

# Oasis<sup>®</sup> USER MANUAL

**SCC P/N  
21-29855**

**OASIS<sup>®</sup> REFRIGERATED MODEL BD3632 AND BD4732 BOX DOOR CASE**

- > SELF-CONTAINED REFRIGERATION SYSTEM
- > FRONT DOOR NON-LOCKING (STANDARD)
- > CASE ADJOINMENT POSSIBLE
- > **NOTE: THIS UNIT IS NOT INTENDED FOR USE IN LOBBIES OR LOCATIONS OF EGRESS, SUCH AS HALLWAYS OR PUBLIC CORRIDORS.**

**Important!**  
This User Manual Must  
Maintain Parity With Its  
French Counterpart:  
SCC P/N 21-30645.



--- Model BD3632 (Shown Above) With One Door ---



--- Model BD4732 (Shown Above) With Two Doors ---

**Structural Concepts<sup>®</sup>**

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**OVERVIEW**

- These cases are designed to merchandise packaged products at 41 °F (5 °C) or less product temperatures.
- Product must be pre-chilled to 41 °F (5 °C) or less product temperatures prior to placing in merchandiser.
- Cases should be installed and operated according to this operating manual's instructions to ensure proper performance. Improper use will void warranty.

**NSF/ANSI TYPE II ENVIRONMENTAL CONDITIONS**

- This unit is designed for the display of products in ambient indoor store conditions where temperature and humidity are maintained within a specific range.
- This NSF/ANSI Type II display refrigerator is intended to be used where environmental conditions are controlled and maintained so that ambient temperature does not exceed 80 °F (27 °C) and 55% relative humidity.
- Due to atmospheric pressure considerations, it is not recommended that these box door cases operate

beyond 6,562 FASL (feet above sea level) / 2,000 MASL (meters above sea level). If your facility exceeds this thresholds, please contact Structural Concepts Corp.

**COMPLIANCE**

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

**REFRIGERANT DISCLOSURE STATEMENT**

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

>> See next page for continuation.



**COMPLIANCE**

- These cases **MUST** be installed in compliance with all applicable NEC, federal, state and local electrical and plumbing codes.
- These cases must **ALSO** be installed in accordance with the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15.
- **ONLY** factory authorized service personnel are to service these box cases.



**WARNING**

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



**WARNING**

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



**WARNING**

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



**WARNING**

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

**OVERVIEW, CONT'D**

- This sheet details dangers due to flammable refrigerant. It addresses operational area required, case placement guidelines, child-proofing the unit and refrigerant recycling and/or disposal, etc..

**DANGER**

- Please read section shown below for specifics on risk of fire explosion, service guidelines, LFL, etc.

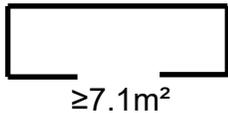
**CAUTION**

- This sheet also details the area required for operation, areas to avoid placing case, guidelines for children (and others with limited capabilities) while near box door cases.
- This sheet also provides information on refrigeration recovery, recycling and disposal.

>> See next page for continuation.



- DANGER**
- Refrigeration unit contains gas under high pressure. Do not tamper with or puncture the system. Contact qualified service personnel before disposal.
  - Risk of fire or explosion. Flammable refrigerant is used in this case.
  - Consult repair manual/owner's guide before servicing this product.
  - Do not store explosive substances (such as aerosol cans with a flammable propellant) in this appliance.
  - Do not use an electrical appliance **INSIDE** the food storage compartments unless its type is recommended by manufacturer.
  - To minimize risk of ignition due to incorrect parts or improper service, this case is **ONLY** to be serviced by factory authorized service personnel.
  - Flammable refrigerant type specified on case nameplate is on serial label.
  - Models BD3632 and BD4732 contain a charge of 150g of R290 refrigerant with a lower flammability limit (LFL) of .038kg/m<sup>3</sup>.



**CAUTION**  
Minimum room floor area required for operation of these box door cases is ≥7.1m<sup>2</sup>.



- CAUTION**
- These box door cases are **NOT** to be installed in lobbies or locations of egress, such as hallways, public corridors.
  - If case is placed in an enclosure or surrounding structure, keep all of the case's ventilation openings clear of obstructions.



**CAUTION**

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



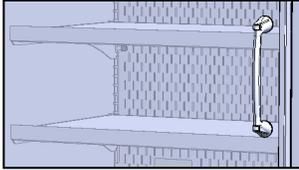
- CAUTION: REFRIGERANT RECOVERY/RECYCLING/DISPOSAL**
- When recycling or discarding case, refrigerants **MUST BE** handled according to local, state and federal codes, requirements and regulations.
  - If disposing of a refrigerated case that uses ozone depleting chemicals in its refrigeration system, make sure the refrigerant is removed by a qualified service technician and properly disposed of.
  - If you intentionally release refrigerant into the atmosphere, you may be subject to fines or other penalties (under regulations mandated by environmental regulators and/or legislative edict).

**OVERVIEW, CONT'D**

**CAUTION**

- This sheet contains cautionary notes and information on shelving load limits, lamp replacement, GFCI (Ground Fault Circuit Interrupters) breaker use,

- thermometers, thermostats, power cord/plug maintenance, checking condensate pan, and wiring diagram format & location.
- Wiring diagram format & location information is also provided below.
- Please read carefully!



**CAUTION! SHELVING LOAD LIMITS / PRODUCT PLACEMENT / TEMP. GUIDE**  
 25 kg per meter<sup>2</sup> maximum weight allowed per shelf.  
 See *LOAD LEVEL GUIDE* section in this User Manual for product placement guidelines and expected temperature variations.



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



**CAUTION! GFCI BREAKER USE REQUIREMENT**  
 If N.E.C. (National Electric Code) or local code requires GFCI (Ground Fault Circuit Interrupter), use a GFCI breaker in lieu of a GFCI receptacle.

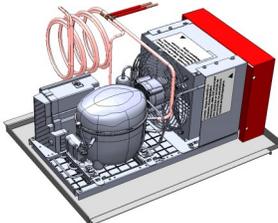


**CAUTION! DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR PRODUCT (FOOD) TEMPERATURES**

- 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.

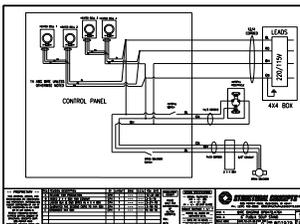


**CAUTION! POWER CORD AND PLUG MAINTENANCE**  
 Risk of electric shock. If cord(s) and/or plug(s) becomes damaged, replace only with cord(s) and/or plug(s) of same type.



**CAUTION! CHECK CONDENSATE PAN, POSITION & CONNECTIONS!**  
 Water on flooring can cause extensive damage!

- Before powering up case, check that condensate pan is positioned directly under case's condensate drain.
- Also, check that there are NO LOOSE CONNECTIONS, including overflow condensate pan and its power cord plug (if part of the condensate package).



**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 placed near ballast box, field wiring box, raceway cover, or other related location.
- Adjoined cases **MUST BE** connected to each other so that vending controls system can communicate with adjoined case.

## OVERVIEW, CONT'D

### ENGLISH TO FRENCH LANGUAGE TRANSLATION

Structural Concepts markets its products in countries with both English and French as their official languages.

As with any translation, there can be issues to contend with. Here are a few:

- There can be abbreviations. When translating abbreviated words to a different language, readers of translated text can be confused as to what meaning the abbreviated words were to convey. Abbreviations have been removed from the English text so that the translation into French is more understandable.
- There can be language structure differences (which can vary widely between languages). For example, in the English language, the adjective is placed before the noun; but in French, the adjective comes after the noun.
- There can be missing terms (which can be difficult to translate if there is no equivalent term in the target language).
- There can be compound words (usually a combination of two or three nouns and adjectives) that can be difficult to maintain accuracy.
- There can be verbs made up of two words (usually a combination of a verb and a proposition). Examples are break down, fill up, etc.). These can sometimes be translated inaccurately.
- There can be words with several meanings (depending on how it is used in a sentence).
- There can be specialized knowledge which may be required to translate technical texts.

Structural Concepts utilizes the latest language translation software available on the market today to translate its English written documents into French. It employs a well-maintained revision system to constantly update its documentation (whether in English or French) whenever warranted.

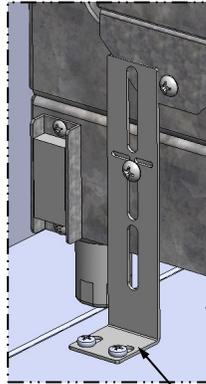
If there be a sentence, phrase or term that can be more accurately translated, please contact Structural Concepts at the following email address: [TechService@StructuralConcepts.com](mailto:TechService@StructuralConcepts.com).



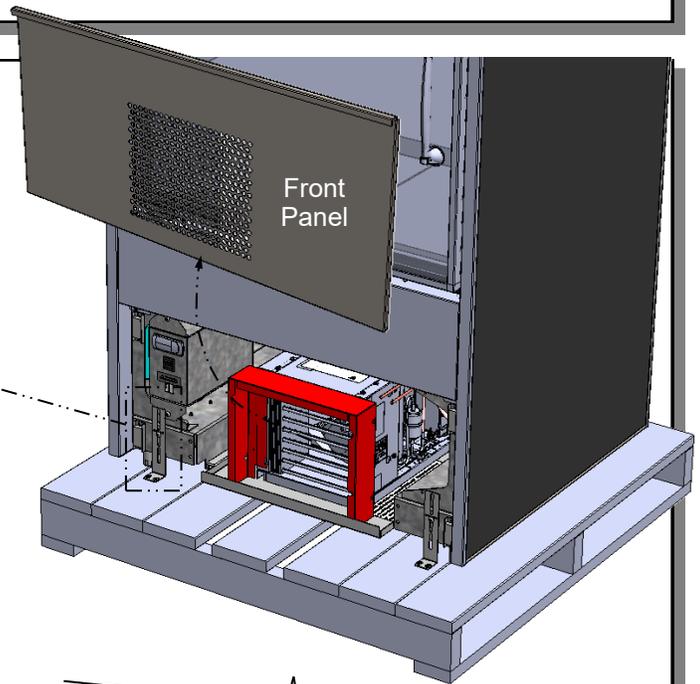
## INSTALLATION: CASE REMOVAL FROM SKID / POSITIONING / LEVELER ADJUSTMENT

### 1. Disconnect Case From Skid

- Remove front and rear panels.
- Also, remove shipping brackets that secure casters to skid
- **Important! Case is shipped with levelers in the DOWN position (for stability). To prevent damage to the case, all levelers must be raised ALL THE WAY UP before moving unit off skid and into position.**
- After levelers are raised, place ramp up against skid (to allow case to smoothly roll off from skid).



Shipping Bracket



### 2. Roll Case Off Skid via Ramp

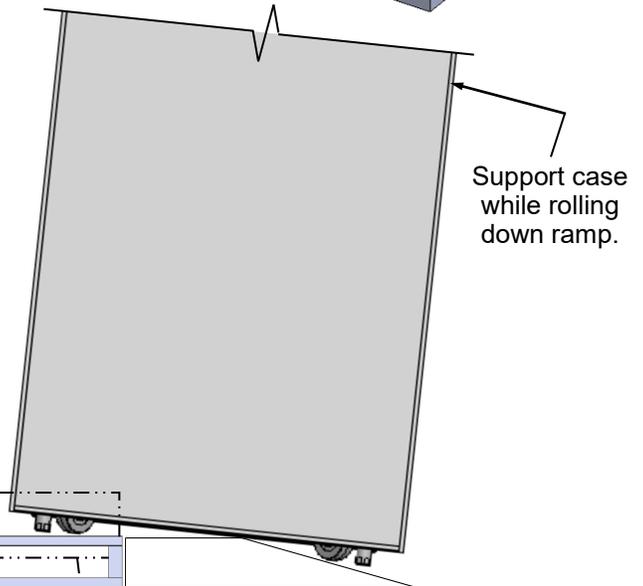
- Maintain support of case at all times or center of gravity may cause case to fall.
- Roll unit to rear of skid.
- Check that ramp is secure and possibly even attached to skid with screws.
- Carefully roll down ramp and off skid.

### 3. Position & Align Alongside Other Cases

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

### 4. Adjusting Levelers

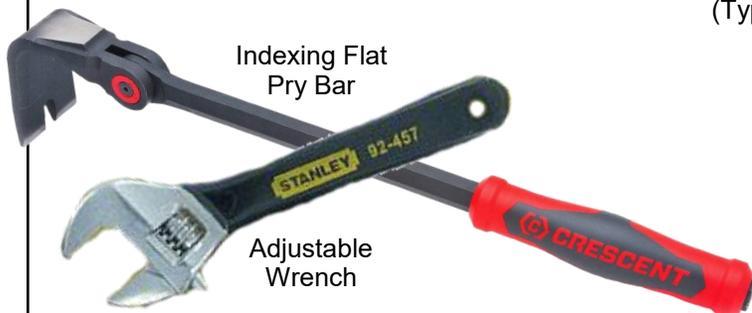
- **Important! After case is in proper position, levelers must then be LOWERED to floor.**
- Adjust levelers so the case is level and plumb. Depending upon case weight it may be necessary to use an indexing flat pry bar (or similar pry bar) to do so.
- Use adjustable wrench to adjust leveler.
- Do not use indexing flat pry bar on end panel as it may chip.
- Use indexing flat pry bar ONLY on base frame to avoid damaging case.
- See illustrations at right.
- After case is level and plumb, you may replace front and rear panels.



Support case while rolling down ramp.

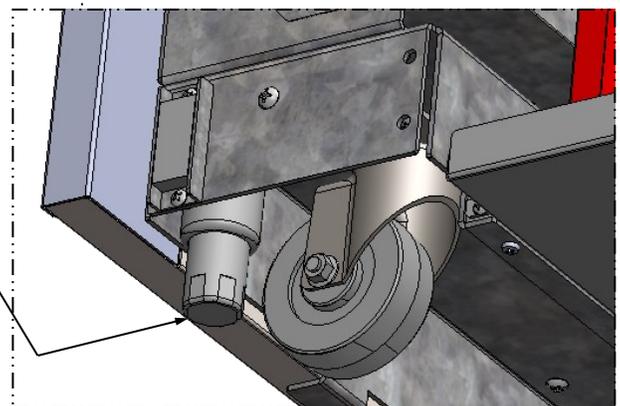


Leveler (Typical)



Indexing Flat Pry Bar

Adjustable Wrench

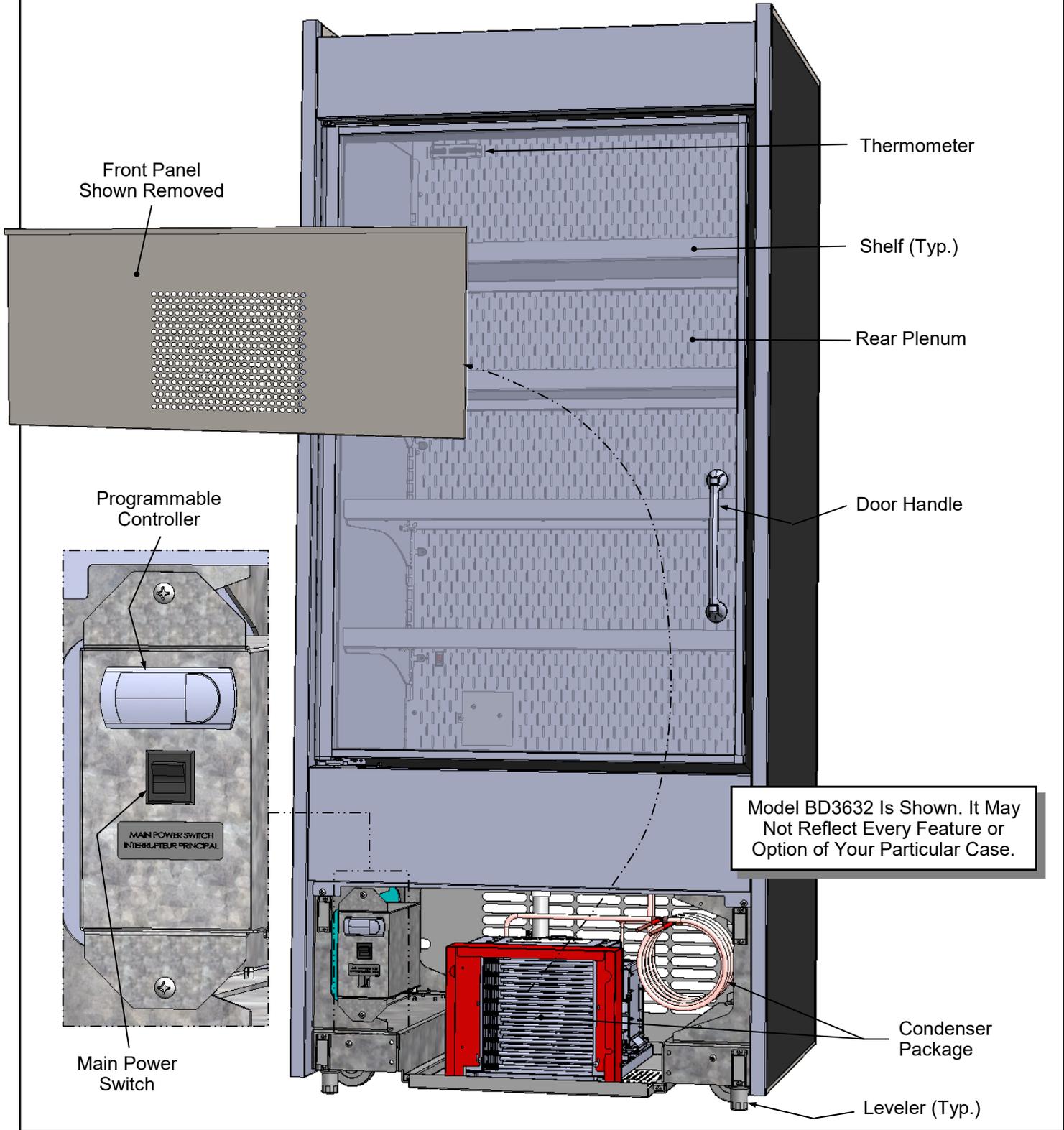


--- Rotated View of Model BD3632 ---

**1. Front View of Case**

- View is shown with front panel removed (for electrical box & condenser package viewing).

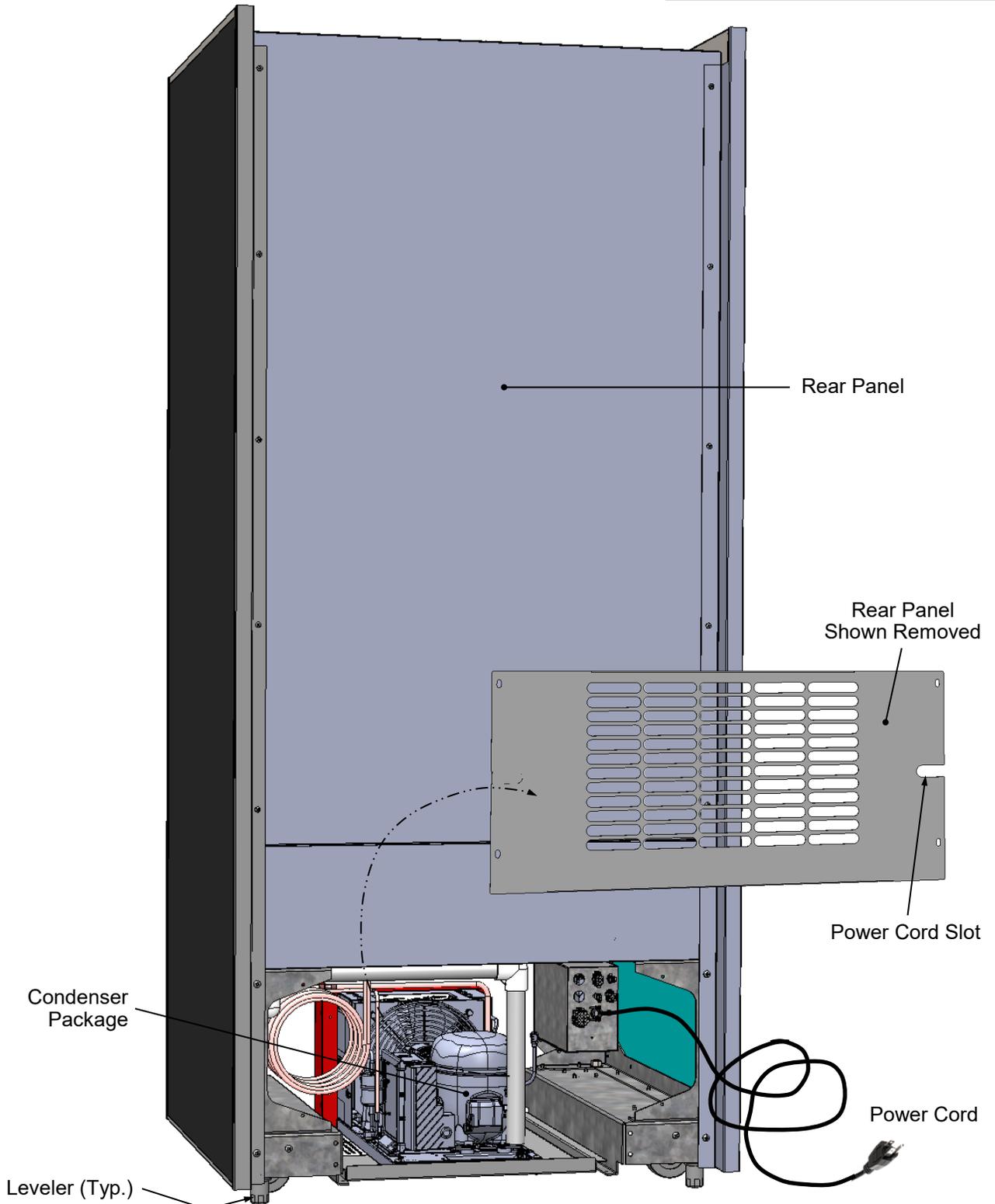
- Vending controls system (monitor, payment processor, locks, etc.) is at right side of case.
- Shelves/dividers have weight sensors for product weighing and pricing.



**2. Rear View of Case**

- Rear panel is shown removed to show access to condenser package and electrical box.
- Vending Control System is at rear-left of case.

Model BD3632 Is Shown. It May Not Reflect Every Feature or Option of Your Particular Case.



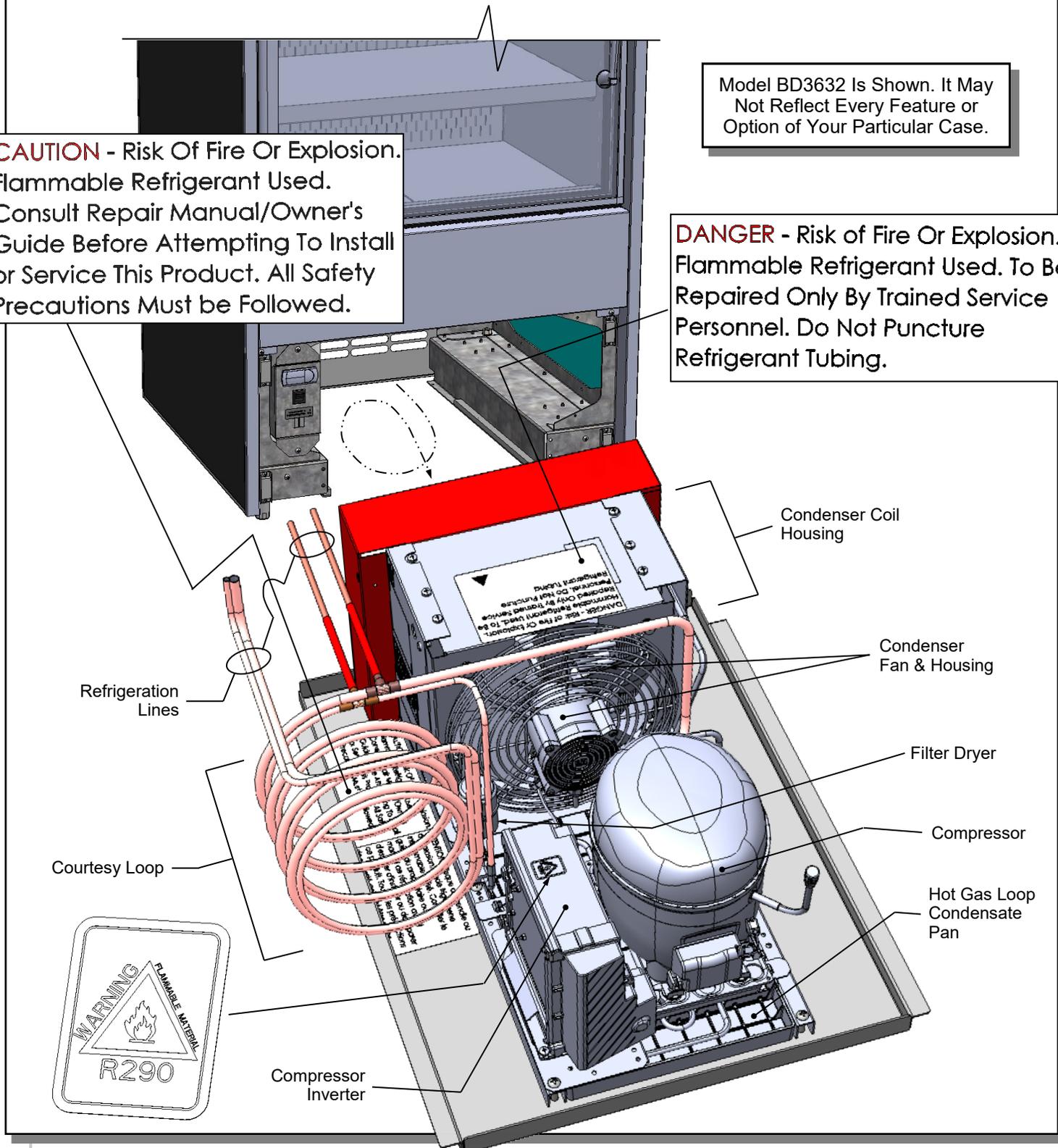
**3. Self-Contained Hot Gas Loop Condensate Package (Shown Rotated 180°)**

- **Caution:** Only trained service providers are to provide maintenance and service to unit.
- **Warning!** Disconnect power before providing maintenance and service to unit.
- **Important:** Carefully read all Warning/Caution/Danger labels on unit!

**CAUTION** - Risk Of Fire Or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner's Guide Before Attempting To Install or Service This Product. All Safety Precautions Must be Followed.

Model BD3632 Is Shown. It May Not Reflect Every Feature or Option of Your Particular Case.

**DANGER** - Risk of Fire Or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.



**5. Evaporator Coil Fans / Air Discharge**

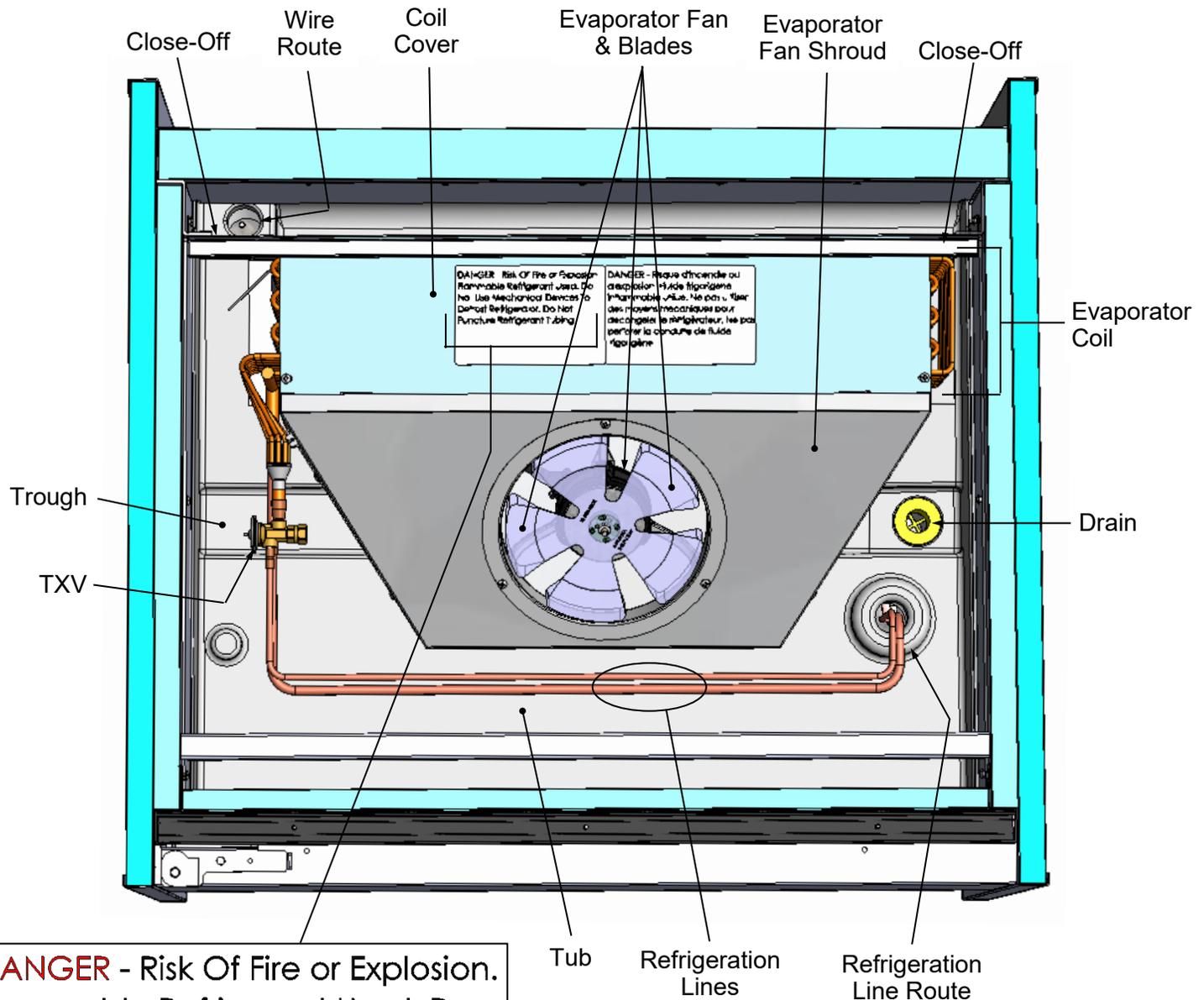
When case is energized, refrigeration will be provided.

- Evaporator coil fan should turn on.
- From inside of the case, check for discharge air from honeycomb discharge duct to confirm that the fan is 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.

**6. TXV (Thermostatic Expansion Valve)**

- TXV (at customer front-left side of case).
- Decking must be removed for access.
- See illustration below for TXV location.



**DANGER** - Risk Of Fire or Explosion. Flammable Refrigerant Used. Do Not Use Mechanical Devices To Defrost Refrigerator. Do Not Puncture Refrigerant Tubing.

### 1. Removable Front/Rear Panel

- Front and rear panel can be removed/replaced by simply grasping top 'lip' and pulling outward, freeing it from magnets.
- See illustration below.

### 2. Check Condenser Package Connections Before Powering Up Case!

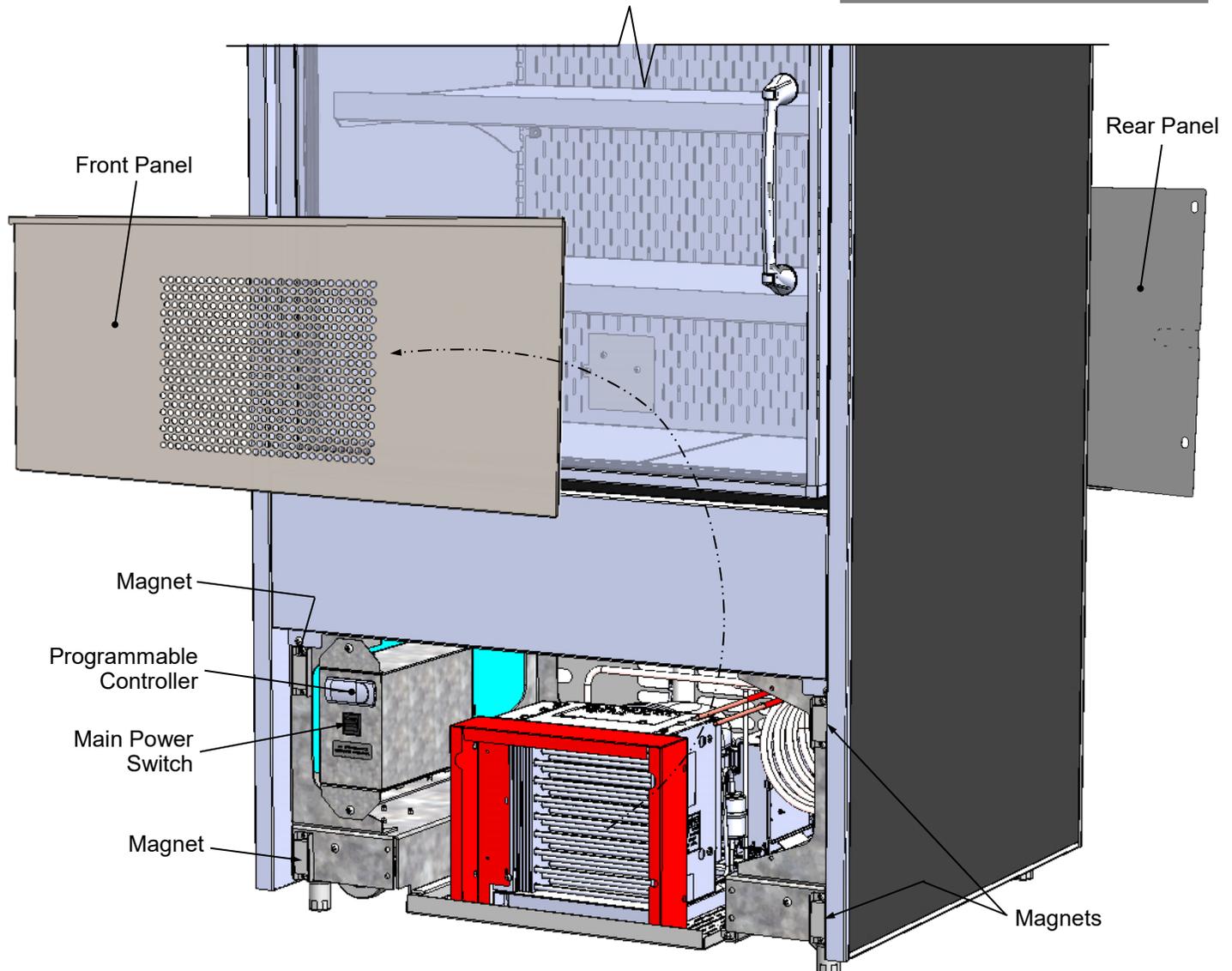
- **Caution! Connections can come loose during shipment; this can allow water to overflow onto floor, causing damage!**
- When case in is proper location, remove front and rear panels to check for loose connections, including overflow condensate pan and its power cord plug (if part of the condensate package).

- See **TROUBLESHOOTING** section in operating manual for various troubleshooting issues.

### 3. Turning On Power To Case

- Plug in power cord.
- Turn on main power switch (at lower left).
- Return front and rear panels to case.
- Check that programmable controller is energized.
- Open door: check that LED light in upper plenum is energized and that evaporator fans are rotating.

Model BD3632 Is Shown. It May Not Reflect Every Feature or Option of Your Particular Case.



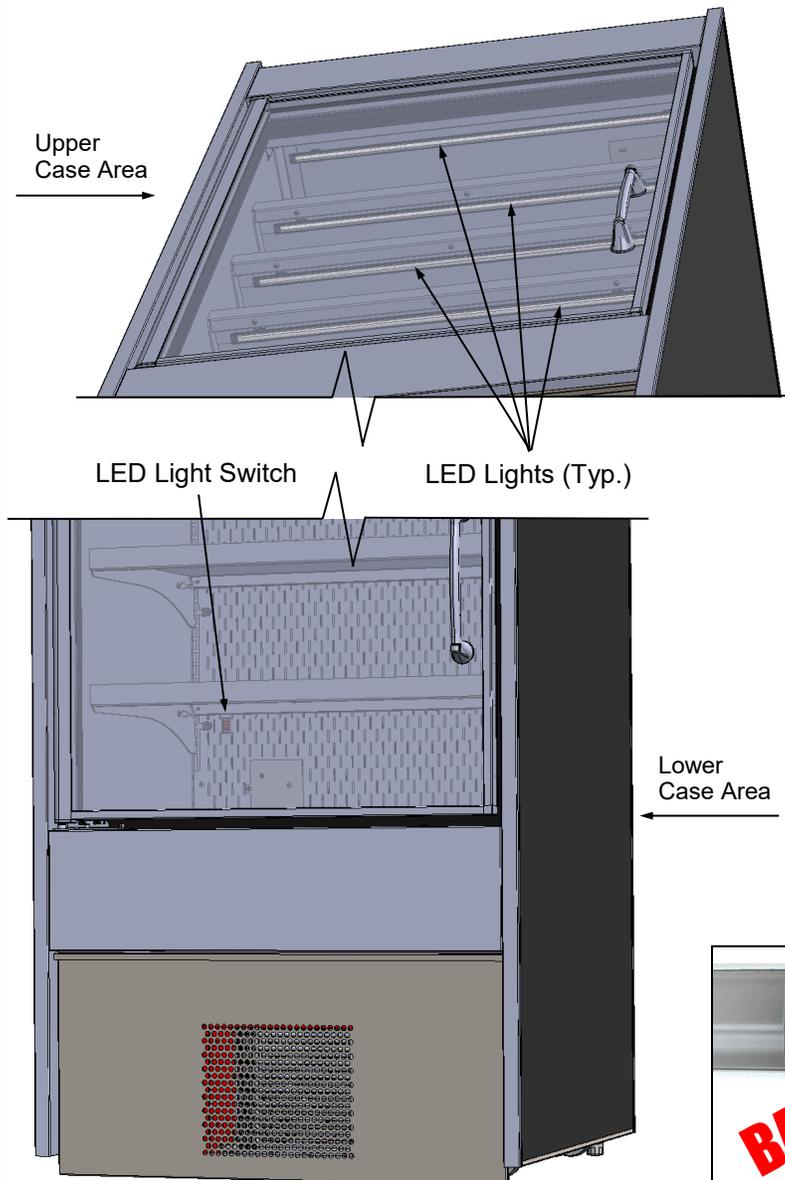
## LED LIGHT FIXTURES

### LED Style Light Fixtures

#### *Removal of Faulty LED Lights:*

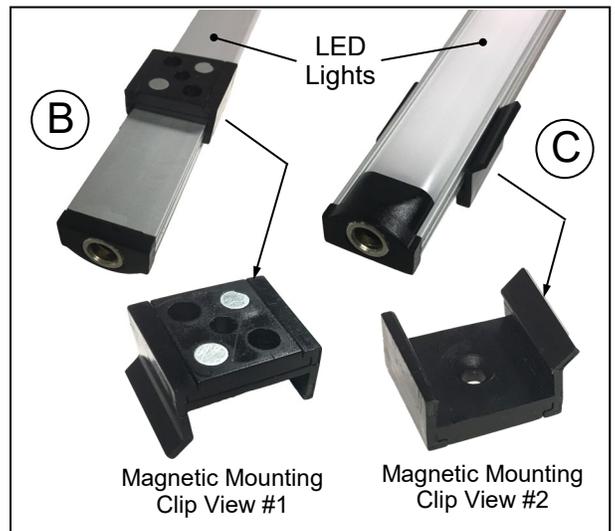
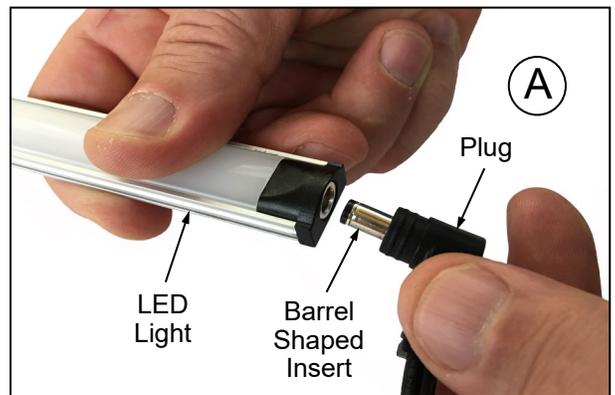
- Contact Structural Concepts' Technical Service Department for replacement LED lights.
- Turn off LED light switch.
- To remove faulty LED light, follow these steps:
  - A. Disconnect plug from LED light.
  - B. Using both hands, grasp LED light assembly (with its magnetic mounting clips). Pull downward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

>> **Note:** Mounting clips MAY be riveted to header. Simply remove LED light from mounting clips by pressing against flange part of clips with thumb.



#### *Replacement of LED lights:*

- Attach magnetic mounting clips onto LED light.
  - Adjust magnetic mounting clips so they are equally spaced on LED light.
  - Reattach LED light assembly to its shelf/header.
  - Position properly in shelf/header.
- >> **Note:** If mounting clips are riveted to shelf (or header), attach by placing LED in base of clip and then snapping into clip at FLANGE SIDE.
- Press plug's barrel-shaped insert deep into LED light.
  - **Important:** If plug is not inserted ALL THE WAY IN the LED light's orifice, the light may not energize. See **"BAD"** vs. **"GOOD"** insertion illustrations below.
  - Turn LED light switch back on.



# LOAD LEVEL GUIDE / TEMPERATURE GUIDE (MODEL BD3632 SHOWN/APPLICABLE TO BD4732)

## LOAD LEVEL & TEMPERATURE GUIDE

>> FOLLOW THESE PRODUCT PLACEMENT GUIDELINES TO MAINTAIN DESIRED PRODUCT TEMPERATURES.

>> NOTES CORRESPOND WITH ILLUSTRATIONS SHOWN.

>> CAUTION! DO SUBJECT SHELVES TO EXCESSIVE LOADS.

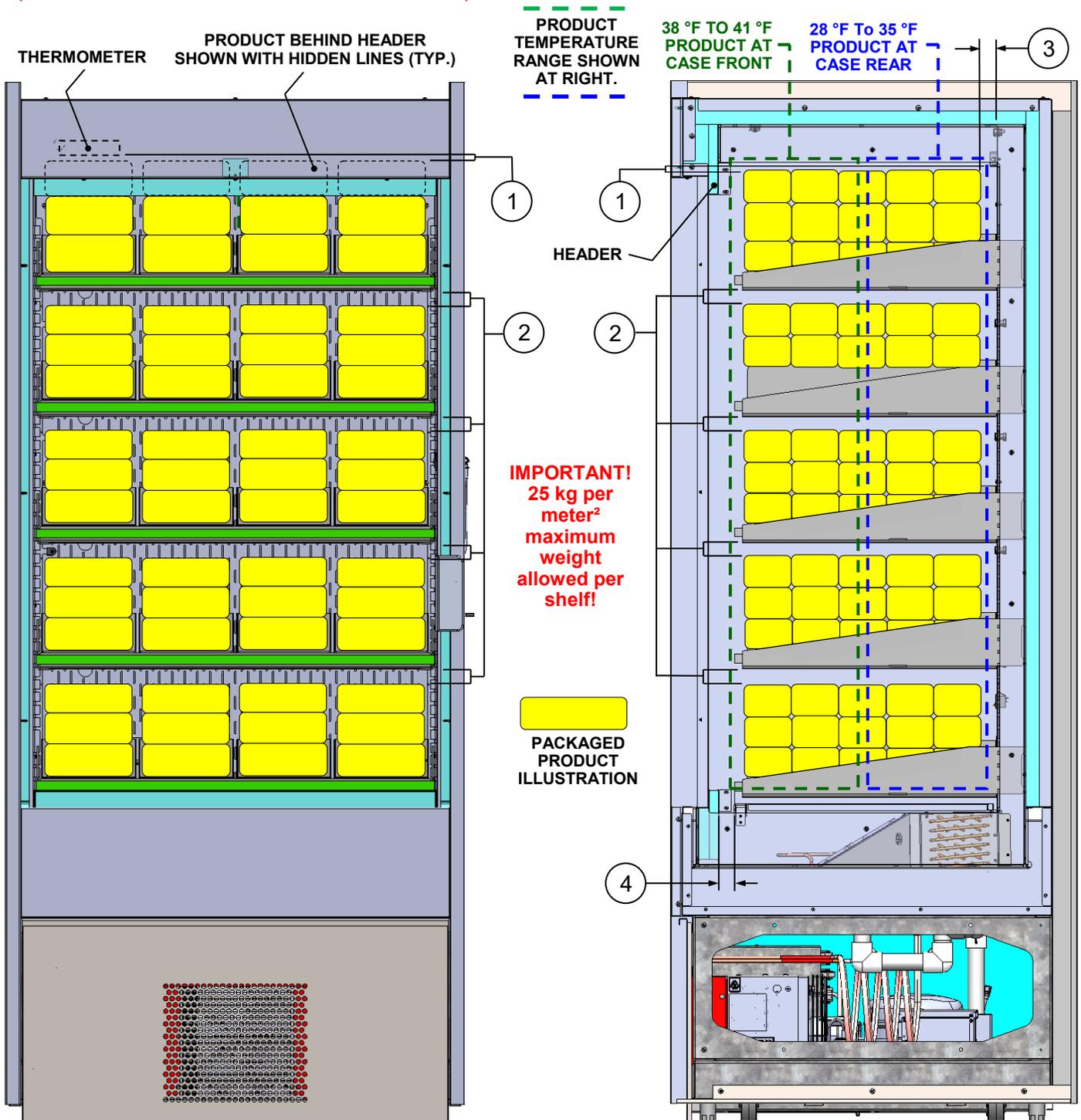
1. AT TOP SHELF, KEEP PRODUCT BELOW THERMOMETER (THAT IS ATTACHED TO REAR PERFORATED PLENUM).

2. ALLOW AT LEAST 1" SPACE BETWEEN PRODUCT AND ITS SHELF ABOVE.

3. AT CASE REAR, ALLOW AT LEAST 1" SPACE BETWEEN PRODUCT AND REAR PERFORATED PLENUM.

4. DO NOT BLOCK 1/4" AIR RETURN OPENING WITH PRODUCT.

>> IF YOU ARE UNABLE TO MAINTAIN DESIRED PRODUCT TEMPERATURES, SEE TROUBLESHOOTING SECTION IN MANUAL.



**CLEANING SCHEDULE - PERFORMED BY STORE PERSONNEL**

<b>FREQ.</b>	<b>INSTRUCTIONS</b>
Daily	<b><u>Inner Metal Components (Shelves, Decks, Rear Perforated Plenum, Inner End Panels, Etc.):</u></b> <ul style="list-style-type: none"><li>• Wipe with cloth dipped in mild-soapy water. Dry with soft cloth.</li></ul>
	<b><u>Outer Metal Components (Door Frame, Door Handles, Lower Panels, End Panels, Etc.):</u></b> <ul style="list-style-type: none"><li>• Wipe with cloth dipped in mild-soapy water. Dry with soft cloth.</li></ul>
Daily	<b><u>Glass Surface (Door):</u></b> <ul style="list-style-type: none"><li>• Clean inside and out with household or commercial glass cleaner. Dry with soft cloth or paper towel.</li></ul>

**WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!**

### QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS

#### Sub. Coil, Drain, Fan Blades, Motors, Brackets:

***Caution! Do Not Clean or Perform Service On Unit While It Is Energized!***

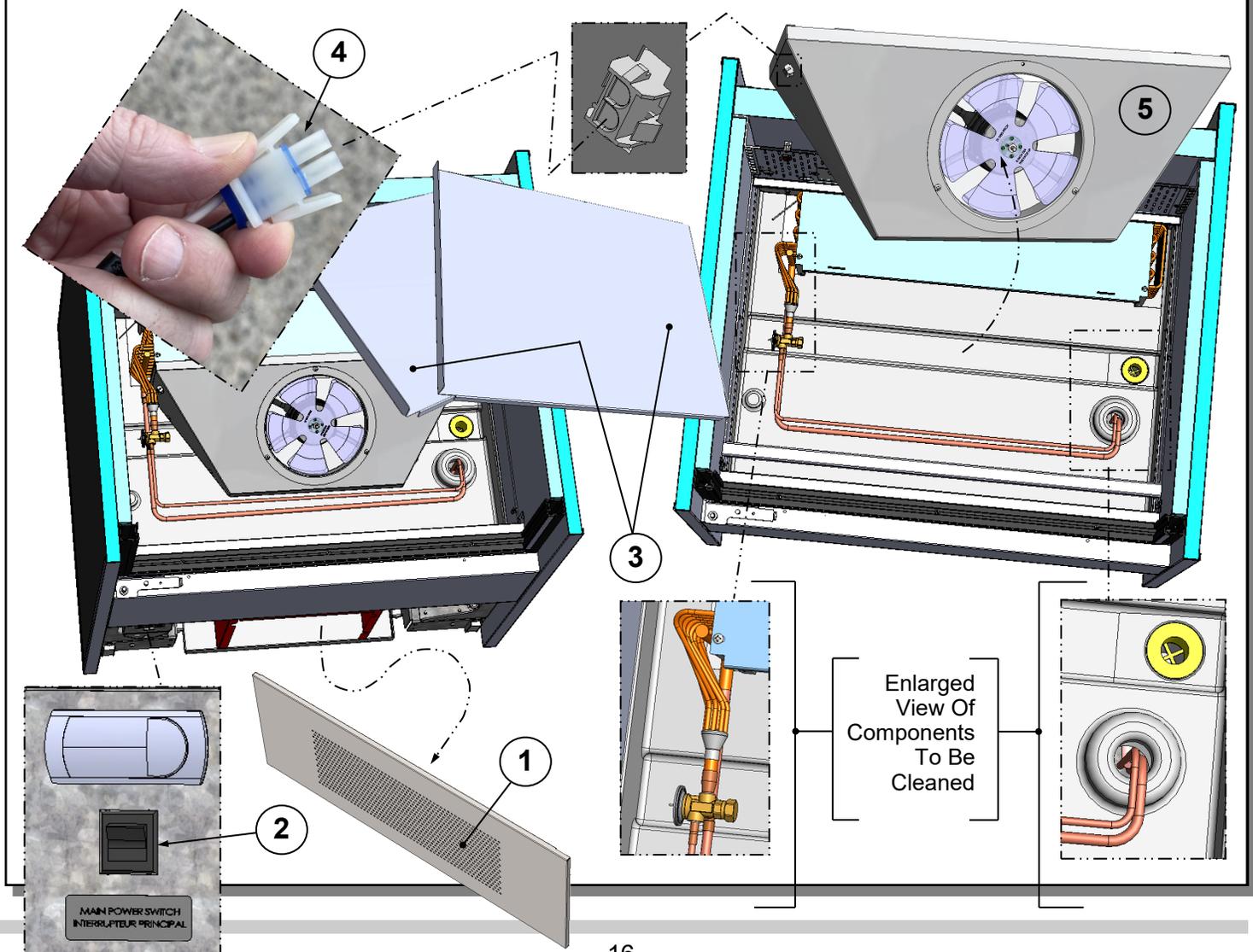
1. Remove front panel (to access controls). No screw removal is required. Place in safe place away from foot traffic.
2. Turn off main power switch (located near programmable controller).
3. Remove deck pans. Place in safe place away from foot traffic.
4. Disconnect power cord that energized fan panel.
5. Grasp fan shroud assembly. Lift up and away from case. Place in safe place away from foot traffic.

#### Cleaning Process:

- Use vacuum to remove excessive residue AND to remove dust in coil.
- Use clean cloth and/or nylon brush with warm water and mild soap solution to clean tub, drain, trough, TXV, lines, solenoid, coil & coil tubes. See enlarged view of components to be cleaned (lower-right).
- Remove debris that may clog drain.
- Wipe down fan blades, motors and brackets with moist cloth. Dry components with paper towel.

#### Returning Components / Restoring Power To Case:

- Replace/reconnect components in reverse order they were removed or disconnected.
- Turn main power switch back on. Check that fans are operational.



**WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!**

**QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS, CONT'D**

**Under Case Cleaning:**

***Caution! You must turn main power switch off before cleaning!***

- Remove front and rear panel (no screw removal required).
- Remove shipment screws from condenser package (if still intact).
- Carefully slide condenser package out from under case. Caution! Be careful not to kink or damage courtesy loop!
- At case rear, vacuum (or broom) under case to remove all dust, debris and dirt that may collect.

**Condensate Package:**

***Caution! You must turn main power switch off before cleaning!***

- Remove front panel. Turn main power switch off and allow components to cool.
- Carefully and slowly slide condensate package out from under case.
- Use a soft-bristled scrub-brush and non-corrosive de-scaling solution (to remove calcium, lime and rust) from condensate pan. Wipe down courtesy loop. Follow de-scaling solution's instructions as to proper dilution and safety precautions.
- After thoroughly cleaning pan with brush and solution, rinse thoroughly with clean water (in spray bottle) and wipe dry with sponge or paper towel.
- Use moist cloth to wipe off dust & debris that collects on various parts (hot gas loop condensate pan, compressor fan, blades and housing, fans, sight glass (if any), refrigeration lines, courtesy loop, overflow pan (if any), etc.
- Slide condensate package back under case.
- Return front panel to case.
- See **GENERAL MERCHANDISER ILLUSTRATION - MODEL BD3632 - PAGE 3 of 4** in this operating manual for condensate package illustration.

CONDITION	TROUBLESHOOTING
<b>Case Not Lining Up</b>	See <b>INSTALLATION</b> section in this manual for instructions on properly aligning case (alongside other cases) and adjusting levelers.
<b>Water Is On The Floor</b>	<p><b>Caution!</b> Water on flooring can cause much damage! Until cause is determined (and repaired), follow these procedures:</p> <ul style="list-style-type: none"> <li>• Use wet-dry vacuum (or mop &amp; bucket) to remove standing water.</li> <li>• Use 'catch pans' for water to drain into. Swap out regularly until case has completely drained.</li> </ul>
	Check that the drain trap is free from debris.
	Check that the drain hose/pipe is correctly positioned over condensate pan (or floor drain, for remote units).
	Check store conditions. To prevent condensation in NSF/ANSI Type II environments, conditions are to be 55% maximum humidity / 80° Fahrenheit (27° Celsius) maximum temperature.
	Check that condensate pan components have no loose connections.
	Check that overflow condensate pan (if any) has its power cord plug properly plugged into electrical box.
	Check that overflow condensate pan (if any) is not malfunctioning. Its electric rod heater should be heating up when case is energized.
	<p><b>Caution!</b> 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"> <li>• Use wet-dry vacuum (or mop &amp; bucket) to remove standing water.</li> <li>• Use 'catch pans' for water to drainage. Swap out regularly until drainage of case is complete (or until power is restored).</li> <li>• When power to case is restored, condensate pan should function properly and water will no longer overflow onto flooring.</li> </ul>

CONDITION	TROUBLESHOOTING
<b>Fan Emits Excessive Noise</b>	Check that the case is aligned, level and plumb.
	Check evaporator fan for cleanliness.
	Unplug/power off fan motor. Check motor shaft for bearing wear.
	Check that fan motor is securely mounted in brackets.
	Verify that fan blades are securely mounted to fan motor.
	Check that nothing is preventing blade rotation.
	Check that the fan shroud is properly secured.
<b>Fan Is Not Working</b>	Check that the MAIN power switch is on.
	Check that fan connector is securely plugged in at fan shroud.
	Check that fan connector is securely plugged in near close-off.
	Check for foreign material obstructing fan performance.
	Check that fan blade freely rotates within fan shrouds
	Check that power is going to fans
	Check that fan wiring is connected on terminal blocks.
<b>Programmable Controller Display Is Blank</b>	Check that the MAIN power switch is on.
	Check circuit breaker box for tripped circuits.
<b>Programmable Controller Display Is Flashing</b>	<i>See your case's serial label for your model's specified settings. See <b>SERIAL LABEL LOCATION &amp; INFORMATION LISTED / TECH INFO &amp; SERVICE</b> for label location, etc.</i>
<b>System Not Operating</b>	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
<b>Case Lights Are Not Working</b>	Check that light switch is in the <i>on</i> position.
	Check that <b>ALL</b> of the light cords and plugs are properly connected. See <b>LED LIGHT FIXTURES</b> section in this manual for specifics.
	Service Technicians Only: Check voltage at LED drivers. If voltage is entering but not exiting, LED driver may be faulty.

CONDITION	TROUBLESHOOTING
<b>Weight Sensors On Shelf/Shelves Are Malfunctioning</b>	Contact Instant Retail Services.
<b>Color-Coded Lights On Shelf/Shelves Are Malfunctioning</b>	Contact Instant Retail Services.
<b>Screen/Monitor Is Malfunctioning</b>	Contact Instant Retail Services.
<b>Payment Processor Is Malfunctioning</b>	Contact Instant Retail Services.
<b>Case Is Not Holding Temperature</b>	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Please load case with pre-chilled product.
	Temperature changes during defrost mode but will return to normal. Fourth LED will indicate defrost cycle in progress.
	Check that case is not directly in the sun.
	Check that condenser coil has been cleaned.
	Check air return opening for obstructions.
	Check sight glass for flashing and/or low charge.
	Check set point temperature; it may be adjusted too high.
<b>Condensing Unit Is Not Operating</b>	Check that the power is turned on.
	Check if programmable controller settings are properly set. <i>See your case's serial label for your model's specified settings. See <b>SERIAL LABEL LOCATION &amp; INFORMATION LISTED / TECH INFO &amp; SERVICE</b> section in manual for label location, etc.</i>

**TROUBLESHOOTING - R-290 CONDENSING SYSTEM (BY TRAINED SERVICE PROVIDERS ONLY)**

CONDITION	TROUBLESHOOTING
<b>Head Pressure Too High</b>	Check that the condensing coil is not dirty or covered.
	Check that condensing fans are working.
	Perform sub-cooling check and verify that no contaminants are in system.
	Check that liquid line filter dryer is not plugged.
	Check that close-offs are intact (around condensing coil) and that air is not recirculating.
	Check that store ambient temperature isn't above maximum allowed. See <b>OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS</b> section in this manual.
<b>Head Pressure Too Low</b>	If sight glass is part of condensing unit, check if it is flashing or showing low charge.

**TROUBLESHOOTING - R-290 EVAPORATOR SYSTEM (BY TRAINED SERVICE PROVIDERS ONLY)**

CONDITION	TROUBLESHOOTING
<b>Low Suction Pressure</b>	Check if sight glass (if present) is flashing or showing low charge.
	Check that expansion valve (TXV) isn't restricted. Check element charge.
	Check that liquid line or filter isn't restricted. Check that refrigeration line / courtesy loop is not kinked.
	Check that evaporator fan motor is working.
	Check that superheat is between 6 °F to 8 °F (-14 °C to -13 °C).
	Check that there is no air recirculation around evaporator coil.
	Check that evaporator coil is not iced up.
<b>High Suction Pressure</b>	Check that the "cooling load" isn't high. Product must be pre-chilled before placing in refrigerated section of case.
	Check that case is at least <u>15-feet</u> from exterior doors, overhead HVAC vents or any air curtain disruption.
	Check that unit is not exposed to direct sunlight via windows or any other heat source (ovens, fryers, etc.).
	Check that superheat adjustment isn't low.
	Check TXV bulb installation a. Poor thermal contact. b. Warm location.

**Serial Label Location & Information Listed / Technical Information & Service**

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

- Sample serial label is shown. A variety of models is displayed on serial label for illustration purposes only. Your case's serial label will reflect only one model.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.

**Structural Concepts®**      **Fusion**      MODEL NRS3648RXV-SAMPLE  
 888 E. Porter Rd - Muskegon, MI 49441      SERIAL NO. 12345X30DZ098765




**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

**Blend**  
**Harmony**  
**Oasis**

ELECTRICAL RATING  
 REFRIGERANT  
 DESIGN PRESSURE  
 MINIMUM CIRCUIT AMPACITY  
 MAXIMUM OVERCURRENT

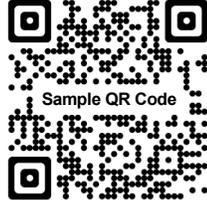
6-8 °F  
 6 defrosts per day, 45 °F

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

**Addenda**  
**Grocerant**  
**Impulse**  
**Reveal**

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

SCAN FOR PRODUCT LITERATURE



Sample QR Code

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



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



**Carel® PJEZ Platform**



**Carel® ir33 Platform**



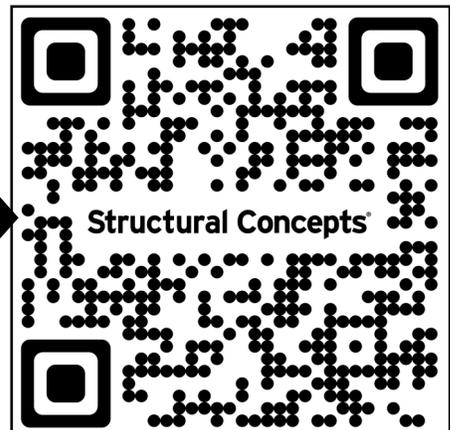
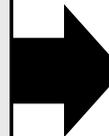
**Carel® iJF Platform**



**Dixell® XM670K-XM679K Platform**

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

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



**STRUCTURAL CONCEPTS TECHNICAL SERVICE CONTACT INFORMATION & LIMITED WARRANTY**

**TECH SERVICE/WARRANTY CONTACT INFO:**  
1 (800) 433-9490 / EXTENSION 1  
**DAYS/HOURS AVAILABLE:**  
MONDAY - FRIDAY (CLOSED HOLIDAYS)  
8:00 AM to 8:00 PM EST

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

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

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

