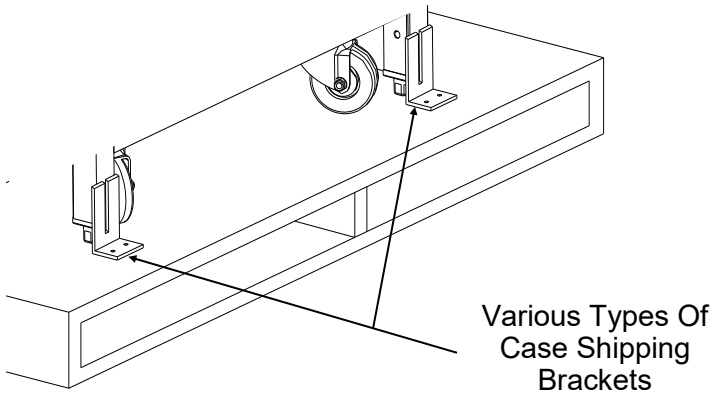
Risk of electric shock. If cord or plug becomes damaged, replace only with cord and plug of same type.

CASE REMOVAL FROM BRACKETS / SKID (LEVELERS OR CASTERS)

1. Removing Case Shipping Brackets That Are Attached To Skid

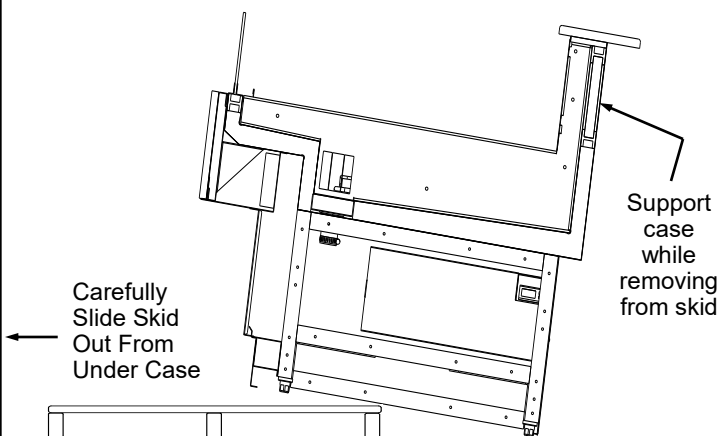
- Remove screws holding shipping brackets to skid.
- Remove shipping brackets from skid.
- See illustrations below.
- Note: Shipping brackets will vary in size, shape, material and location depending upon case type and model.

Note: Units shown may not depict an exact representation of the unit being installed.



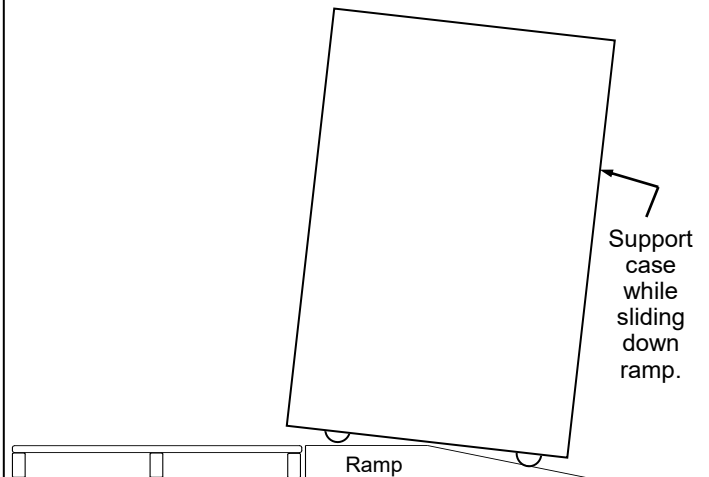
2. Remove Case (With Levelers or Frame Support Rails) From Skid

- To prevent damage, support case while sliding it toward edge of skid.
- When case is at edge of skid, carefully lower to floor so that two levelers (or one frame support rail) rests on floor.
- Carefully slide skid out from under case.
- After case is off skid, place into position.
- Note: Illustration below reflects general outline of sample case and does not reflect any particular model or options).



3. Remove Case (With Casters) From Skid

- Place ramp up against skid (to allow case to smoothly slide off from skid).
 - Maintain support of case at all times or center of gravity may cause case to fall.
 - Unlock casters. Slide unit to rear of skid. Slide down ramp and off from skid.
- Note: Illustrations reflect general outline of sample case and may not reflect your particular model or options).



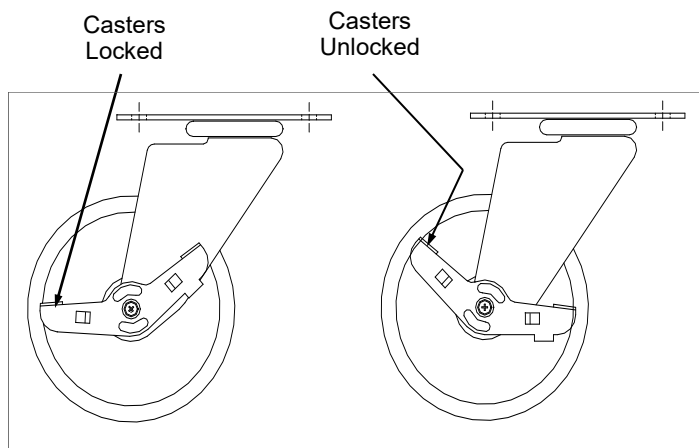
Note: Units shown may not depict an exact representation of your particular unit being installed.

1. Position & Align Case Alongside Other Cases

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

2. Caster Locking / Unlocking Operation (Not on All Models)

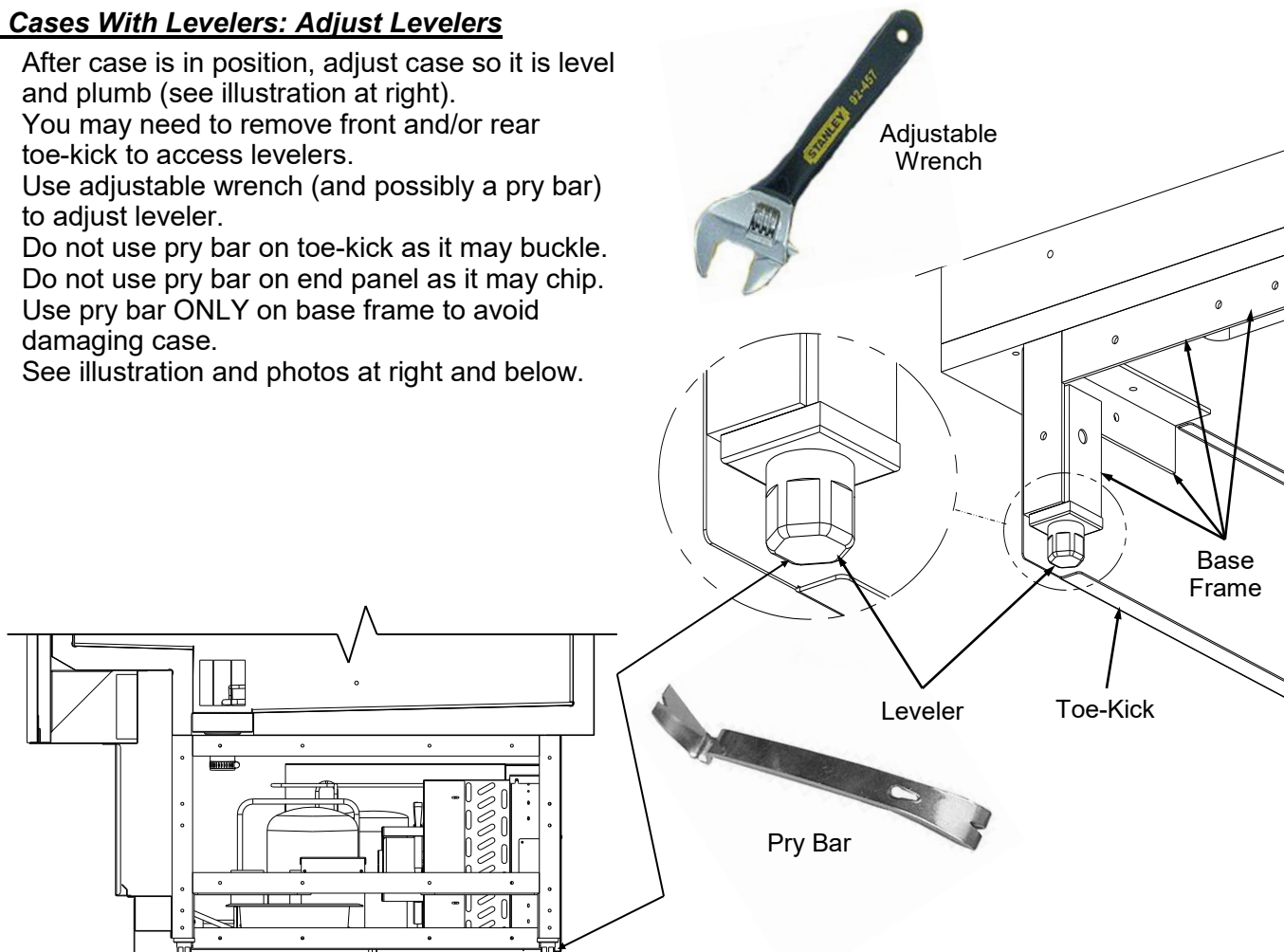
- To lock casters (from the unlocked position), press down on each RAISED caster lever (as shown in illustration). Casters are now locked.
- To unlock casters (from the locked position), press down on the RAISED caster lever (as shown in illustration at top-right). Casters are now unlocked.



Certain Casters Have Locks. Yours May Differ.

3. Cases With Levelers: Adjust Levelers

- After case is in position, adjust case so it is level and plumb (see illustration at right).
- You may need to remove front and/or rear toe-kick to access levelers.
- Use adjustable wrench (and possibly a pry bar) to adjust leveler.
- Do not use pry bar on toe-kick as it may buckle.
- Do not use pry bar on end panel as it may chip.
- Use pry bar **ONLY** on base frame to avoid damaging case.
- See illustration and photos at right and below.

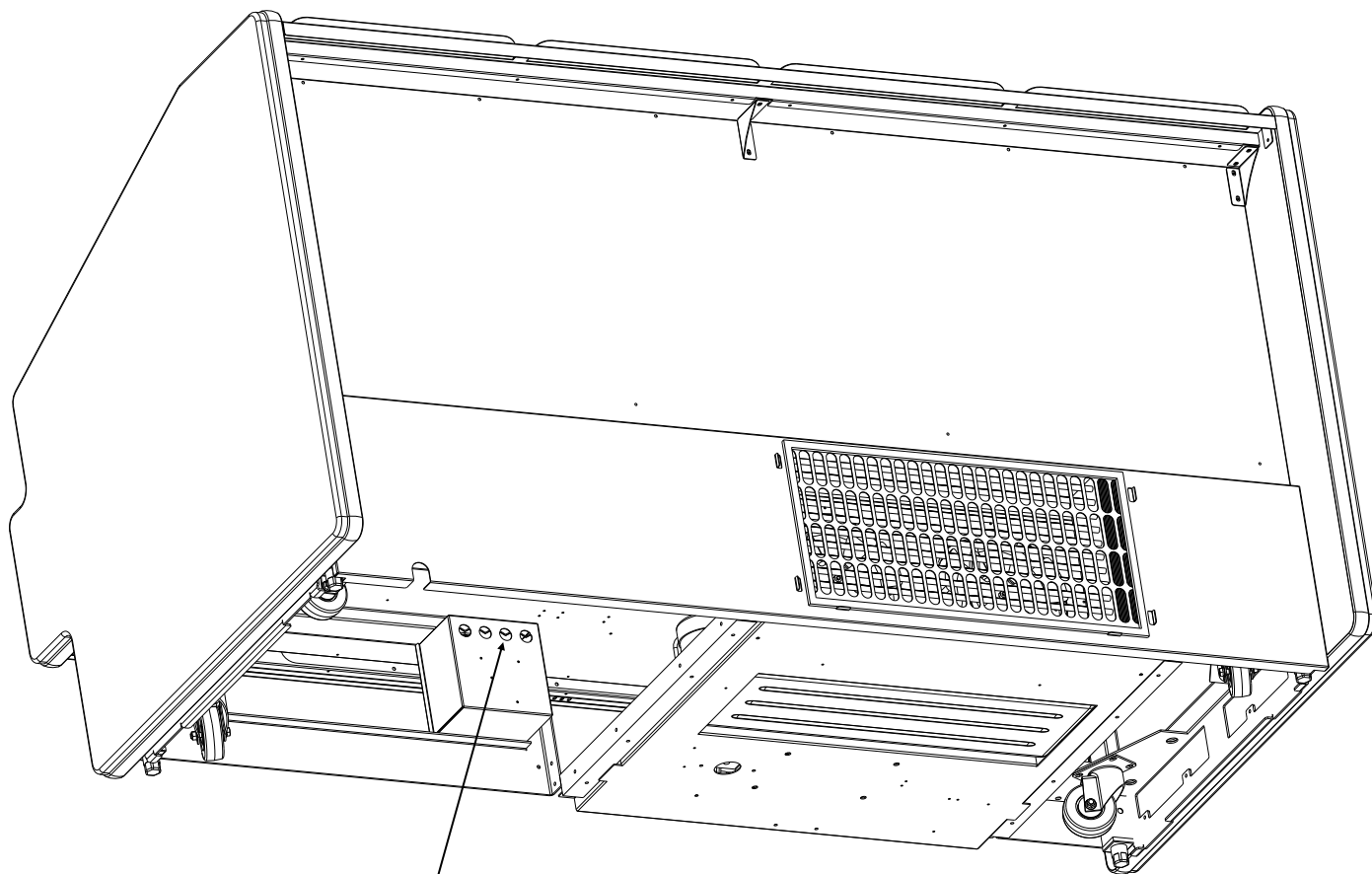


ELECTRICAL CONNECTIONS (SELF-CONTAINED UNITS)

Electrical Connections (Self-Contained Units)

Field wiring hook-up/electrical access locations are shown in illustration below (may not exactly reflect your particular unit).

- Either single phase leads OR straight blade power cord will be provided.
- See Technical Information Sheet for more information.



Field Wiring Hookup (for
Self-Contained Cases)

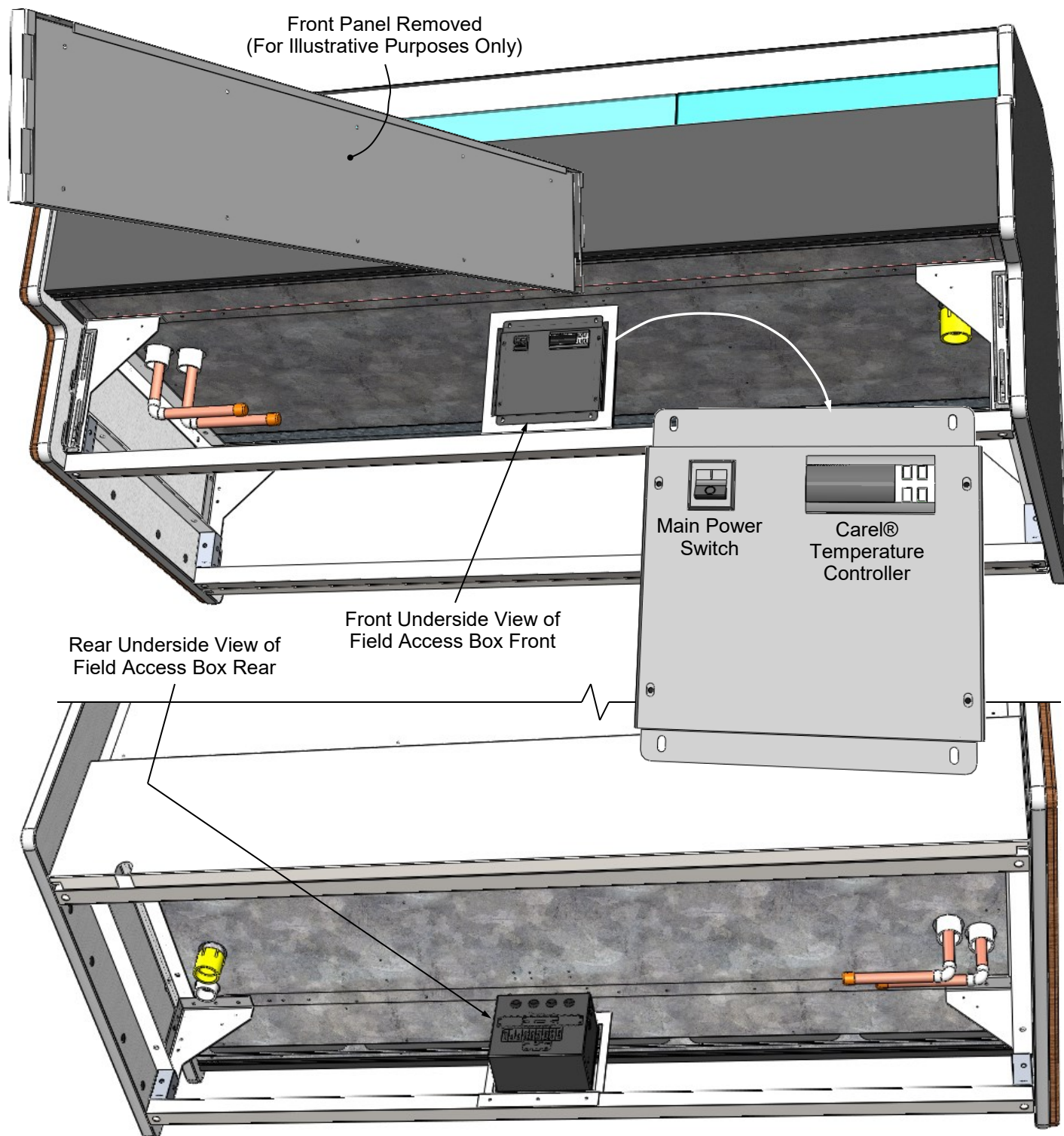
Rear Underside
View of Case

START-UP AND OPERATION / ELECTRICAL CONNECTIONS - REMOTE UNITS

Electrical Connections (Remote Units)

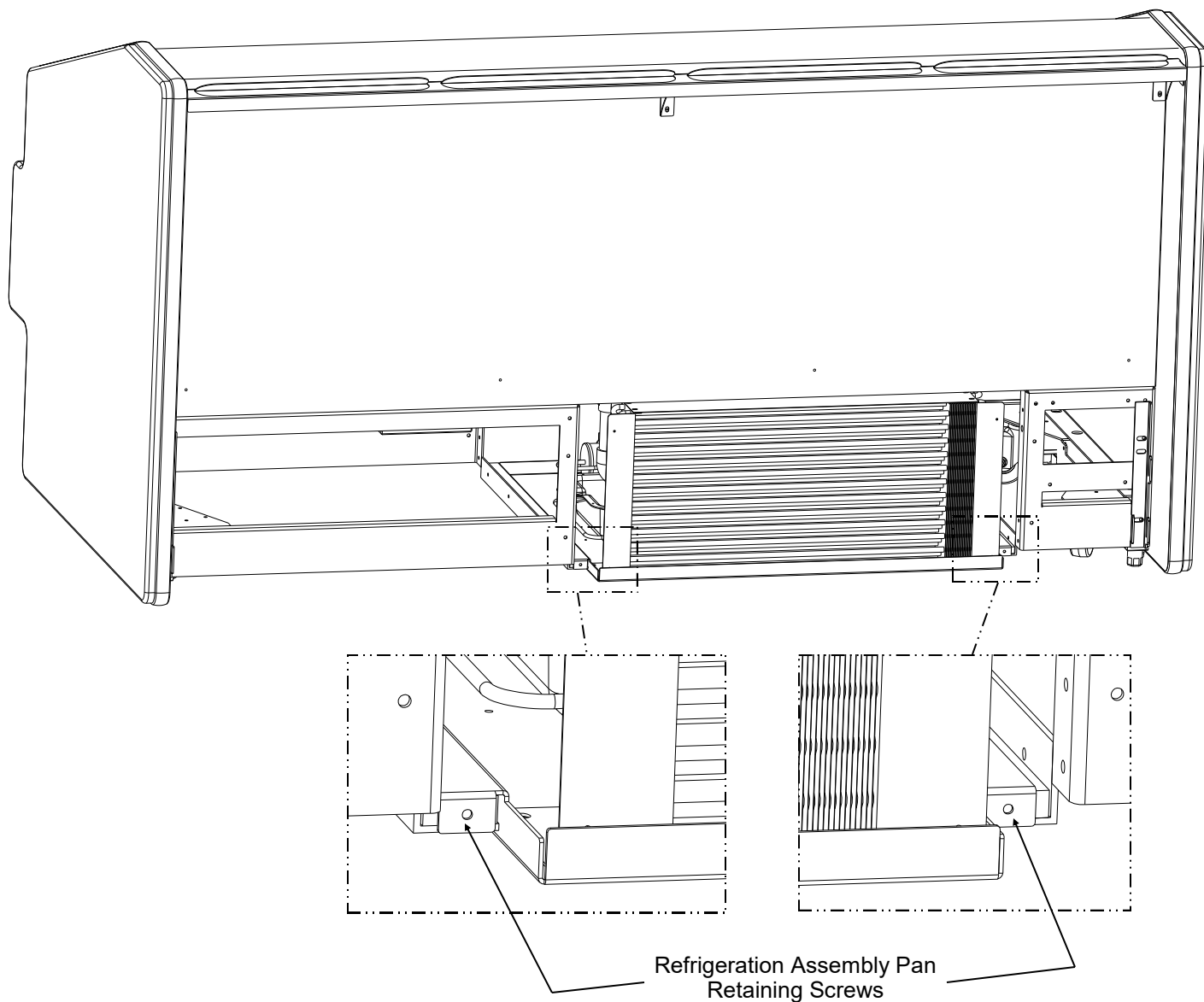
- Model P63941R remote glycol unit is shown below.
- Front panel is shown removed. Hook/slot method. No screw removal required.

- Access field access box at either front or rear of case by removing front or rear panel
- Leads are accessible at either front or rear.
- After properly connecting leads, turn main power switch on. Unit will power-up.



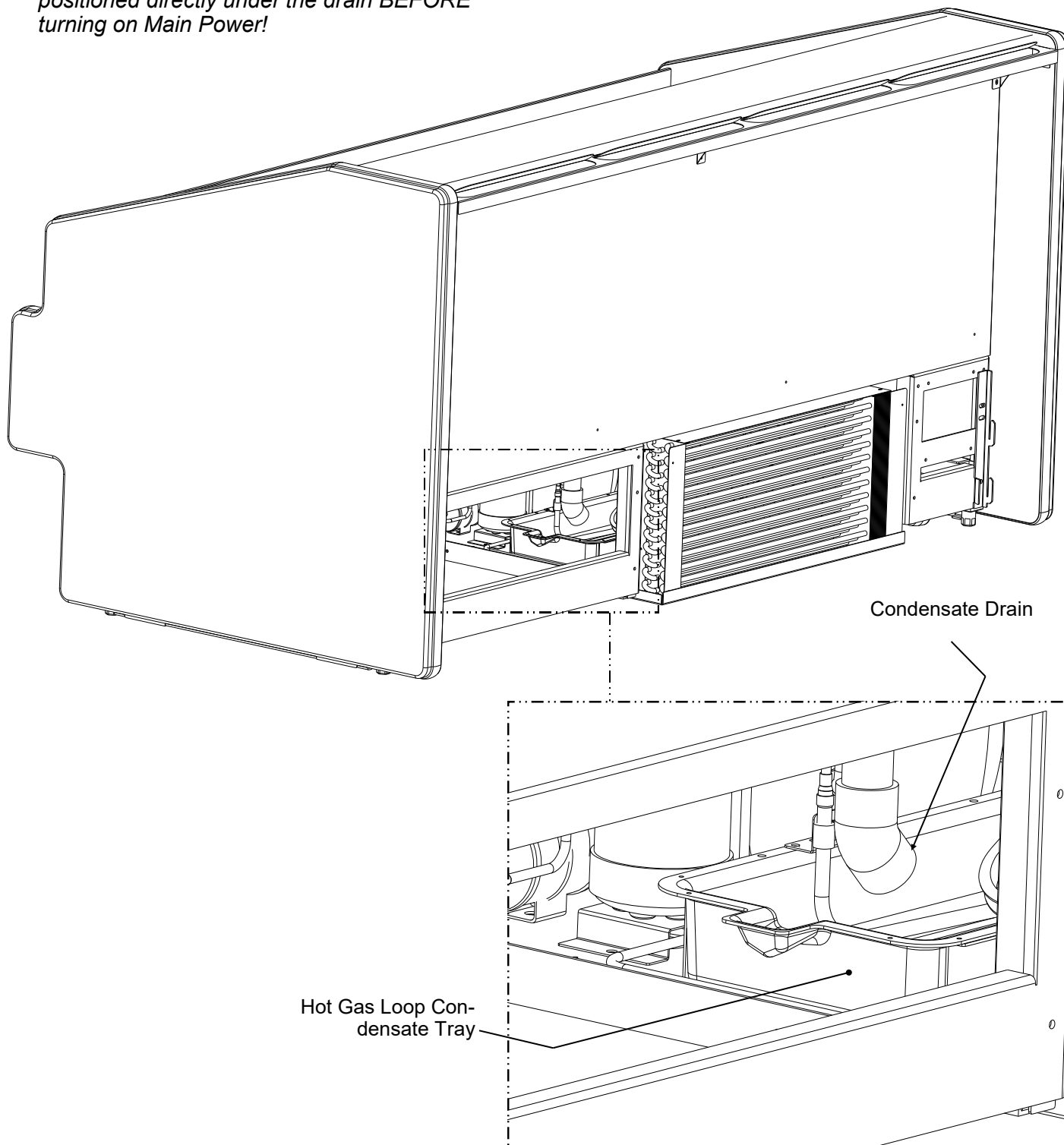
1. Merchandiser Refrigeration Assembly Pan Slide-Out Feature

- Retaining screws must be removed to allow refrigeration assembly to be slid out (for servicing and/or cleaning).
- See illustration below for retaining screw locations.
- See **MAINTENANCE FUNDAMENTALS, CONTINUED: CONDENSER PACKAGE LAYOUT** section in this operating manual for illustration of condenser package pulled out from under case.



2. Condensate Pan Placement

- Before turning on Main Power switch (at front of case), remove rear panel (by lifting up and off; no screw removal required).
- ***Caution!*** Check that the condensate pan is positioned directly under the drain **BEFORE** turning on Main Power!
- Return rear panel to the case in same manner it was removed. See below illustration.



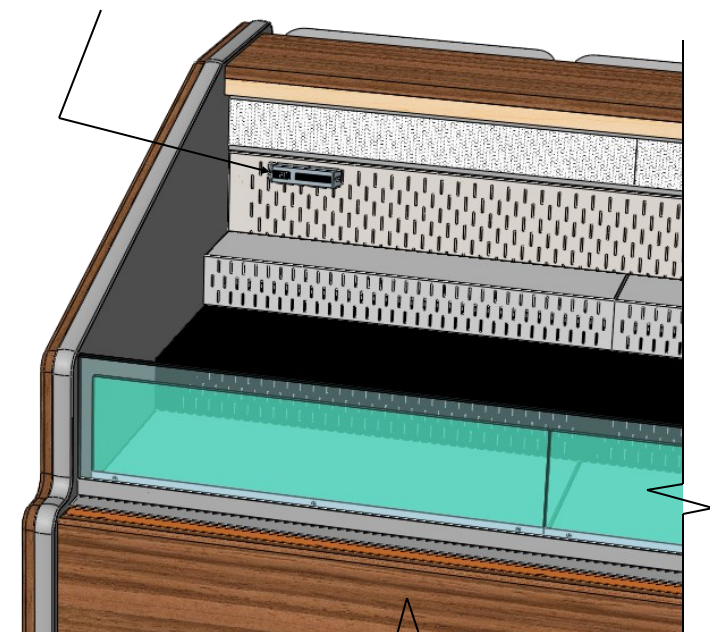
3. Main Power Switch and Temperature Controller

- Temperature Controller is at case front (shown below).
- Access by removing front panel. Simply lift up and off (no screw removal is required).
- See Carel® Temperature Controller section of this manual for specifics on settings & parameters.

4. Thermometer

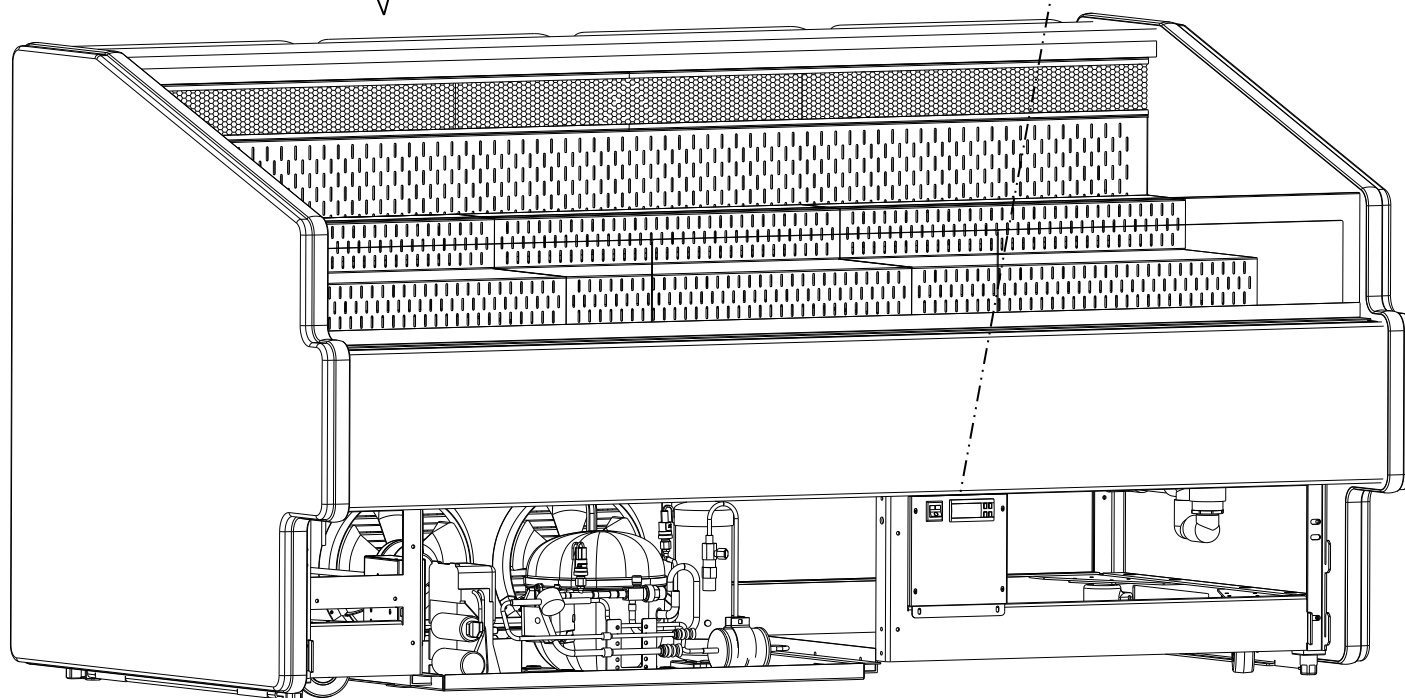
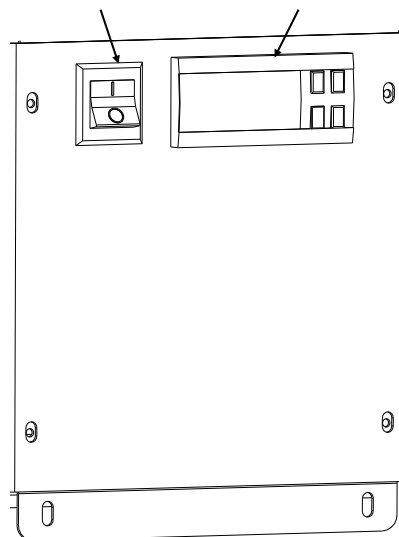
- Thermometer is located in the refrigerated compartment are for monitoring warmest air temperature in accordance with NSF Std. 7.
- After leads have been properly connected, turn main power switch on. Unit will power-up.
- See illustration below.

Thermometer



Main Power Switch

Temperature Controller



1. Evaporator Fans, Drain, Trough Access

- Caution! Turn main power off and disconnect from outside power source.
- Remove decking and sub-deck
- Perform maintenance, service or cleaning as required.
- Return decking and sub-deck to unit in reverse order in which they were removed.

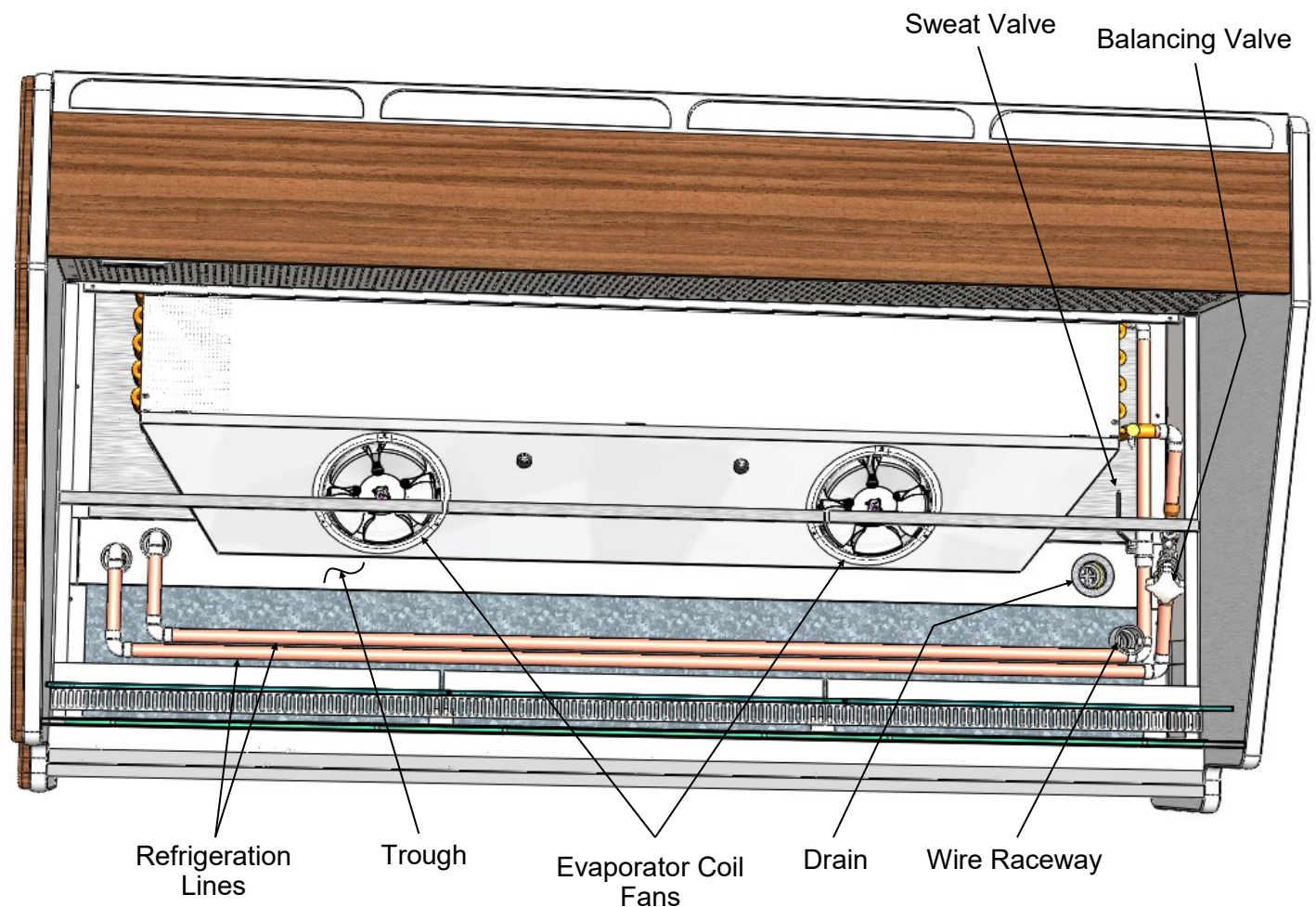
2. Evaporator Coil Fan Discharge

When main power switch is on, refrigeration assembly will energize (see **START-UP AND OPERATION** section in this operating manual).

- Coil fans should turn on. From inside of the case, check for discharge air from front baffle, to confirm that the fans are functioning properly.
- When case has been idle for a long period of time, the unit will require 75 minutes of run time to pull-down temperature.

3. Sweat Valve / Balancing Valve

- Sweat valve and balancing valve is at customer front-right of case).
- Decking must be removed for access.
- See below illustration for general location.



--- Above Illustration Shown Partially Disassembled for Illustrative Purposes Only ---

1. Evaporator Fans, TXV and Drain Access

- Caution! Turn Main Power off and disconnect from outside power source.
- Remove Decking and Sub-Deck
- Perform maintenance, service or cleaning as required.
- Return Decking and Sub-Deck to unit in reverse order in which they were removed.

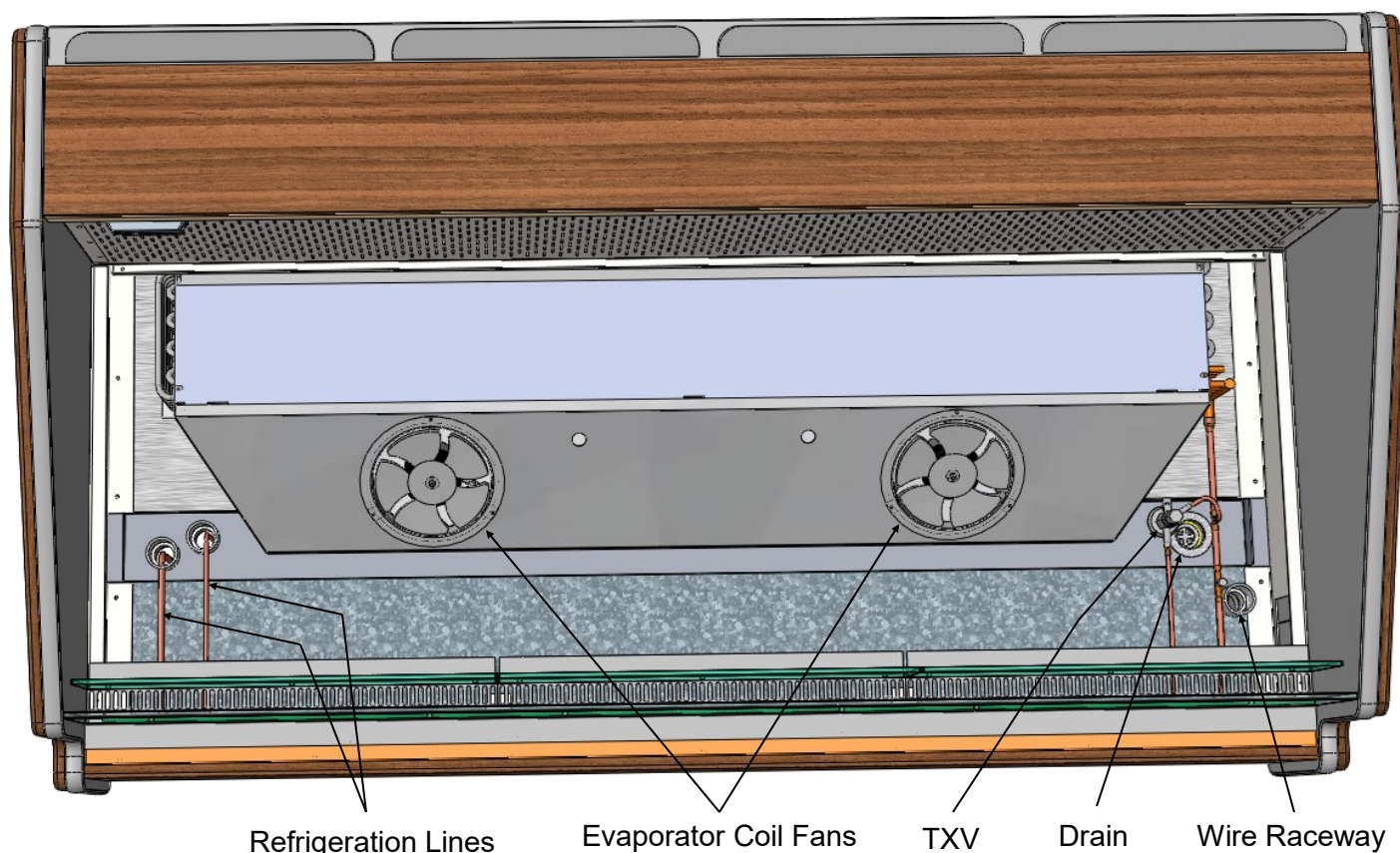
2. Evaporator Coil Fan Discharge

When main power switch is on, refrigeration assembly will energize (see **START-UP AND OPERATION** section in this operating manual).

- Coil fans should turn on. From inside of the case, check for discharge air from front baffle, to confirm that the fans are functioning properly.
- When the case is in a start up mode or has been idle for a long period of time, the unit will require 75 minutes of run time to pull-down temperature.

3. TXV (Thermostatic Expansion Valve)

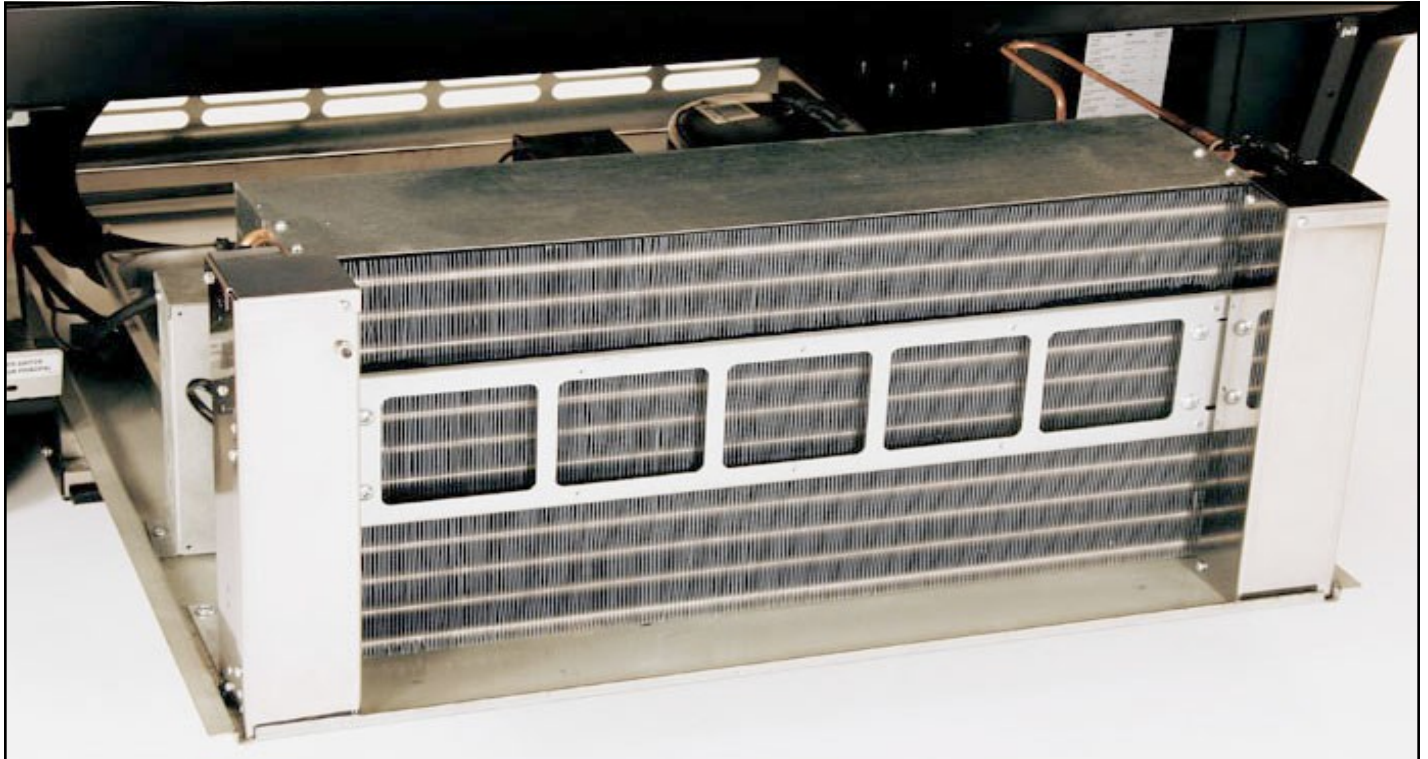
- TXV is under TXV access panel (at customer front-right of case).
- Decking must be removed for access.
- See below illustration for general location of TXV.



--- Above Illustration Shown Partially Disassembled for Illustrative Purposes Only ---

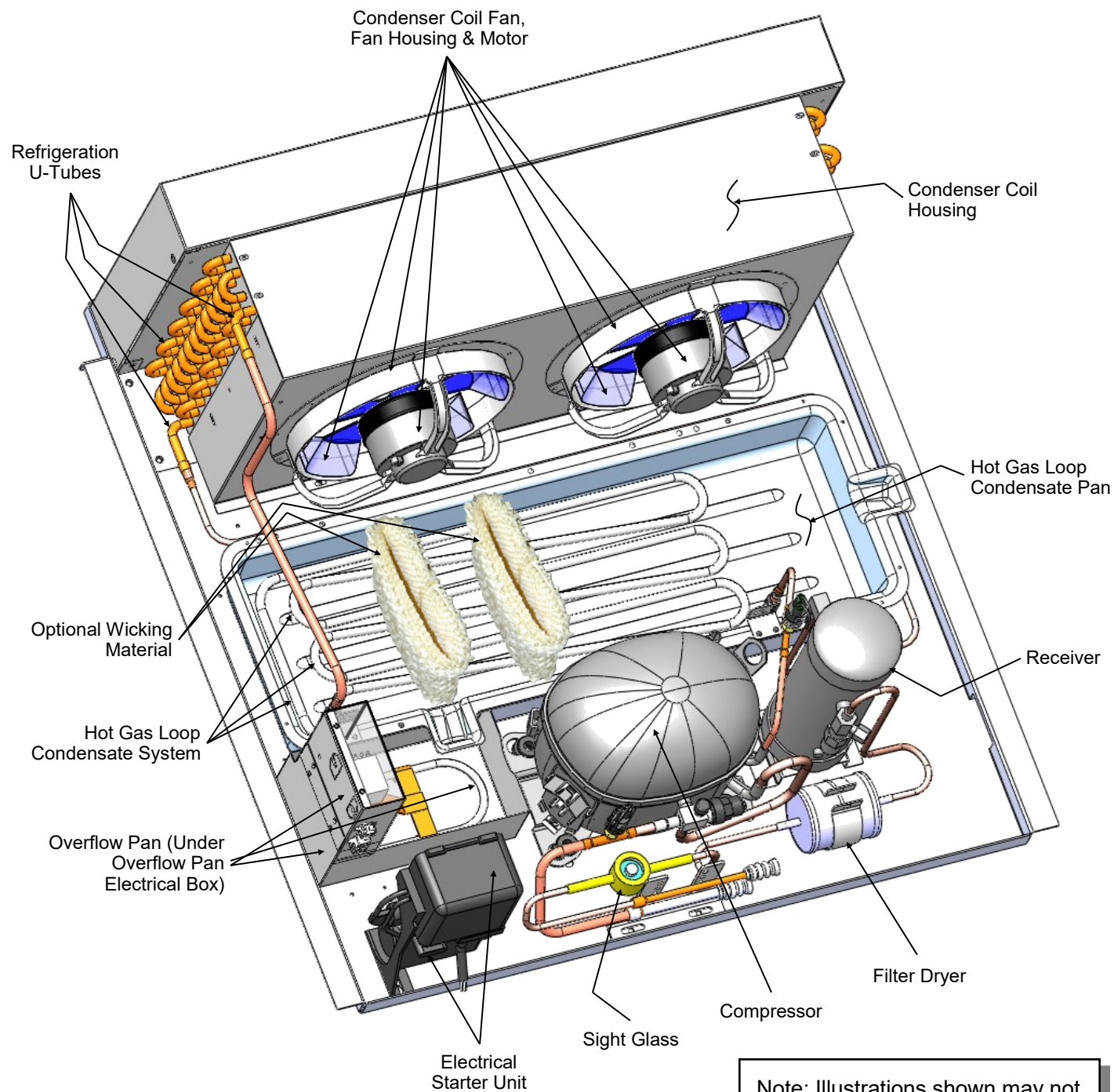
4. Optional Clean Sweep Condenser Coil (Self-Contained Units Only)

- Clean Sweep Condenser Coil (photo below) is accessible by removing rear grille.
- See *Preventive Maintenance (To Be Performed By Trained Service Provider)* for cleaning instructions.
- Photo below is after rear grille has been removed case



5. Condenser Package Layout (Hot Gas Loop Condensate Tray)

- Note: Due to design variables, refrigeration package component layout can slightly vary in size and location.



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

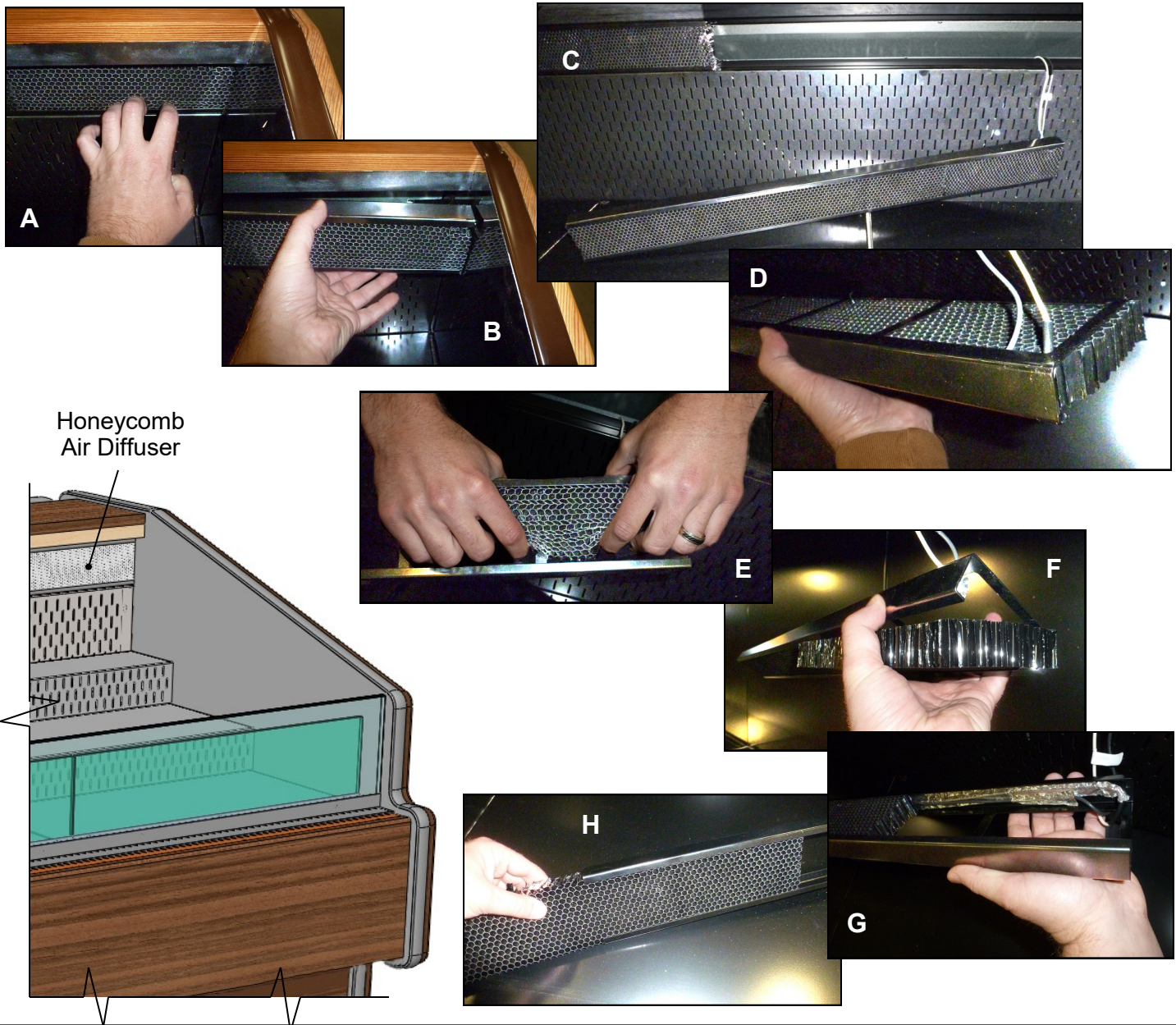
6. Honeycomb Air Diffuser Removal

Caution! Be careful not to dislodge the heater wire (a.k.a. heat tape) from honeycomb bracket as it prevents condensation from forming in the case.

- A. Grasp honeycomb bracket and pull outward.
- B. Both bracket and honeycomb may be pulled out from housing.
- C. View of bracket/honeycomb assembly (with heater wire/heat tape still connected to case).
- D. View of heater wire/heat tape routed through rear of honeycomb (at corner of bracket).
- E. To remove, apply pressure to collapse honeycomb and remove from retaining bracket.
- F. Section of honeycomb shown removed from bracket.
- G. Heated wire/heat tape MUST remain in place (and tape secure) while removing honeycomb.
- H. Remaining portion of honeycomb may be slid out at opposite end of bracket (while taking care to NOT dislodge heater wire/heat tape).

> See **PREVENTIVE MAINTENANCE (TO BE PERFORMED BY TRAINED SERVICE PROVIDER)** section in this manual for cleaning instructions.

> Replace honeycomb air diffuser in reverse order it was removed. **Caution!** Be careful not to dislodge the heater wire/heat tape from honeycomb bracket!





Serial Label Location & Information Listed / Technical Information & Service

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

- Sample serial label 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

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

Reveal
Blend
Harmony
Impulse
Oasis

Addenda
Grocerant
Fusion

MODEL NRS3648RXV-SAMPLE
SERIAL NO. 12345X30DZ098765

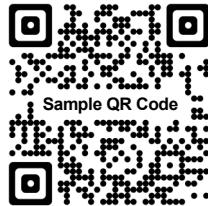
120/1/60 16 A
R513A AMOUNT 50 OZ
HIGH 186 LOW 88
20A
20A

ELECTRICAL RATING
REFRIGERANT
DESIGN PRESSURE
MINIMUM CIRCUIT AMPACITY
MAXIMUM OVERCURRENT

6-8 °F
6 defrosts per day, 45 °F

FOR PARTS AND SERVICE
CALL 1-800-433-9490

SCAN FOR PRODUCT LITERATURE



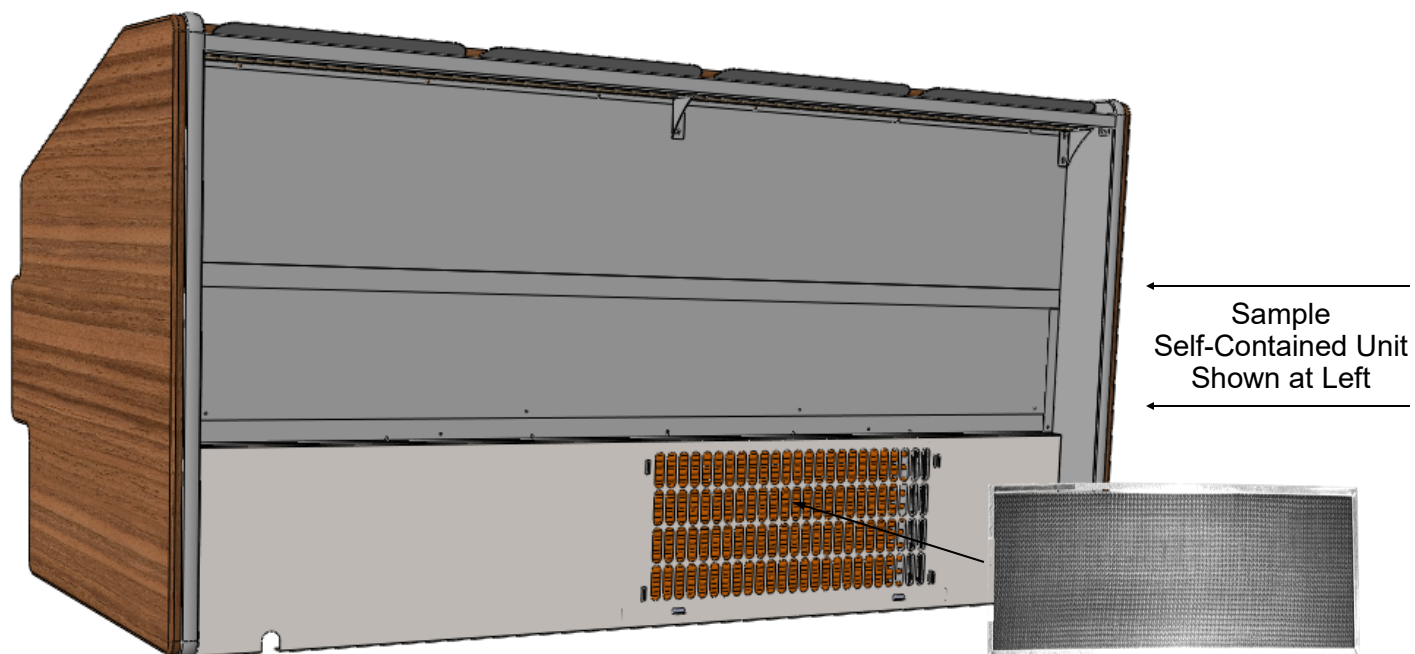
Sample QR Code

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).

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

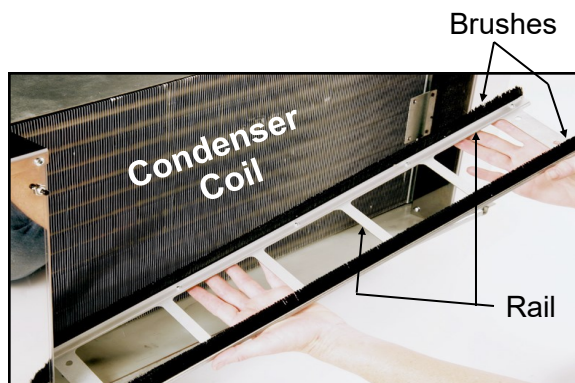
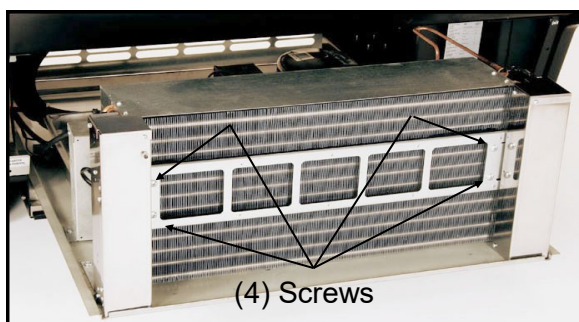
CLEANING SCHEDULE (TO BE PERFORMED BY STORE PERSONNEL)

AREA TO CLEAN	FREQ.	INSTRUCTIONS
Case Exterior	Daily	Condenser Coil (Self-Contained Units): Vacuum or brush condenser coil at case rear (after removing rear grille).
	Weekly	Magnetized Condenser Coil Filter (Self-Contained Units): Remove and submerge in warm, soapy water. Use nylon brush to remove dust and dirt. Pat dry (or blow dry with wet/dry vacuum). Return to case.
	Weekly	Acrylic Sneeze Guard: Clean with a warm water and mild soap solution and soft cloth. Never use ammonia-based cleaners on acrylic.
Case Interior	Weekly	Decks and Product Steps: Wipe off decks and product steps with moist cloth. For hardened stains, decks and steps can be removed and submersed in warm, soapy water and cleaned with nylon brush.
	Monthly	Condenser Coil (Self-Contained Units): <ul style="list-style-type: none"> Remove rear panel (by lifting up and off). No screw removal is required. Use wet/dry vacuum or other vacuum with high air velocity and bristled brush. Clean dust and dirt that collects on the Condenser Coil. See illustration below. Caution! Coil fins are sharp. Handle with care! Return rear panel to case.



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

PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Exterior	Monthly	<p>Condenser Package (Self-Contained Units): <i>Disconnect power from case before cleaning the condenser coil!</i></p> <ul style="list-style-type: none"> Remove rear grille (by removing 4 screws). Roll / slide out refrigeration assembly. <u>Note:</u> At initial slide-out, it may be necessary to remove two (2) compressor pan shipment screws for refrigeration assembly to slide out. Use air pressure or industrial strength vacuum; clean dust and dirt that may collect on the condenser coil. See illustration below. Use damp cloth to clean all internal areas of condenser package (including hot gas loop condensate tray, overflow condensate pan, fan blades, etc.). Caution! Coil fins are sharp. Handle with care! Slide/roll Condenser unit assembly back under case. Replace rear grille to case (4 screws). See illustration below.
	Quarterly	<p>Optional Clean Sweep™ Condenser Coil (Self-Contained Units): <i>Disconnect power from case before cleaning Clean Sweep Condenser Coil!</i></p> <ul style="list-style-type: none"> Remove rear grille (by removing 4 screws). Slide/Roll out condensing unit assembly. Remove the four (4) screws holding the Clean Sweep™ rails 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 condenser coil: Use air pressure or industrial strength vacuum; clean dust and dirt that collects on condenser coil. Caution! Coil fins are sharp. Handle with care! Reattach Clean Sweep rail to condensing unit (4 screws). Slide/roll condensing unit assembly back under case. Replace rear grille to case (4 screws). See photos below.



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

PREVENTIVE MAINTENANCE	FREQUENCY	INSTRUCTIONS
Case Exterior	Quarterly	<u>Under Case Cleaning:</u> Once refrigeration package is clear of unit, vacuum under case to remove all dust and dirt that may collect under case.
Case Interior	Quarterly	<u>Tub, Coil and Drain:</u> Remove decking and clean tub, coil and drain with warm water and mild soap solution. Remove any debris that may clog drain.
	Quarterly	<u>Fan Blades, Motor, and Bracket:</u> Wipe down each blade, motor and bracket with moist cloth.
	Quarterly	<p><u>Honeycomb Air Diffuser:</u> See <i>MAINTENANCE FUNDAMENTALS, CONTINUED (TRAINED SERVICE PROVIDERS ONLY)</i> section in manual for instructions on removing honeycomb from its retaining bracket as well as proper replacement.</p> <ul style="list-style-type: none"> • <i>Caution!</i> While removing honeycomb air diffuser from case, be careful not to dislodge the heater wire (a.k.a. heat tape) from honeycomb bracket as it prevents condensation from forming in the case. • After honeycomb has been removed from case, clean honeycomb with warm water, soap solution and nylon brush. Submerge if necessary. Use nylon brush to dislodge hardened dust particles and stubborn or sticky residue. Dry by using vacuum's blow mode (vs. suction mode).

CONDITION	TROUBLESHOOTING
Case Not Lining Up	See INSTALLATION section for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On The Floor	<p>Caution! Water on flooring can cause much damage! Until cause is determined (and repaired), follow these procedures:</p> <ul style="list-style-type: none"> • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.
	Check that the drain trap is free of debris.
	Check that the drain hose is correctly positioned over condensate pan (or floor drain, for remote units).
	Check store conditions. To prevent condensation in Type 1 condition environments, maximum conditions are to be 55% humidity / 75 °Fahrenheit. For Type 2 condition environments, maximum conditions are to be 60% humidity / 80 °Fahrenheit. See serial label (at case rear near main power switch) for Type of your case.
	Check condensate pan float for proper operation (heat rod condensate system only).
	Check that condensate pan is properly plugged in or connected.
	<p>Caution! Condensate pan may be malfunctioning (electrical heat rod condensate system). If so, water will overflow pan and seep onto flooring causing damage! Until condensate pan is functioning (or is replaced), follow these procedures:</p> <ul style="list-style-type: none"> • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.
	<p>Caution! Disruption of power can cause water to overflow pan and seep onto flooring causing damage! Check that power to case is constant. Until power is restored, follow these procedures:</p> <ul style="list-style-type: none"> • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drainage. Swap out regularly until evaporation of case is complete (or until power is restored). • When power to case is restored, condensate pan should function properly and water will no longer overflow onto flooring.
	<p>Caution! Wicking material may be dirty or worn and need replacement (hot gas condensate system only).</p> <ul style="list-style-type: none"> • Slide refrigeration system out from under unit. • After refrigeration system has been carefully slid out from under unit, replace wicking material with new. If wicking material is not available, contact Structural Concepts®. See toll-free number at last page of this operating manual.

CONDITION	TROUBLESHOOTING
Fan Emits Excessive Noise	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motors. Check motor shaft for bearing wear.
	Check that fan motors are securely mounted in brackets.
	Verify that fan blades are securely mounted to fan motor.
	Check that nothing is preventing blade rotation.
Fans Are Not Working	Check that the fan shroud is properly secured.
	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
Digital Control Display Is Blank	Check that fan wiring is connected on terminal blocks.
	Check that the MAIN power switch is on.
System Not Operating	Check the circuit breaker box for tripped circuits.
	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
Control Display Is Flashing	See your case's serial label for your model's specified settings. See SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE for label location, etc.
	See the Carel® Controller thermostat sheets in this manual for codes that may be displayed on controller identifying problem.
Case Is Not Holding Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Unit needs product to be pre-chilled.
	Temperature changes during defrost mode but will return to normal. Fourth LED will indicate defrost cycle in progress.
	Check that case is not in sun or near a heat or air-conditioning vent. See OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / CORDS / WIRING section in manual for adverse conditions/spacing issue parameters.
	If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature. See OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / CORDS / WIRING section in manual for adverse conditions/spacing issue parameters.
	Check that condenser coil air filter (attached to rear grille) has been cleaned. See GENERAL CLEANING (TO BE PERFORMED BY STORE PERSONNEL) section in operating manual for instructions.
	Check that condenser coil has been cleaned.
	Check air return grilles for obstructions.
	Check sight glass for flashing and/or low charge.
	Check set point temperature; it may be adjusted too high.
Condensing Unit Is Not Operating	Check that the power is turned on.
	Determine if temperature controller settings are properly set. See your case's serial label for your model's specified settings. See SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE section in manual for label location, etc.

TROUBLESHOOTING (BY TRAINED SERVICE PROVIDERS ONLY) - CONDENSING SYSTEM

CONDITION	TROUBLESHOOTING
Head Pressure Too High	Check that the condenser 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 condenser 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. <ul style="list-style-type: none"> • See OVERVIEW AND WARNINGS section in User Manual.
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 (BY TRAINED SERVICE PROVIDERS ONLY) - EVAPORATOR SYSTEM

CONDITION	TROUBLESHOOTING
Low Suction Pressure	Check that the refrigerant doesn't have a low charge.
	Check that thermostatic expansion valve (TXV) isn't restricted.
	Check that liquid line or filter isn't restricted.
	Check that evaporator fan 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.



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



Carel® PJEZ Platform



Carel® ir33 Platform



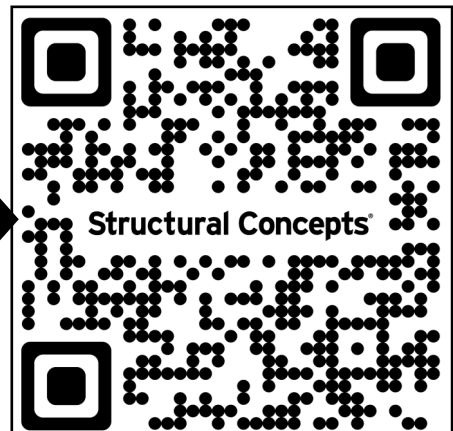
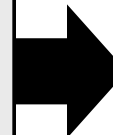
Carel® iJF Platform



Dixell® XM670K-XM679K Platform

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

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



STRUCTURAL CONCEPTS TECHNICAL SERVICE CONTACT INFORMATION & LIMITED WARRANTY

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

DAYS/HOURS AVAILABLE:
MONDAY - FRIDAY (CLOSED HOLIDAYS)
8:00 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.

