READ AND SAVE THESE INSTRUCTIONS

Elevate USER MANUAL

SCC P/N 21-29823

ELEVATE REFRIGERATED MODEL BD3632IS, BD3632DIS, BD3632IS-DUO, BD3632SIS, BD3632DSIS, AND SD2826IS AUTONOMOUS RETAIL MERCHANDISERS

- **> SELF-CONTAINED REFRIGERATION SYSTEM**
- **> SEE LAST PAGE IN USER MANUAL FOR TRAINING ON SOFTWARE, SETUP, CALIBRATION, CONFIGURATION, ONGOING MERCHANDISING, ADMIN FIRST TIME SETUP, ETC.**

Important!

Overview of Structural Concepts and Instant Retail Systems Unique Collaboration on the Elevate Autonomous Retail Merchandiser

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Structural Concepts Model BD3632IS includes autonomous shopping technology from our partner, Instant Retail Systems.

This manual includes instructions for operating the equipment as well as links for technology onboarding and troubleshooting.

Contact Structural Concepts for information pertaining to the refrigerated display at:

Structural Concepts Corporation
1-800-433-9490 / Ext. 1

Contact Instant Retail Systems for information pertaining to the technology that powers the autonomous shopping at:

Instant Retail Systems
1-615-236-6474
Support@InstantRS.com



Structural Concepts®

DELIVERING FRESH. ALWAYS.™ Structural Concepts Corp. · 888 E. Porter Rd · Muskegon, MI 49441 Phone: 231.798.8888 · www.structuralconcepts.com

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OVERVIEW

- These Structural Concepts merchandisers are designed to merchandise packaged products at 41 °F (5 °C) or less product temperatures.
- Cases should be installed and operated according to this operating manual's instructions to ensure proper performance. Improper use will void warranty.
- Component parts shall be replaced with like components.

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.
- NSF/ANSI Type II Conditions: Product is displayed in store conditions with maximum ambient temperature of 80 °F (27 °C) and maximum relative humidity of 55%.

COMPLIANCE

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

WARNINGS/DANGER

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

REFRIGERANT DISCLOSURE STATEMENT

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



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: 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.



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.



DANGER
Risk of fire or explosion. Flammable refrigerant is used in this case.
Consult repair manual/owner's guide before servicing this product.
To minimize risk of possible ignition due to incorrect parts or improper service, this case is ONLY to be serviced by factory authorized service personnel.
The flammable refrigerant type specified on case nameplate is on serial label.
This case's R290 refrigerant lower flammability limit (LFL) is .038 (114kg/m³).

PRECAUTIONS

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

WIRING DIAGRAM FORMAT & LOCATION

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



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! POWER CORD AND PLUG MAINTENANCE

This vending case has ONE (1) GFCI In-line 120V power cord with Auto Reset. Power cord must be unplugged during case movement, testing or repairs.

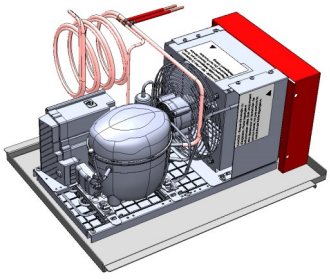
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Risk of electric shock. If cord or in-line GFCI becomes damaged, replace only with cord and GFCI of same type.



TOWER'S 15 FT. IN-LINE GFCI WITH FLYING 14/3 LEADS

- **14/3 AWG SJTW cord**
- **Trip level 4-6 Ma. Trip response time less than 25mS**
- **UL listed & UL listed to Canadian Safety Standards**
- **Automatic reset**
- **UL rainproof rated for outdoor use**
- **Rated for 125 volt, 15 amp use**
- **Open neutral and grounded neutral protection**
- **Operating temperature range -31 degree F to 150.8 degree F**
- **Impact resistant case**



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).**



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

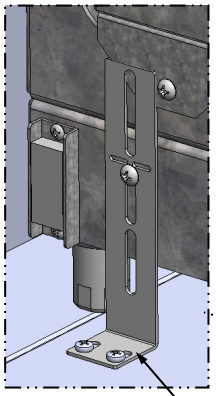
- **Thermometers & thermostats reflect air temperatures ONLY.**
- **For ACTUAL product (food) temperatures, use a calibrated food probe thermometers ONLY.**
- **For accurate readings, DO NOT use infrared food thermometers.**

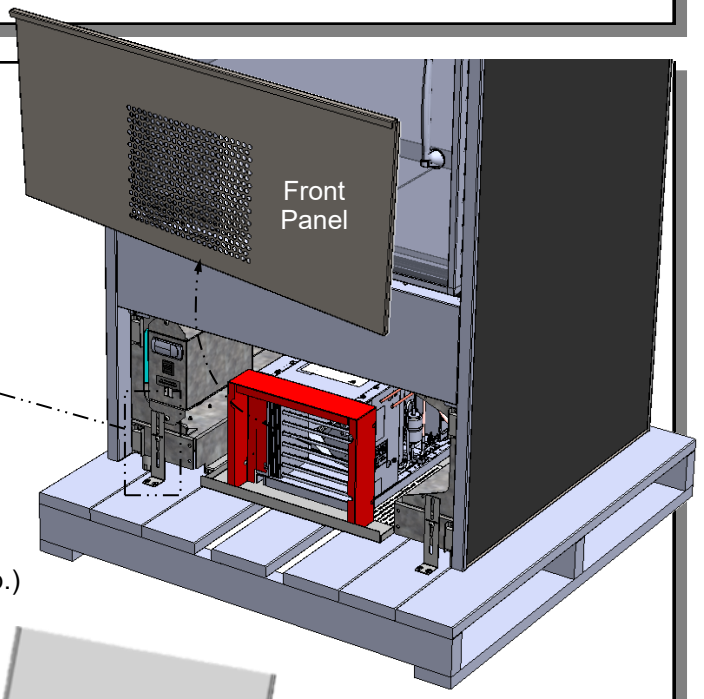
1. Remove Front and Rear Panel

2. Disconnect Case From Skid

a. Remove shipping brackets that secure casters to skid

*b. Important! Case is shipped with levelers in the **DOWN** position (for stability). To prevent damage to case, all levelers must be raised **ALL THE WAY UP** before moving unit off skid and into position.*





3. Remove Case From Skid

*a. Important! No less than three (3) people are required to remove case from skid. Remember, **ALWAYS** lift your legs and **NEVER** your back to avoid serious injury.*

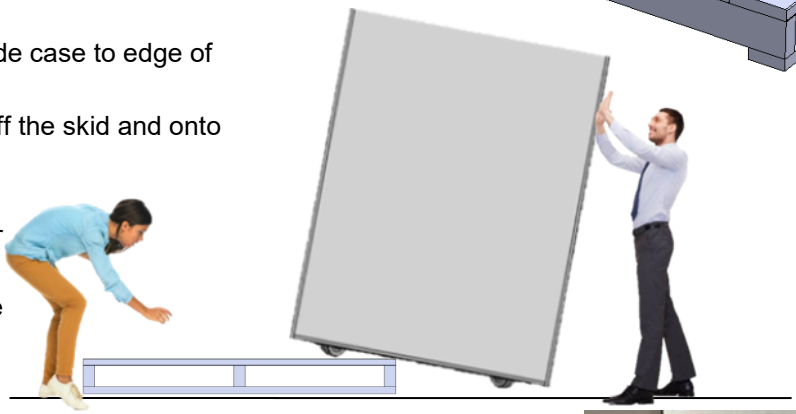
b. After levelers are raised, walk/slide case to edge of skid.

c. Gently ease front edge of case off the skid and onto the floor.

d. Tilt case forward and have an assistant remove skid from under case.

e. Ease back side of the case to the floor.

Uncrating Best Practices Video | Structural Concepts



4. Plug in Ethernet Cable

a. Slide case to the final position but leave room behind case

b. Remove side panel (right side of case) by removing the two (2) 6-point hex screws [**A**]

c. Plug Ethernet cable into wall jack.

d. With back panel still off, follow the Black power cable on the left side (facing back of the case) to find opening in bottom of shroud [**B**].

e. Feed Ethernet Cable through the opening [**C**].

f. Locate Ethernet Port to the right of the power cord and plug in cable [**D**].

g. Replace Side & Rear Panel

A



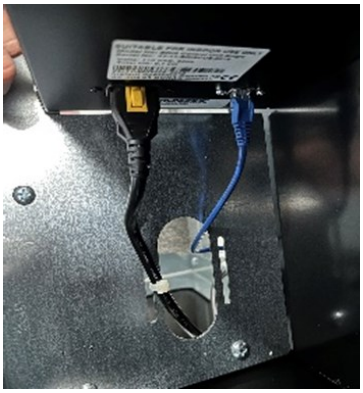
B



C

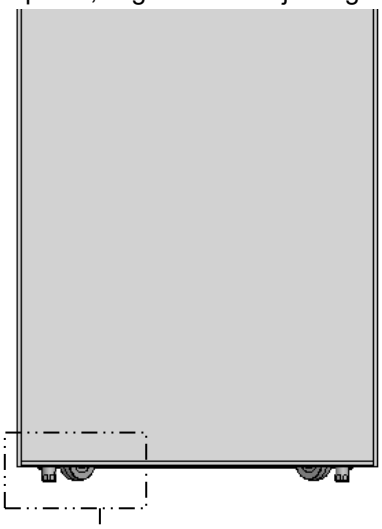


D



5. Position & Align Case

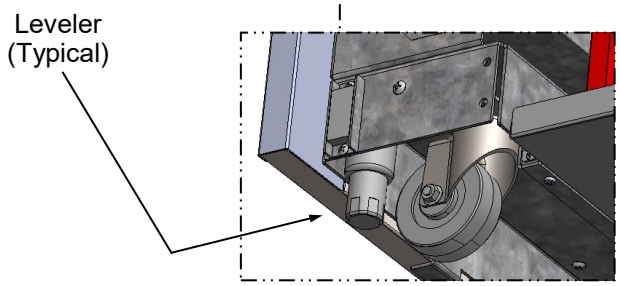
a. Before adjusting levelers, make certain that the case is in proper position and, if required, aligned with adjoining case(s).
b. This may require the repositioning of the case you are installing or the already positioned case(s).



6. Adjusting Levelers

a. *Important! After case is in proper position, levelers must then be **LOWERED** to floor.*
b. Adjust levelers so the case is level and plumb. Depending upon case weight, it may be necessary to use a pry bar to do so.
c. Use adjustable wrench to adjust leveler.
d. **DO NOT** use pry bar on end panel as it may chip
e. Use pry bar **ONLY** on base frame to avoid damaging case.
f. See Illustration to the right.
g. Click link for reference video.
ARM Initial Setup | Structural Concepts



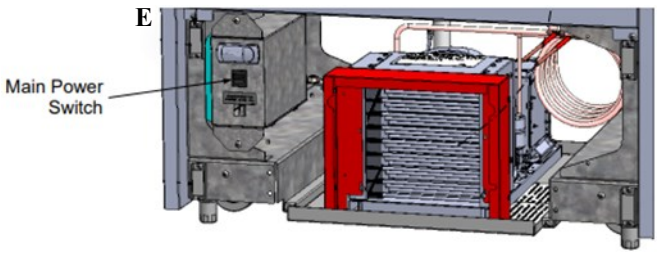


7. Opening E-Box

a. Locate small manilla envelope containing two (2) keys taped to front door.
b. Insert keys into the two (2) locks, above and below the touchscreen, and turn so flat part of keys are parallel with ground.
c. E-Box door is held shut with magnets, it will take a bit of force to get the door open.

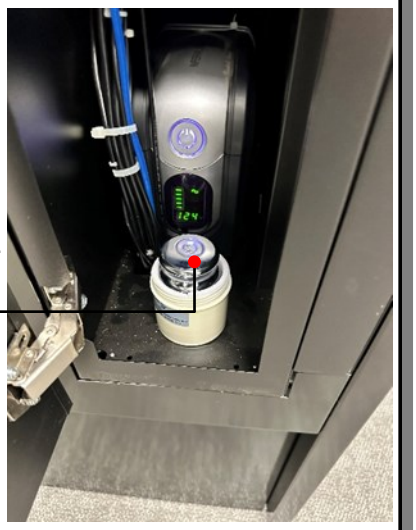
8. Powering On Case

a. Locate Main Power Switch on the Front Lower Left side of the Case and press on to start refrigeration compressor [**E**].
b. Press and hold Power Button inside the E-Box to power on UPS [**F**].





9. Replace Front Panel



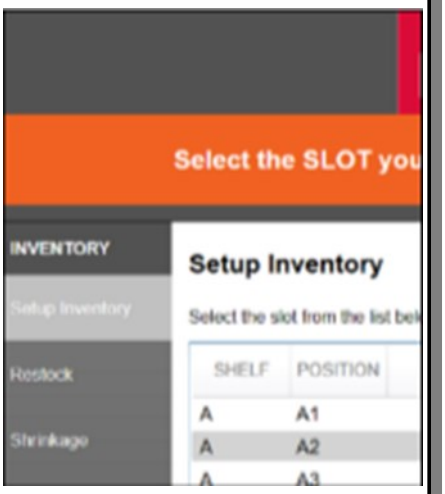
10. Calibrating Shelves

a. Tap top left corner of touchscreen rapidly (at least 5x) to bring up admin log-in.
b. Enter log-in information received from Instant Retail Systems.
c. Press Red “Door Locked” Button at top of screen to unlock door.
d. Open the now unlocked door.
e. Find Planograms in the Menu Bar on the left side and select “SCC ARM Planogram”.
f. Load Planogram
g. Locate test weight in front of the UPS in the E-Box [**G**] and unscrew top.
h. Find “Calibrate Shelves” in the Menu Bar on the left side of the screen.
i. Select shelf; click “Next”
j. Set test weight (1000 grams); click “Next”
k. Place test weight in first bin on selected shelf.
l. Once screen reads “Stable”; click “Calibrate”.
m. Repeat steps **k** & **l** for rest of shelves.
n. Repeat steps **i - m** for rest of shelves.
o. Click link for reference video
ARM Shelf Calibration | Structural Concepts

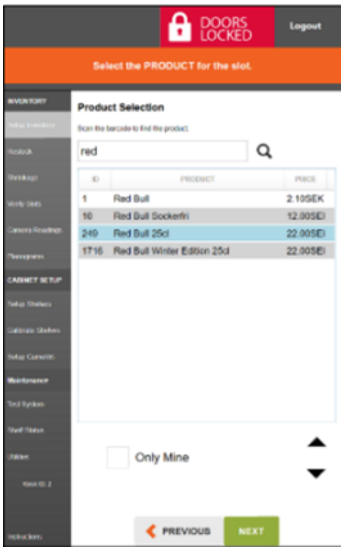
11. Inventory Setup

a. Once the shelves have been calibrated, select “Setup Inventory” [**H**] in the Menu Bar on the left side of the screen.
b. Pick shelf and Position in which you would like to set up inventory; click “Next” [**I**].
c. Search for product in Product Inventory; click “Next” [**J**].
d. Place one (1) product on shelf and wait for screen to read “Stable”; click “Add” [**K**].
e. Repeat step **d** above two (2) more times to verify correct weight of product; click “Finish”.
f. Repeat steps **b - e** above for the rest of the bins.
g. Click link for reference video
ARM Inventory Setup | Structural Concepts

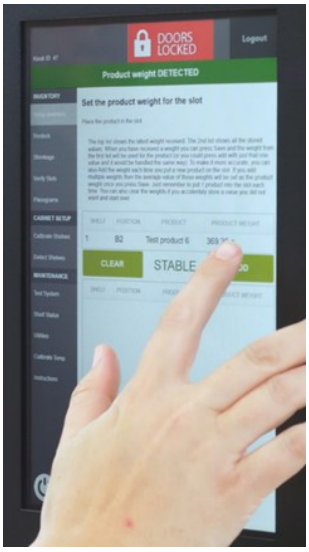
H



J



K



I



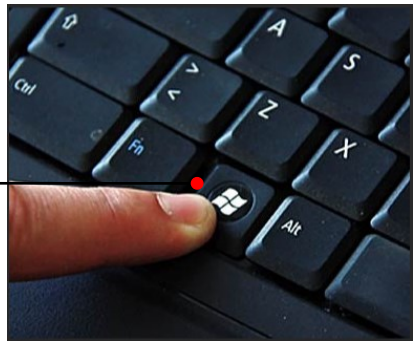
1. Connecting Keyboard to PC

a. Locate keys
b. Turn key in top lock 90° so key is parallel with ground and turn key in bottom lock 180°.
c. E-Box door is held shut with magnets, it will take a bit of force to get the door open.
d. Find Red PC above the UPS
e. Plug-in keyboard to one of the open USB ports.

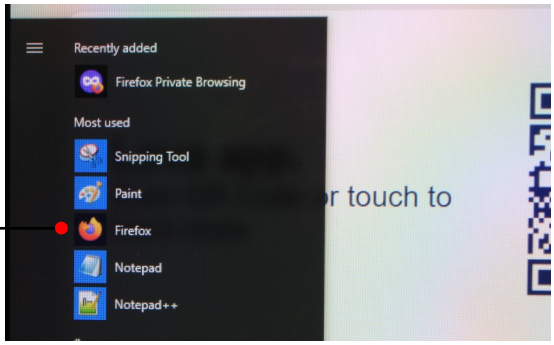


2. Logging into Router Administration Site

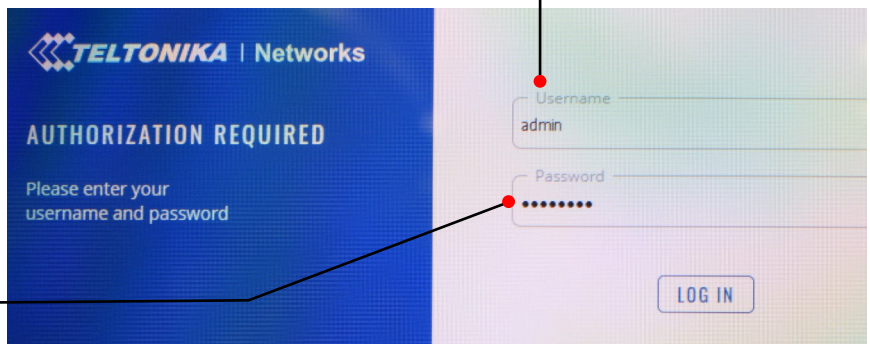
a. Press the "Windows" key to display Start Menu



b. Select Mozilla Firefox browser



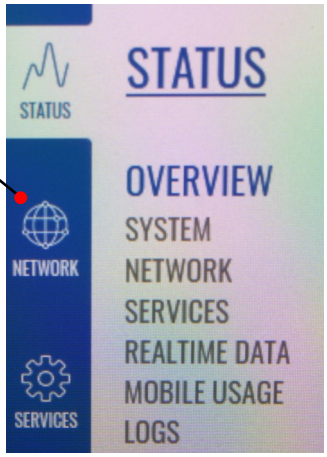
c. In the address bar, type ***192.168.60.1*** to navigate to the router log-in
d. The default log-in information in below:
   User Name: ***admin***
   Password: ***admin01***

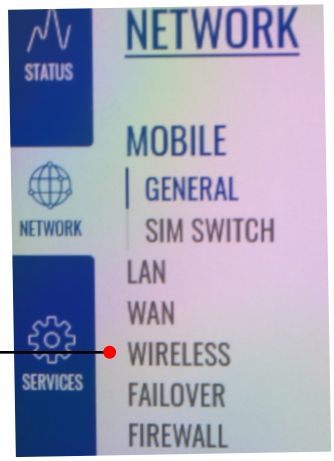


e. On the first login, you'll be prompted to enter a new password. Set it to "***Admin01!***"

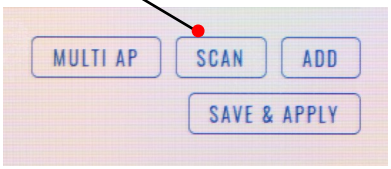
3. Connecting to Wi-Fi Network

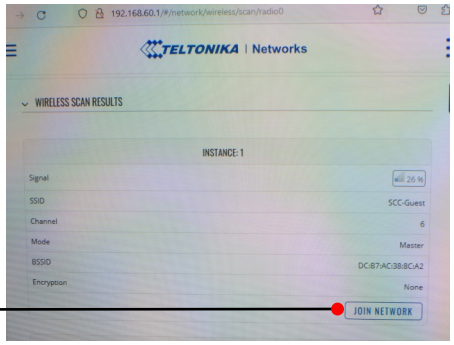
a. Once you are logged into the Taltonika interface, press the 3 Bar menu in the top left corner.
b. Select the "***Network***" option down the left side of the screen.
c. Press the 3 Bar menu again
d. Select "***Wireless***" in the white select menu.



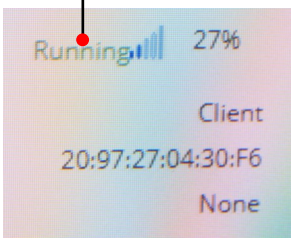


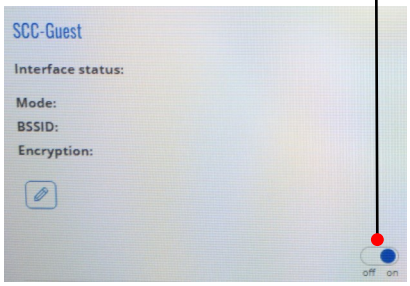
e. On the right side, press the "***Scan***" button to search for surrounding wireless networks.
f. Find desired Network from the resulting list the scan produces and press "***Join Network***"





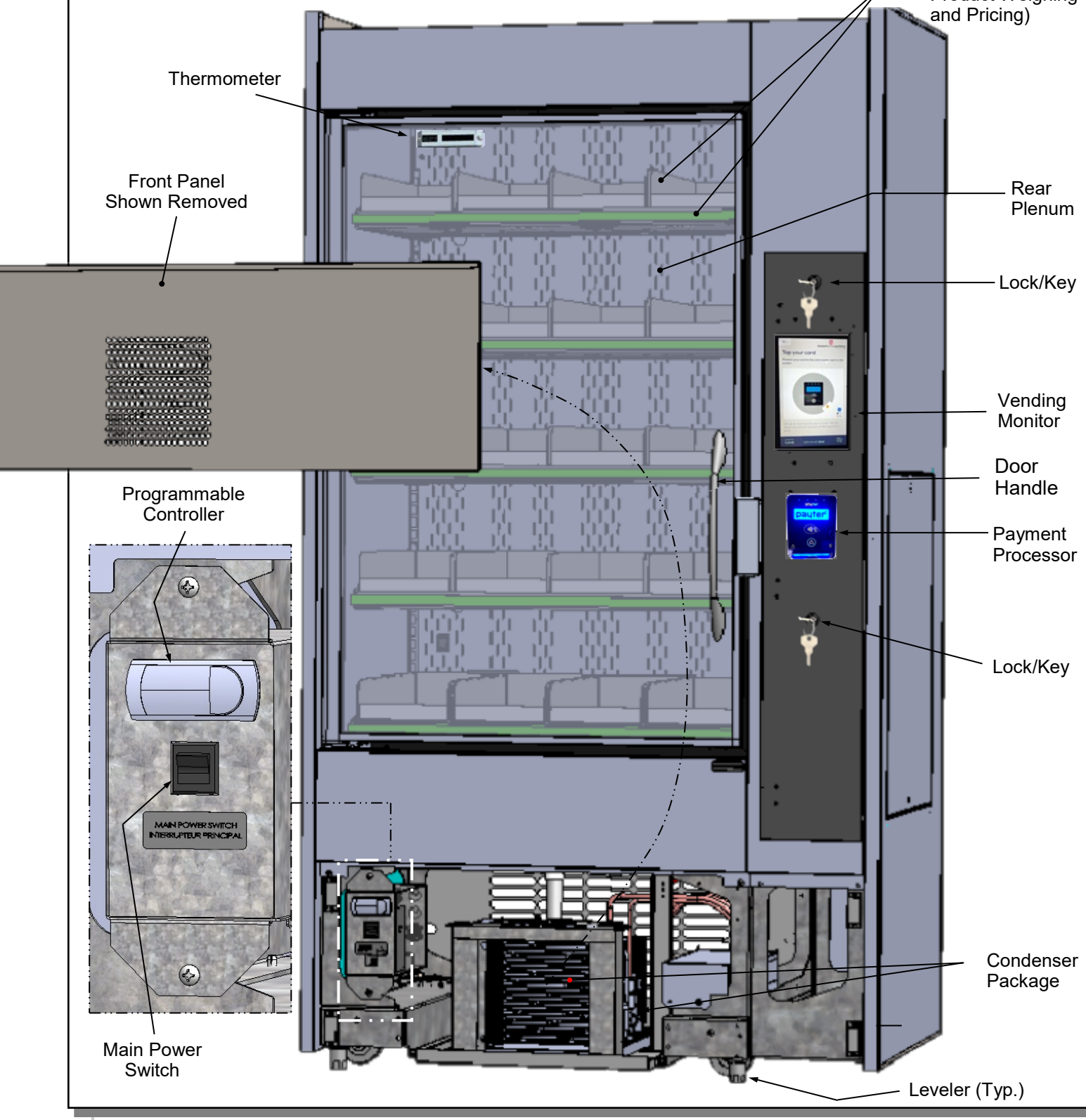
g. You will be redirected to a window where you will be asked to Name the new network, set the name of the new network to "***wifi1***"
h. Press the "Submit" button
i. You will again be redirected to another window where you are asked to enter the desired Wi-Fi password.
j. The next window that opens will be ***Interface Configuration***. Values here, mostly, should be left unchanged to avoid connection problems, because they are dictated by Access Point.
k. Verify that the switch at the bottom of desired network window is turned "**On**" and the Interface Status says "**Running**".





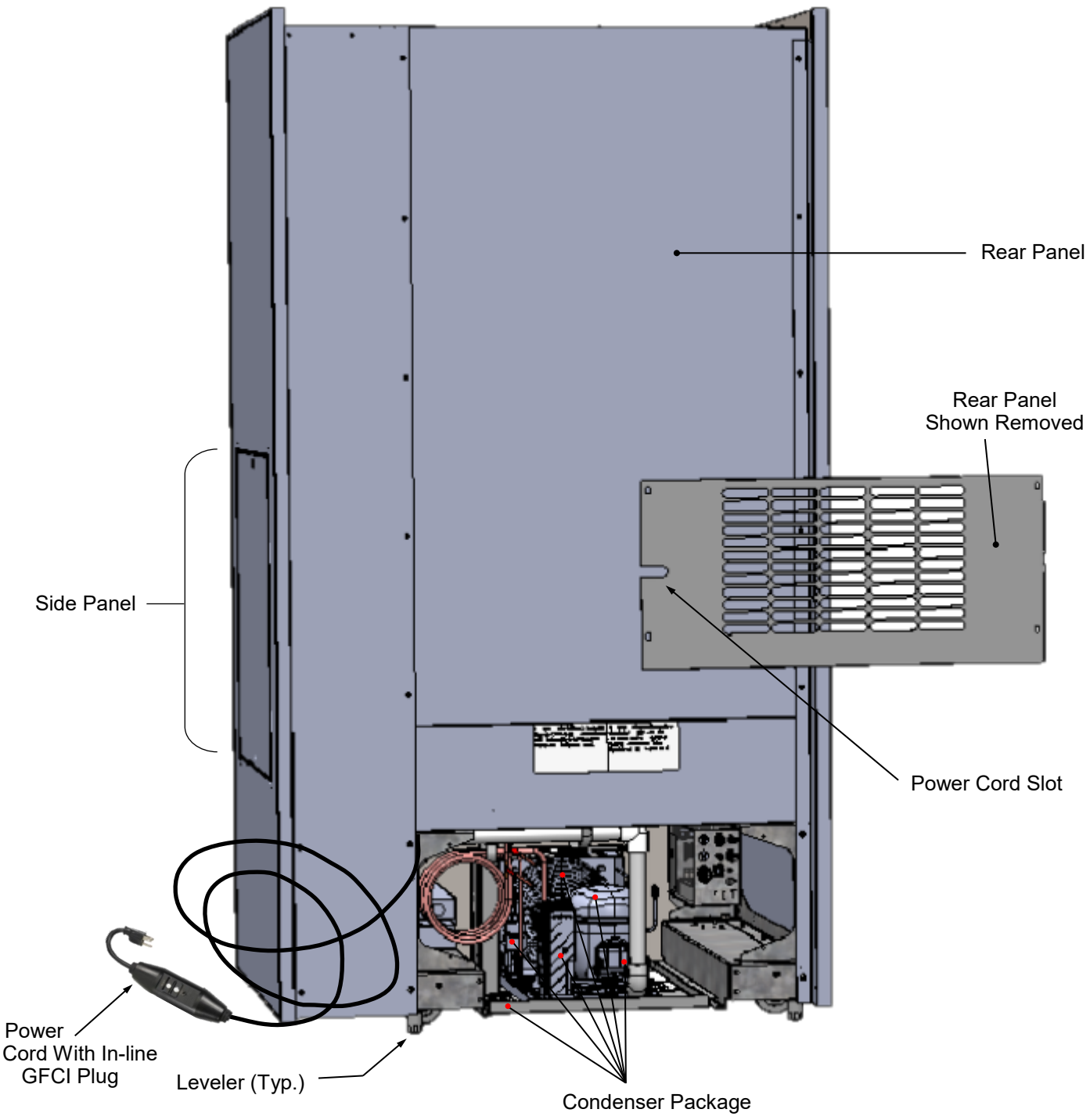
1. Front View of Case

- 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.



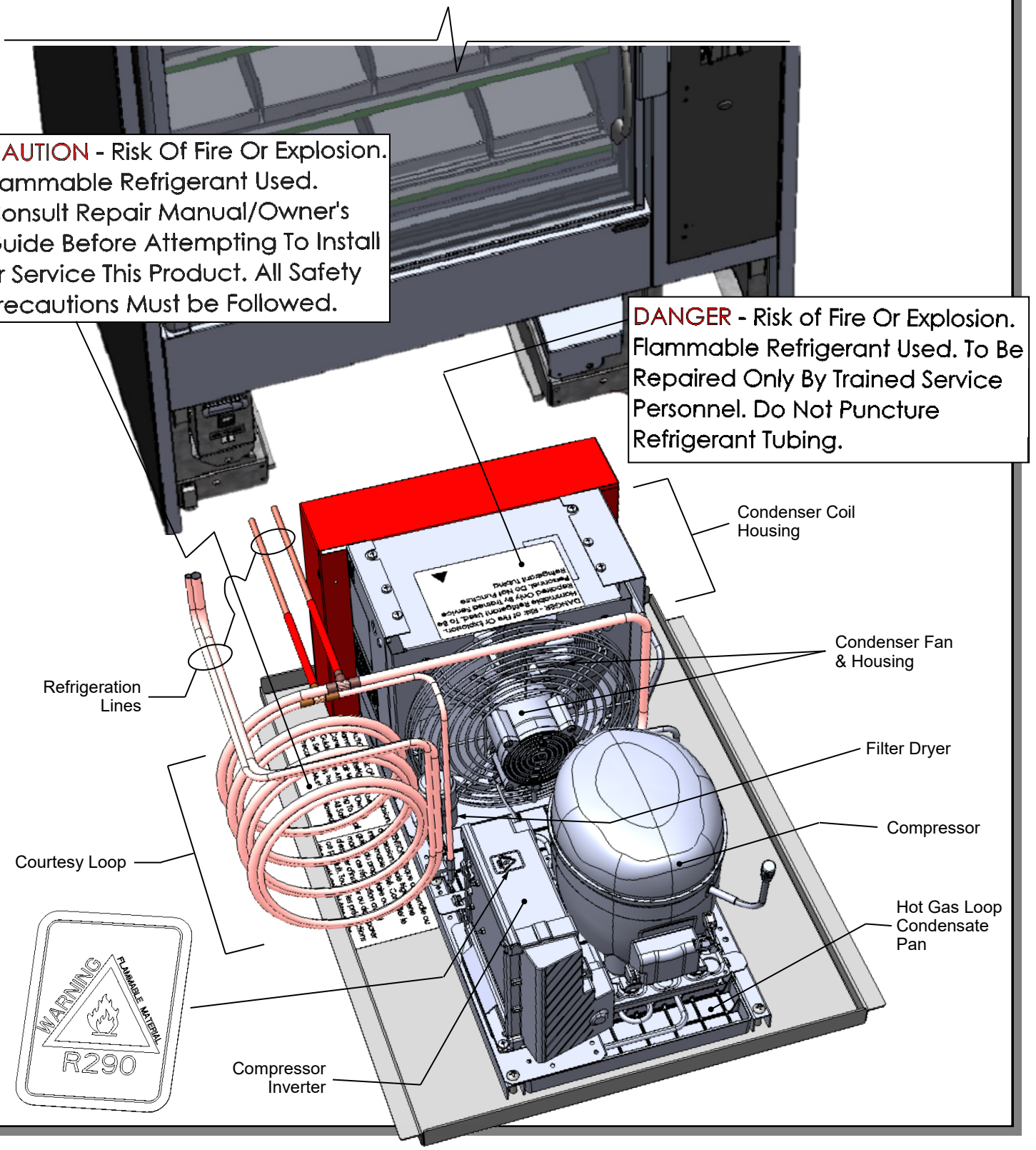
2. Rear View of Case

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



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!*



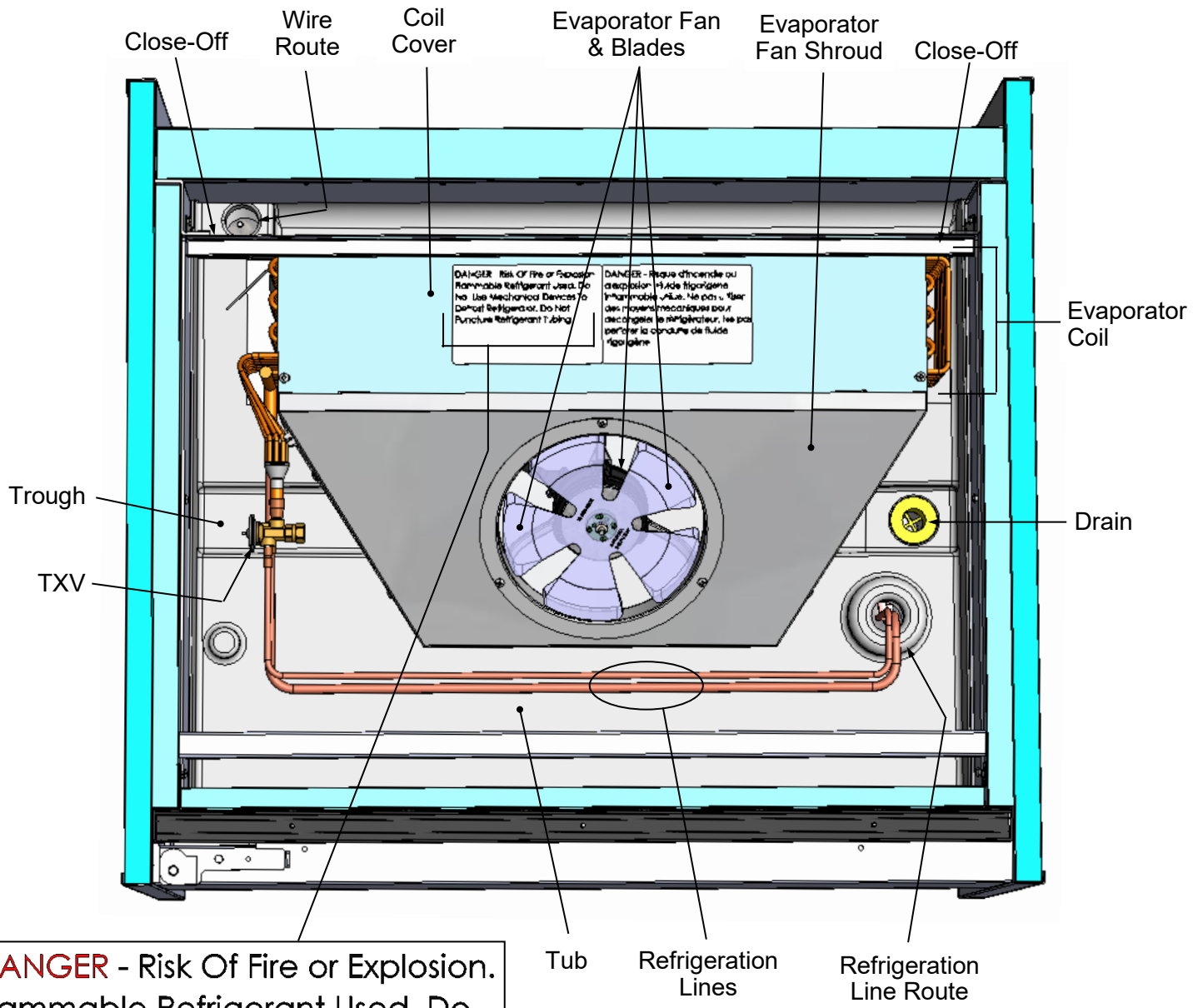
5. Evaporator Coil Fans / Air Discharge

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-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.

FRONT/REAR PANEL REMOVAL / CONNECTIONS CHECK / PREPARING CASE FOR MERCHANDISING

1. Removable Front/Rear Panel

- Front and rear panel can be removed/replaced by either freeing from magnets or screw removal (as illustrated below).

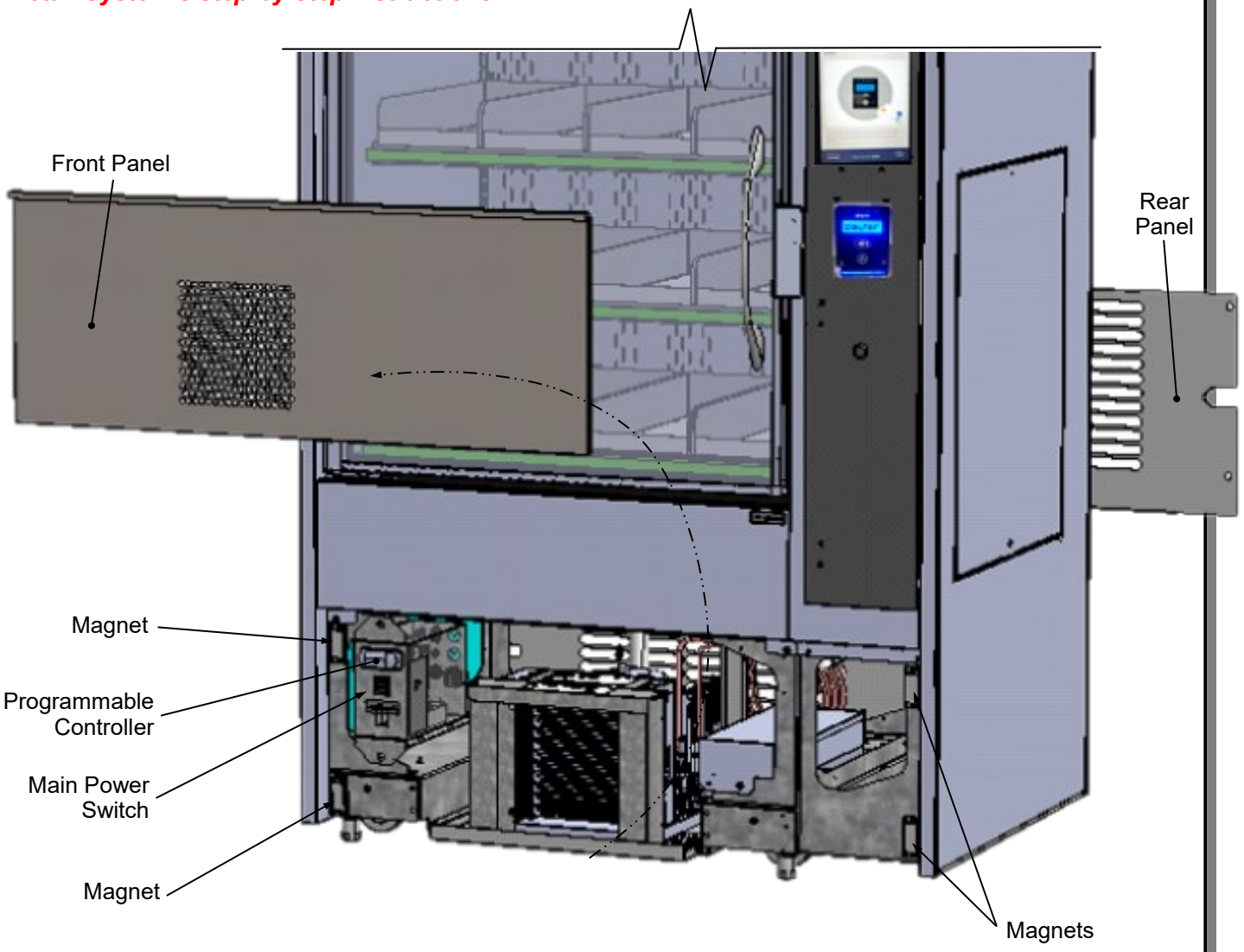
2. Check Condenser Package Connections Before Preparing Case For Merchandising

- ***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 plug.

3. Preparing Case For Merchandising

- ***Caution! Do not attempt to prep case for merchandising without following Instant Retail System's step-by-step instructions!***

> Access the QR Code found on the last page this User Manual. Instant Retail System's video presentations will instruct you how to do the following:
> Access keys at case rear.
> Unlock main controller door & remove cables.
> Remove thumb screws, side panel, cables and envelope (if present).
> Confirm that sim card is in modem by using pin key.
> Release latch to open main door.
> Remove packaging material from shelves along with cooler manual and leveler adjustment tool.
> Align and connect additional cases to main case.
> Turn on main power supply/battery backup. The modem, routers, computers, payment terminal and kiosk screen will energize.
> Energize additional units (if any).
> Level system (so main door will latch properly).
> Install braces (if required).



General Operation

- ***Important Note: Software activation through Instant Retail Systems is required before this merchandiser can be fully operational. See last page of this User Manual for instructions on contacting Instant Retail Systems.***
- Each shelf consists of four (4) bins that are screwed onto their respective shelves.
- Each shelf has a color-coded light bar (at front) which lights up when case is operational.
- DO NOT separate shelving components.
- See ***TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDER ONLY)*** section in manual if there is a shelving malfunction.

Weight Sensors / Shelf Light Color Scheme

Follow these steps to operate merchandiser.

1. Submit payment.
2. Open by grasping handle and slowly opening door.
3. Select product.
4. Note: the light at front of shelf (that had product on it) will now turn green. This signifies that product(s) is added to your cart.
5. If product is inadvertently placed in the wrong bin, the weight sensors detect an error and the shelf light (in front of that particular bin) will turn red (signifying an error). Note that the green light is STILL on in the bin where the product supply was provided (signifying that the transaction is still in the process of being processed).
6. Product MUST be either A) placed back onto correct shelf or B) removed from the bin (and purchased) for the red light to be turned back to white.
7. After desired product has been removed from the bin, the door may be shut, completing the sale.



LOAD LEVEL GUIDE & TEMPERATURE GUIDE - MODEL BD3632IS

LOAD LEVEL & TEMPERATURE GUIDE - MODEL BD3632IS

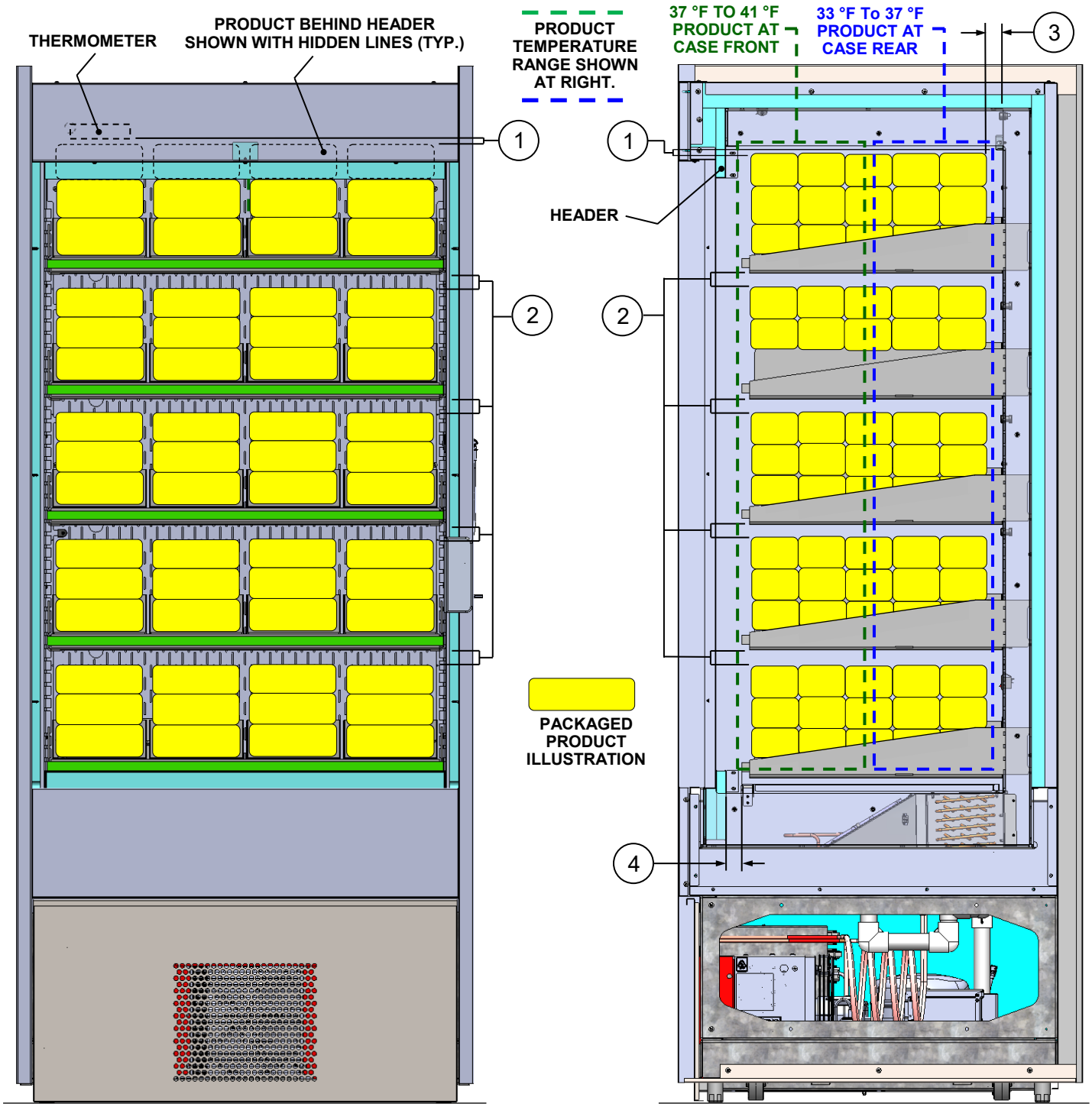
>> FOLLOW THESE PRODUCT PLACEMENT GUIDELINES TO MAINTAIN DESIRED PRODUCT TEMPERATURES.

>> FRONT TO REAR PRODUCT TEMPS ARE ESTIMATES ONLY.

>> NOTES CORRESPOND WITH ILLUSTRATIONS SHOWN.

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 1/4" AIR RETURN OPENING WITH PRODUCT.**

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



MODEL BD3632IS SHOWN ABOVE. CASE IS PARTIALLY DISASSEMBLED, CROSS-SECTIONED AND PACKAGED PRODUCT LADEN FOR ILLUSTRATIVE PURPOSES

CLEANING SCHEDULE - PERFORMED BY STORE PERSONNEL

FREQ.	INSTRUCTIONS
Daily	**Glass Surfaces:** Clean glass surface and shelves with household or commercial glass cleaner.
Daily	**Exterior Panels:** Wipe off all surfaces with warm water and mild soap solution and non-abrasive cloth.
Daily	**Decks:** Wipe off decks with a moist cloth dipped in mild soap and water solution..
Daily	**Acrylic Surfaces:** • Clean: Use a soft, clean cloth dipped in a solution of warm water and a small amount of mild liquid soap. • Apply light pressure while wiping away all smudges and residue. • Rinse: Use pure water in a spray bottle to rinse. • Dry: Use non-abrasive clean cloth. • Polishing: Buff with a light coat of automobile paste wax or plastic cleaner/polish. • Scratches: Use high-quality buffing compound. Carefully follow instructions. • Never use window or household cleaning products.
Daily	**Stainless Steel Surfaces:** • Wash with a solution of hand dish-washing liquid detergent and water or a solution of baking soda and water. Rinse and polish dry with a soft cloth. • Never use scouring powders or steel wool as they will scratch stainless steel. • Brighten by polishing with a cloth dipped in vinegar or in ammonia; sprinkle baking soda on a sponge and rub gently, rinse. Polish dry with soft cloth. • Remove streaks or heat stains from stainless steel by rubbing with club soda.
Weekly	**Magnetic Condensing Coil Filter (If applicable):** • This filter helps prevent dust particles from entering condenser coil. • It is accessible at the air intake side of the case. • Magnetic condenser coil filter is dishwasher safe; remove from case and use a rag or soft-bristled brush to wipe off excess dust particles from filter. Run in normal dishwasher cycle. Remove from dish-washer. • Dry with a soft cloth or allow to air dry. Replace in case.
Monthly	**Condenser Coil without Clean Sweep Option:** • Use a rag or soft-bristle brush to remove dust particles from coil fins • As needed, vacuum dust particles from the coil to prevent dust build up.
Quarterly	**Condenser Coil with Clean Sweep Option:** • Use a rag or soft-bristle brush to remove dust particles from coil fins • As needed, vacuum dust particles from the coil to prevent dust build up.
Quarterly	**Under Case Cleaning:** • Remove lower front and rear panels. Unlock caster and lower to floor. • Slide the case out of the current position, and slide the condenser package out from under the case. • Use a vacuum with brush to remove all dust, dirt, food particles, or residue from underside of the case. • Place the case back in position and replace the front and rear panels.

WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

QUARTERLY PREVENTIVE MAINTENANCE INSTRUCTIONS

Tub, Coil, Drain, Fan Blades, Motors, Brackets:

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

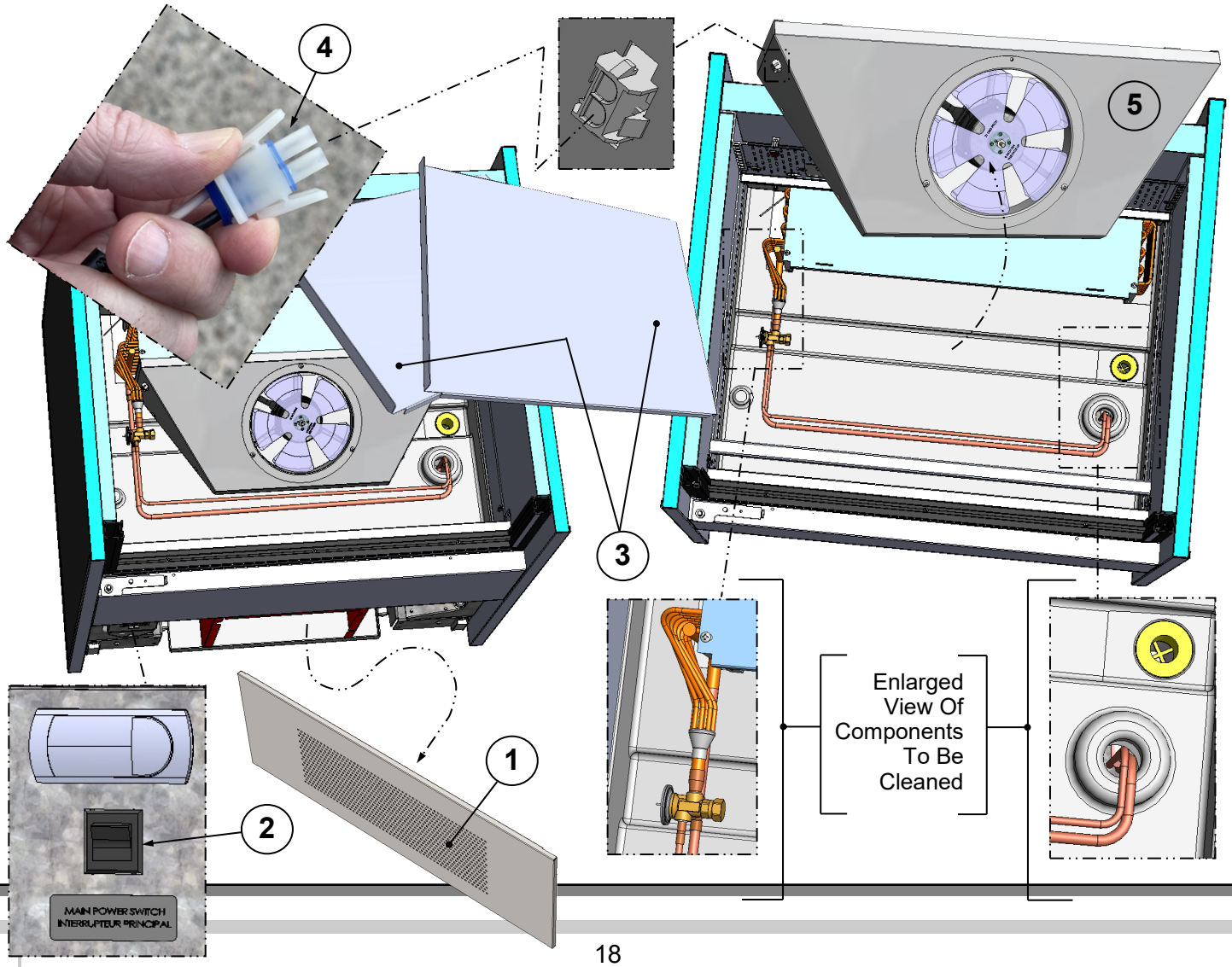
1. Remove front panel (to access controls). No screw removal is required. Place in safe place away from foot traffic.
2. Turn off main power switch (located near programmable thermostat).
3. Remove deck pans. Place in safe place away from foot traffic.
4. Disconnect power cord that energized fan panel.
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:

Whenever refrigeration assembly is removed from underside of case, 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 BD3632IS - PAGE 3 of 4*** in this operating manual for condensate package illustration.

TROUBLESHOOTING (TO BE PERFORMED BY TRAINED SERVICE PROVIDER ONLY) - PAGE 1 of 4

CONDITION	TROUBLESHOOTING
Case Not Lining Up	See ***INSTALLATION*** section in this manual for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On The Floor	***Caution!*** Water on flooring can cause much damage! Until cause is determined (and repaired), follow these procedures: • 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 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, maximum conditions are to be 55% relative humidity / 80° Fahrenheit.
	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.
	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: • Use wet-dry vacuum (or mop & bucket) to remove standing water. • Use 'catch pans' for water to drainage. Swap out regularly until drainage 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.

CONDITION	TROUBLESHOOTING
Fan Emits Excessive Noise	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.
Fan Is Not Working	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.
Programmable Controller Display Is Blank	Check that the MAIN power switch is on.
	Check circuit breaker box for tripped circuits.
Programmable Controller 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.
System Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
LED Light Is Not Working	Check that light switch is in the *on* position.
	Check that the light cord and plug is properly connected. See ***LED LIGHT FIXTURE IN HEADER*** 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
Weight Sensors On Shelf/Shelves Are Malfunctioning	Contact Instant Retail Systems (see last page of User Manual).
Color-Coded Lights On Shelf/Shelves Are Malfunctioning	Contact Instant Retail Systems (see last page of User Manual).
Screen/Monitor Is Malfunctioning	Contact Instant Retail Systems (see last page of User Manual).
Payment Processor Is Malfunctioning	Contact Instant Retail Systems (see last page of User Manual).
Case Is Not Holding Temperature	You must load case with pre-chilled product. A warm load can result in air temperature of food storage compartment exceeding 45 °F (7 °C) for more than 15 minutes; this can result in vending mechanism disablement.
	Temperature changes during defrost mode but will return to normal.
	Check that case is not directly in the sun.
	Check that condenser coil has been cleaned.
	Check air return opening for obstructions.
	If sight glass is part of condensing unit, check if it is flashing or showing low charge.
	Check set point temperature; it may be adjusted too high.
Condensing Unit Is Not Operating	Check that the power is turned on.
	Check if programmable 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.

LED Light Fixture in Header

Removal of Faulty LED Light:

- Contact Structural Concepts' Technical Service Department for replacement LED light. See last page of User Manual.
- 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.

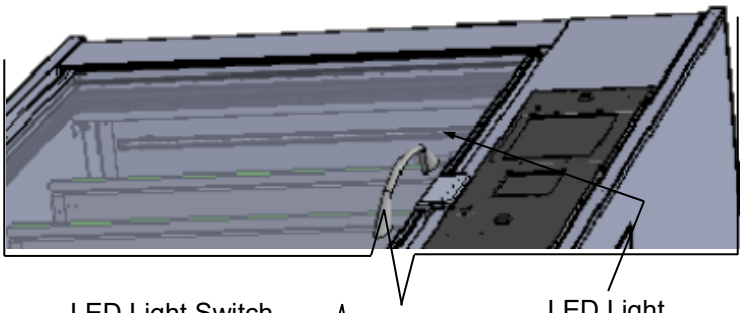
Replacement of LED light:

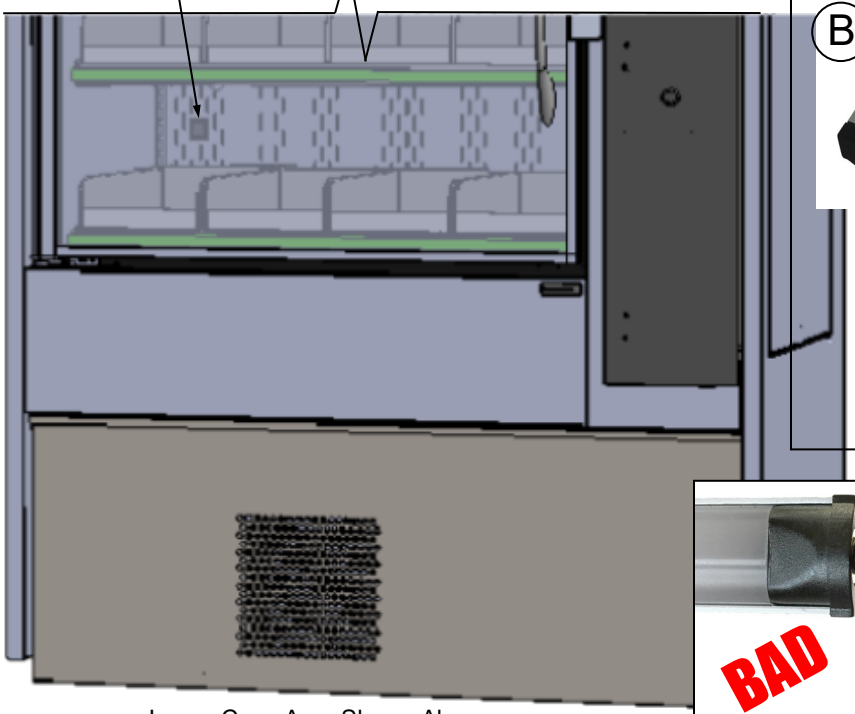
- Attach magnetic mounting clips onto LED light.
- Adjust magnetic mounting clips so they are equally spaced on LED light.
- Reattach LED light to header.
- Position properly in shelf/header.

>> Note: If mounting clips are riveted to header, attach by placing LED light in base of clip and then snapping into clip at FLANGE SIDE.

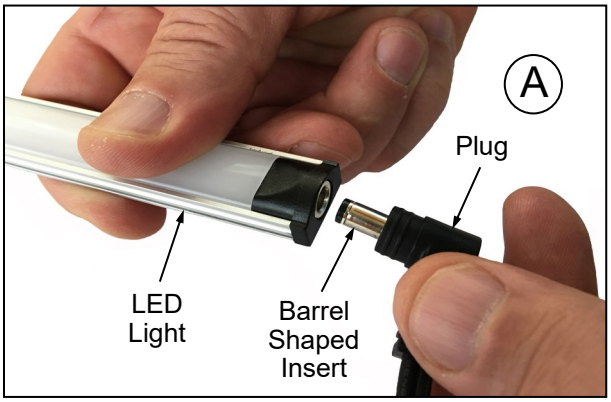
- Press plug's barrel-shaped insert deep into LED light.
- Important: If plug is not inserted ALL THE WAY IN the LED light's orifice, the light may not energize. See **"BAD"** vs. **"GOOD"** insertion illustrations below.
- Turn LED light switch back on.

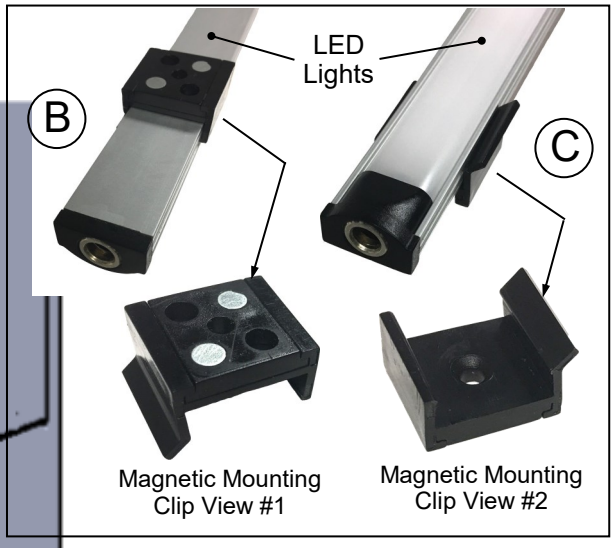
--- Upper Case Area Shown Below ---

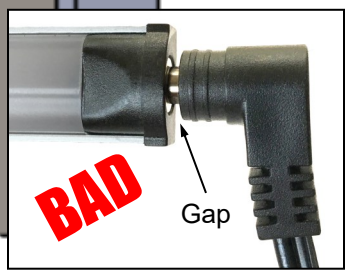




--- Lower Case Area Shown Above ---









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

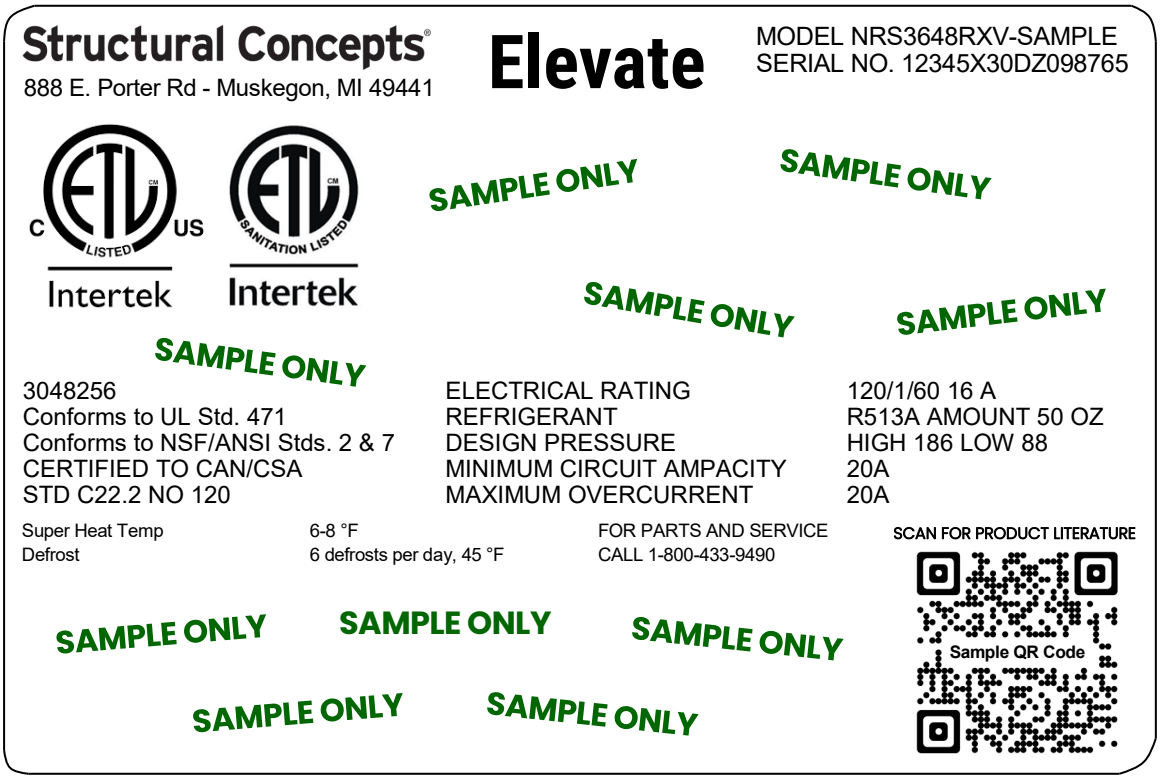
CONDITION	TROUBLESHOOTING
Head Pressure Too High	Check that the condensing coil is not dirty or covered.
	Check that condensing fans are working.
	Perform sub-cooling check and verify that no contaminates are in system.
	Check that liquid line filter dryer is not plugged.
	Check that close-offs are intact (around condensing coil) and that air is not recirculating.
	Check that store ambient temperature isn't above maximum allowed. See ***OVERVIEW / TYPE / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING / PLUGS*** section in this manual.
Head Pressure Too Low	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
Low Suction Pressure	If sight glass is part of condensing unit, check if it 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.
	Check that there is no air recirculation around evaporator coil.
	Check that evaporator coil is not iced up.
High Suction Pressure	Check that the "cooling load" isn't high. Product must be pre-chilled before placing in refrigerated section of case.
	Check that case is at least 15-feet from exterior doors, overhead HVAC vents or any air curtain disruption.
	Check that unit is not exposed to direct sunlight via windows or any other heat source (ovens, fryers, etc.).
	Check that superheat adjustment isn't low.
	Check TXV bulb installation a. Poor thermal contact. b. Warm location.

Serial Label Location & Information Listed / Technical Information & Service

- Serial labels are 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.



--- 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®

INSTANT RETAIL SYSTEMS / STRUCTURAL CONCEPTS TECH. SVC CONTACT INFO & LTD WARRANTY

FOR TRAINING ON HARDWARE SETUP, SOFTWARE, CALIBRATION, CONFIGURATION, ONGOING KIOSK MERCHANDISING, ADMIN FIRST TIME SETUP, ETC., ACCESS THE QR CODE AT RIGHT.

> IF VIEWING THIS DOCUMENT ON SMART PHONE, TABLET OR COMPUTER, SELECT/CLICK ON THE QR CODE AT RIGHT WITH YOUR CURSOR.

> IF VIEWING THIS DOCUMENT IN PRINT (HARD COPY), SCAN THE QR CODE AT RIGHT WITH YOUR SMART PHONE OR TABLET.

FOR INSTANT RETAIL SYSTEMS TECHNICAL SERVICE:
EMAIL SUPPORT@INSTANTRS.COM (PREFERRED) OR CALL 1 (615) 236-6474

FOR STRUCTURAL CONCEPTS GENERAL MERCHANDISER TECHNICAL SERVICE/WARRANTY CONTACT INFORMATION: CALL 1 (800) 433-9490 / EXT. 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 INSTANT RETAIL SYSTEMS OR STRUCTURAL CONCEPTS CORPORATION: SERIAL NO. / MODEL NO. / STORE NO. / STORE ADDRESS / DETAILS (PHOTOS, LEAK LOCATIONS, PROBLEM/ MALFUNCTION, 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.

