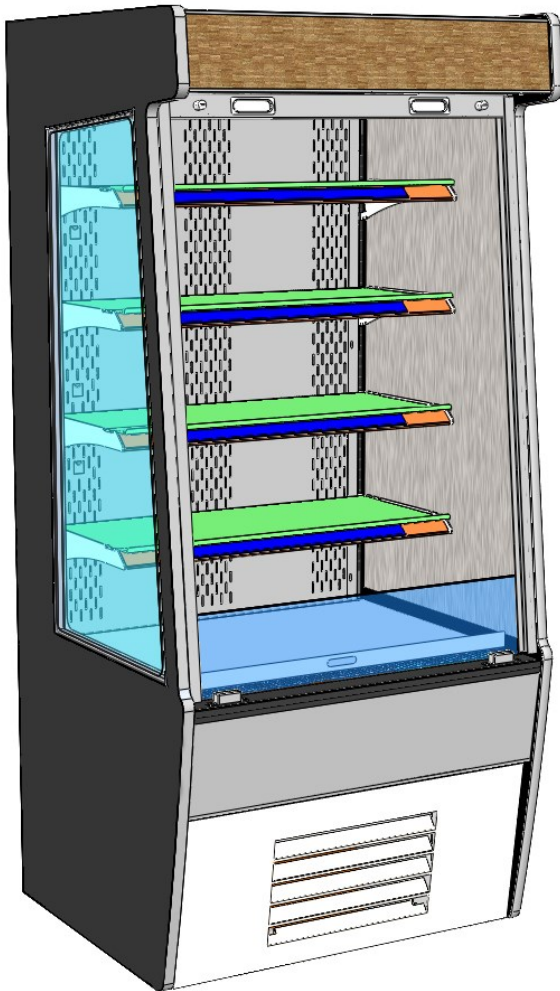


Oasis[®] USER MANUAL

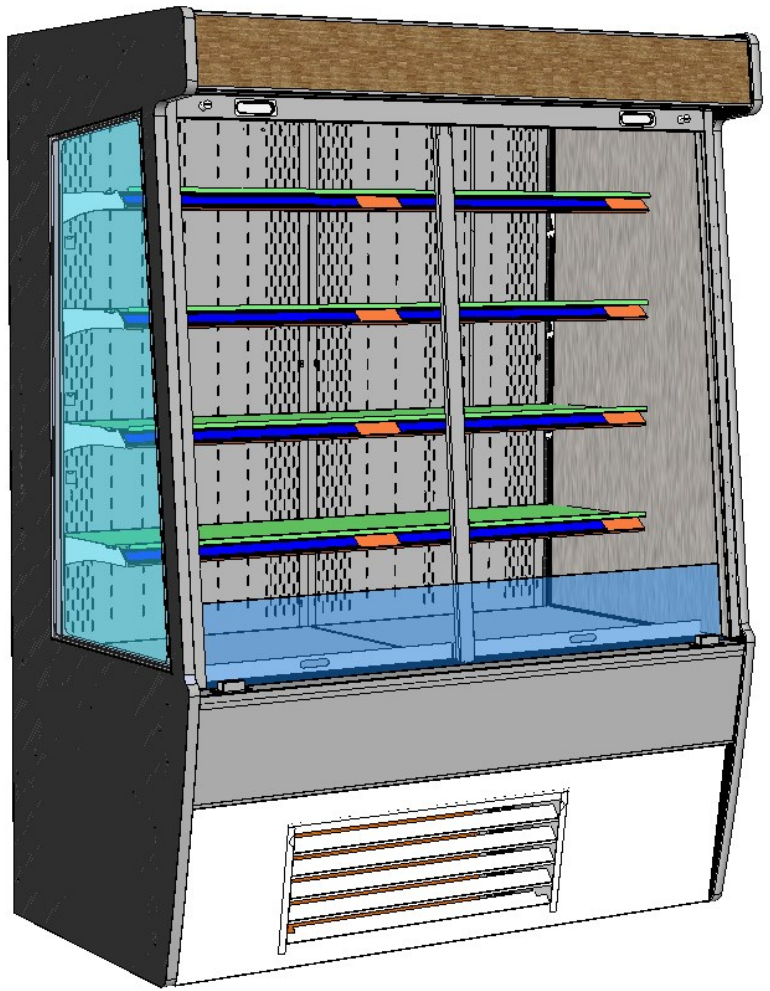
SCC
P/N 20-13644

- MOBILE REFRIGERATED SELF-SERVICE MERCHANDISER**
- > ROLL-DOWN SECURITY DOORS ARE OPTIONAL ON ALL UNITS
 - > BREEZE-E WITH ENERGYWISE IS STANDARD ON ALL UNITS
 - > REAR PLENUM DOORS ARE OPTIONAL ON ALL UNITS

Important! If Adjoining Cases, See Synchronous Defrost Connection Instructions On Page 7 AND Adjoiment Instructions on Page 8 In This Manual.



Model CO37R Shown With Optional Roll-Down Security Door (Similar Design to Models CO35R, CO45R and CO47R)



Model CO57R Shown With Optional Roll-Down Security Door (Similar Design to Models CO55R, CO65R and CO67R)

MODEL CO35R.....	36 1/4"L* x 33 1/4"D x 61 1/4"H^		MODEL CO37R.....	36 1/4"L* x 33 1/4"D x 81"H^
MODEL CO45R.....	47 1/4"L* x 33 1/4"D x 61 1/4"H^		MODEL CO47R.....	47 1/4"L* x 33 1/4"D x 81"H^
MODEL CO55R.....	59 1/4"L* x 33 1/4"D x 61 1/4"H^		MODEL CO57R.....	59 1/4"L* x 33 1/4"D x 81"H^
MODEL CO65R.....	71 1/4"L* x 33 1/4"D x 61 1/4"H^		MODEL CO67R.....	71 1/4"L* x 33 1/4"D x 81"H^

**Includes End Panels. ^With Levelers Extended 1 1/4" From Base Frame*

Structural Concepts[®]

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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.

TYPE I vs. TYPE II ENVIRONMENTAL CONDITIONS

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

- Type I display refrigerators are intended for use in an area where environmental conditions are controlled and maintained so that the ambient temperature does not exceed 75 °F (24 °C) and 55% maximum humidity.
- Type II display refrigerators are intended for use in an area where environmental conditions are controlled and maintained so that the ambient temperature does not exceed 80 °F (27 °C) and 55% maximum humidity.
- If unsure if your unit is Type I or II, see tag next to serial

label. See **SERIAL LABEL LOCATION & INFORMATION LISTED / TECH INFO & SERVICE** section in this manual for sample serial labels.

COMPLIANCE

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

PRECAUTIONS and WIRING DIAGRAMS

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

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.



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



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



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



WARNING
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

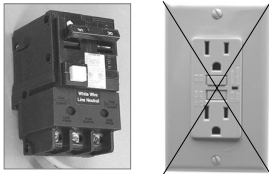
- This sheet contains important precautions to prevent damage to unit or merchandise.
- Please read carefully!
- See previous page for specifics on **OVERVIEW**, **CONDITION TYPE**, **COMPLIANCE** and **WARNINGS**.

WIRING DIAGRAM

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



CAUTION! LAMP REPLACEMENT GUIDELINES
LED lamps must reflect specific size, shape and overall design. Any replacements must meet factory specifications.



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



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



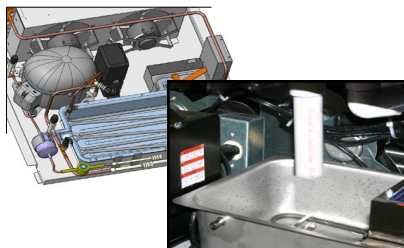
CAUTION! DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR PRODUCT (FOOD) TEMPERATURES.

- 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! 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.



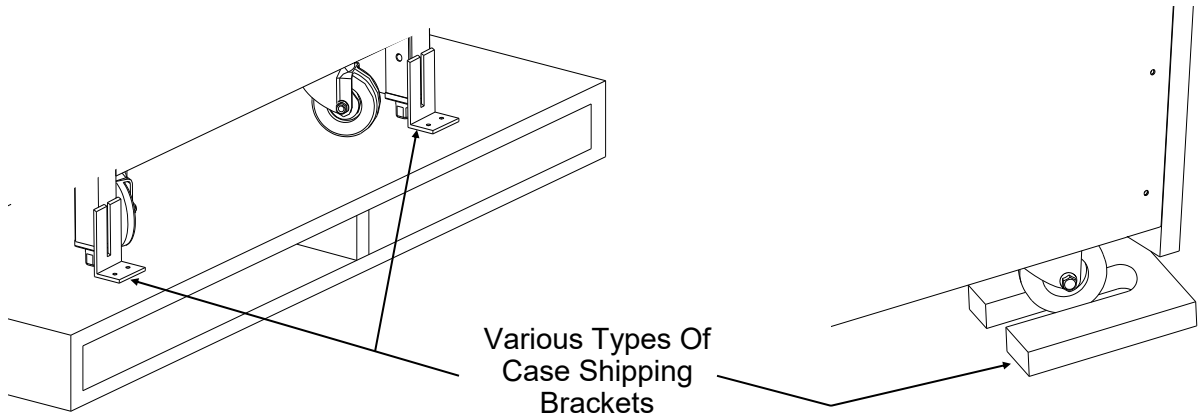
CAUTION! CHECK CONDENSATE PAN POSITION & PLUG!
Water on flooring can cause extensive damage!

- 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.

CASE REMOVAL FROM SKID (LEVELERS OR CASTERS)

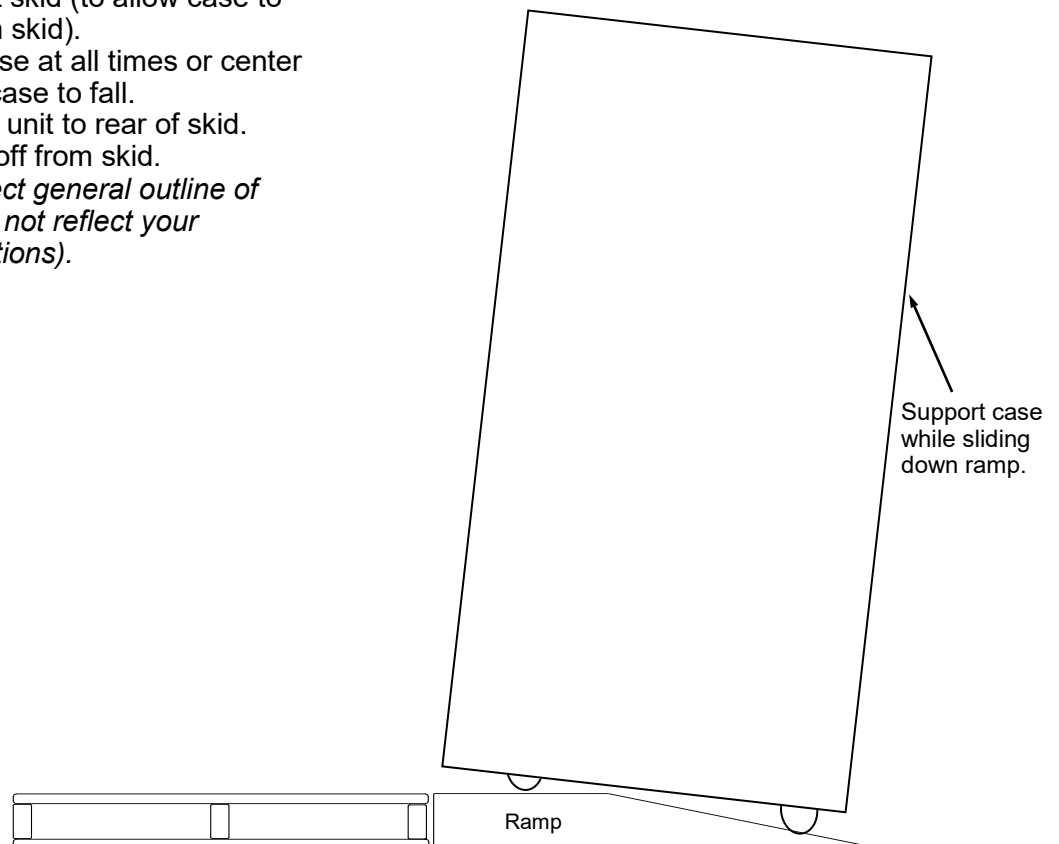
1. Removing Case Shipping Brackets That Are Attached To Skid

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



2. Remove Case (With Casters) From Skid

- A. Place ramp up against skid (to allow case to smoothly slide off from skid).
 - B. Maintain support of case at all times or center of gravity may cause case to fall.
 - C. 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).



INSTALLATION: MERCHANDISER SET-UP, ELECTRICAL SET-UP, OPTIONAL REMOTE SYSTEM

1. Merchandiser Set-Up

- Remove the rear lower grille.
- Ensure that the manufacturer provided hot gas evaporator pan is installed under the condensate drain.
- Ensure that overflow evaporator pan is plugged into the receptacle inside base.
- Reinstall the rear grille after confirming the above.

2. Electrical Set-Up

- **With Power Cord:**
 - **For your safety, equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.**
 - Plug cord into certified electrical outlet with ground. See Overview/Warnings sheet for more specifics.
- **Without Power Cord:**

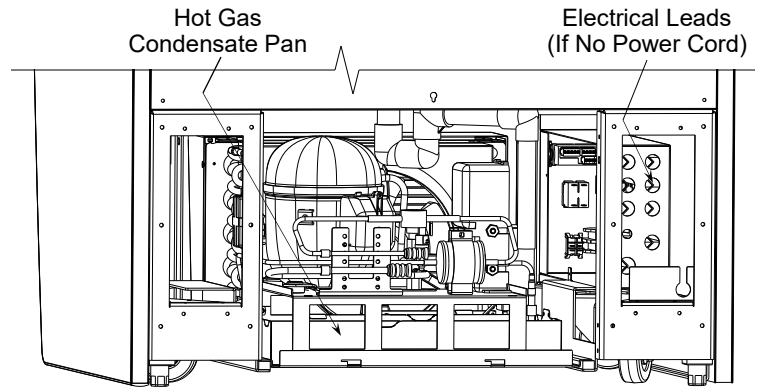
Note: Servicing to be accomplished by a certified electrical contractor.

 - **Electrical Leads**
 - Remove cover from the left lower rear of the unit.
 - Electrical leads connections are provided in the junction box.

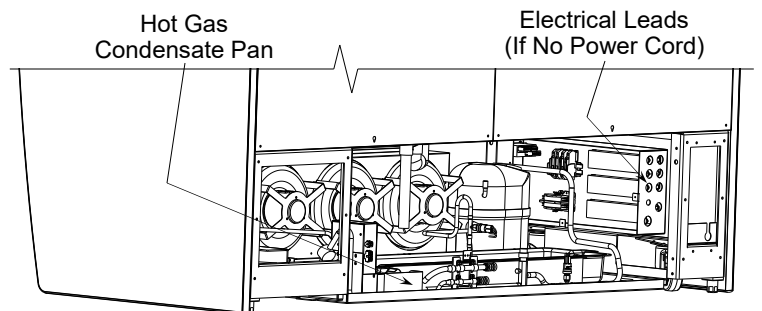
3. Optional Remote Refrigeration System

Note: Servicing units is to be done by refrigeration / electrical contractors only.

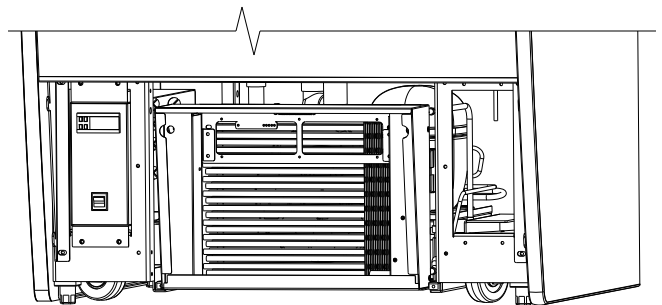
- **Electrical leads**
 - Remove lower rear panel.
 - Electrical lead connections are located in electrical/ballast box.
- **Refrigeration stub-ups**
 - Refrigeration stub-up connections are provided on underside of the tub inside the base of the unit.
 - Remove lower rear and/or front panel.
 - The evaporator stub-up connections are located on the right hand side of the unit.



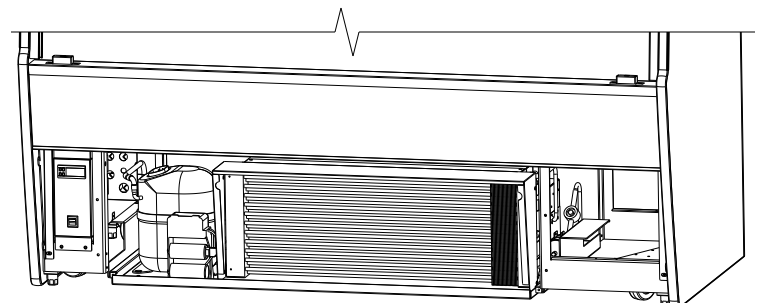
Rear Refrigeration Access After Rear Grille Removed
(Model CO37R Shown Above)



Rear Refrigeration Access After Rear Grille Removed
(Model CO67R Shown Above)



Front Refrigeration Access After Front Grille Removed
(Model CO37R Shown Above)



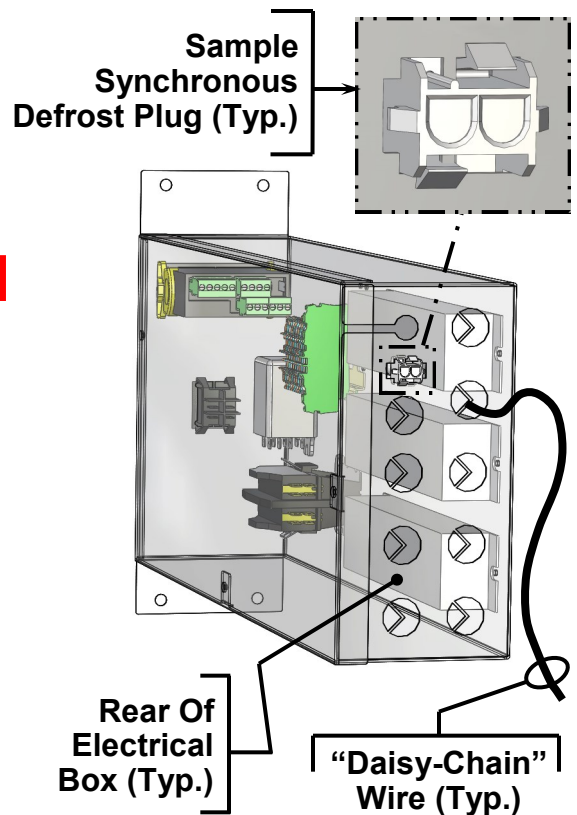
Front Refrigeration Access After Front Grille Removed
(Model CO67R Shown Above)

4. Synchronous Defrost Connection (Optional)

- Adjoined cases MUST HAVE its synchronous defrost plugs connected.
- See wiring diagram accompanying case.

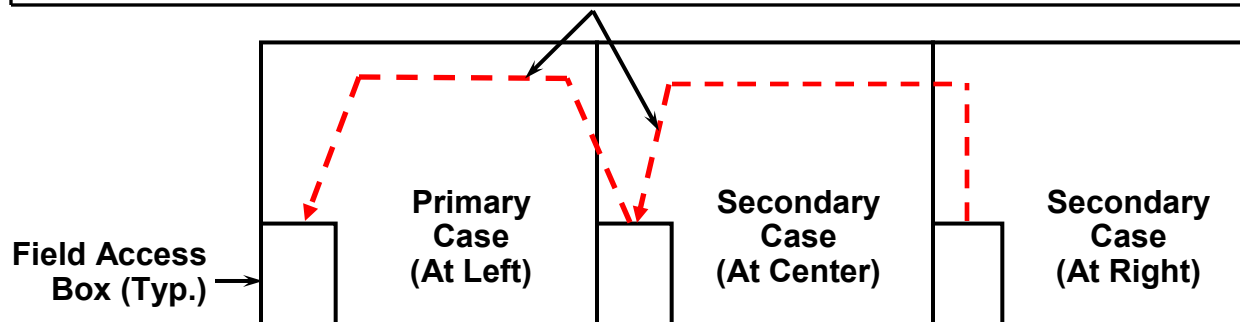
Attention!

- Adjoined cases have synchronous defrosts.
- Synchronous Defrost Plugs Must Be Connected At Rear of Electrical Box During Case Adjoinment.
- See Your Case's Wiring Diagram For Instructions.



SCC Internal Note: Any Changes To This Sheet Must Also Be Made To SCC P/N 20-61248.

Note: "Daisy-Chain" Synchronous Wiring Must Route To Primary Case (At Left)



Sample Case Adjoinment / Case Front View

INSTALLATION, CONTINUED: SILICONE & URETHANE APPLICATION / BOLTING ADJOINED UNITS

5. Overview / Silicone Application

Sealant Overview:

- Warranty is void if improper sealant is used.
- Sealing tub prevents air from escaping through seams between cases (causing condensation problems and reducing refrigeration efficiency).
- Sealing also prevents water from seeping between cases to the floor.

Silicone Application:

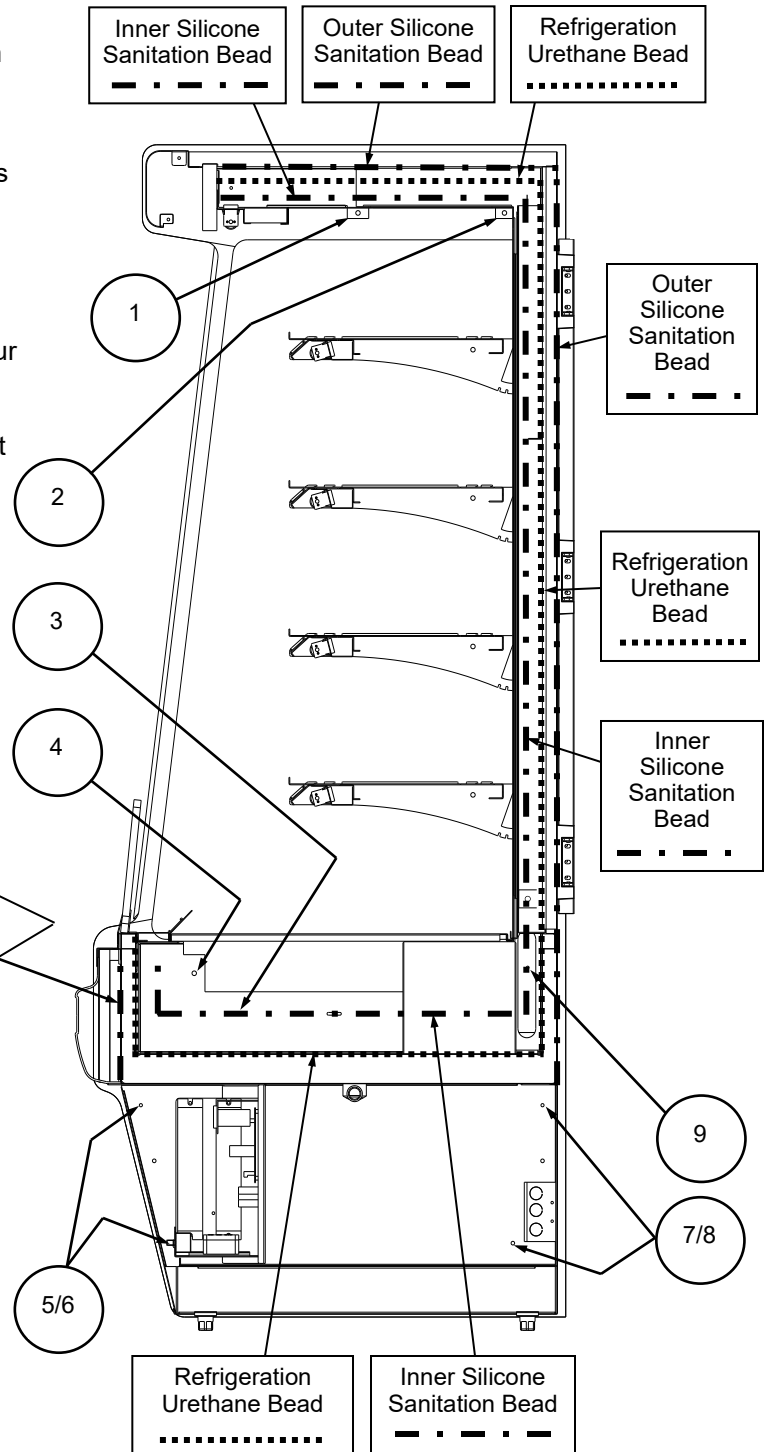
- Form (1) INNER sanitation bead AND (1) refrigeration bead BEFORE case is adjoined (as shown).
- Then, AFTER case is adjoined (and bolted), form (1) OUTER sanitation bead (as shown) into any cavities or gaps that may remain along outer adjointment areas where sealant has ALREADY been applied.
- Also place a thick bead of urethane around drain.

6. Bolting Adjoined Units

- Bolt holes are at various locations (depending upon model). Model illustrated MAY NOT exactly reflect your particular unit but will likely be similar in layout.
- Use appropriately sized nuts and bolts for each hole.
- #1 hole is accessible at honeycomb (slight adjustment or removal of honeycomb air diffuser may be necessary for attachment of bolt).

Note: Model Shown May Not Exactly Reflect Every Feature or Option of Your Particular Case.

- #2 hole is accessible near rear plenum.
 - #3, 4 & 9 holes are accessible after removing decking.
 - #5-6 holes are accessible after removing front panel.
 - #7-8 holes are accessible after removing rear panel.
- >> Be sure to reattach components to case after the adjointment process is complete.



.....
Industrial Grade Urethane Adhesive (For Refrigeration Bead Applications)

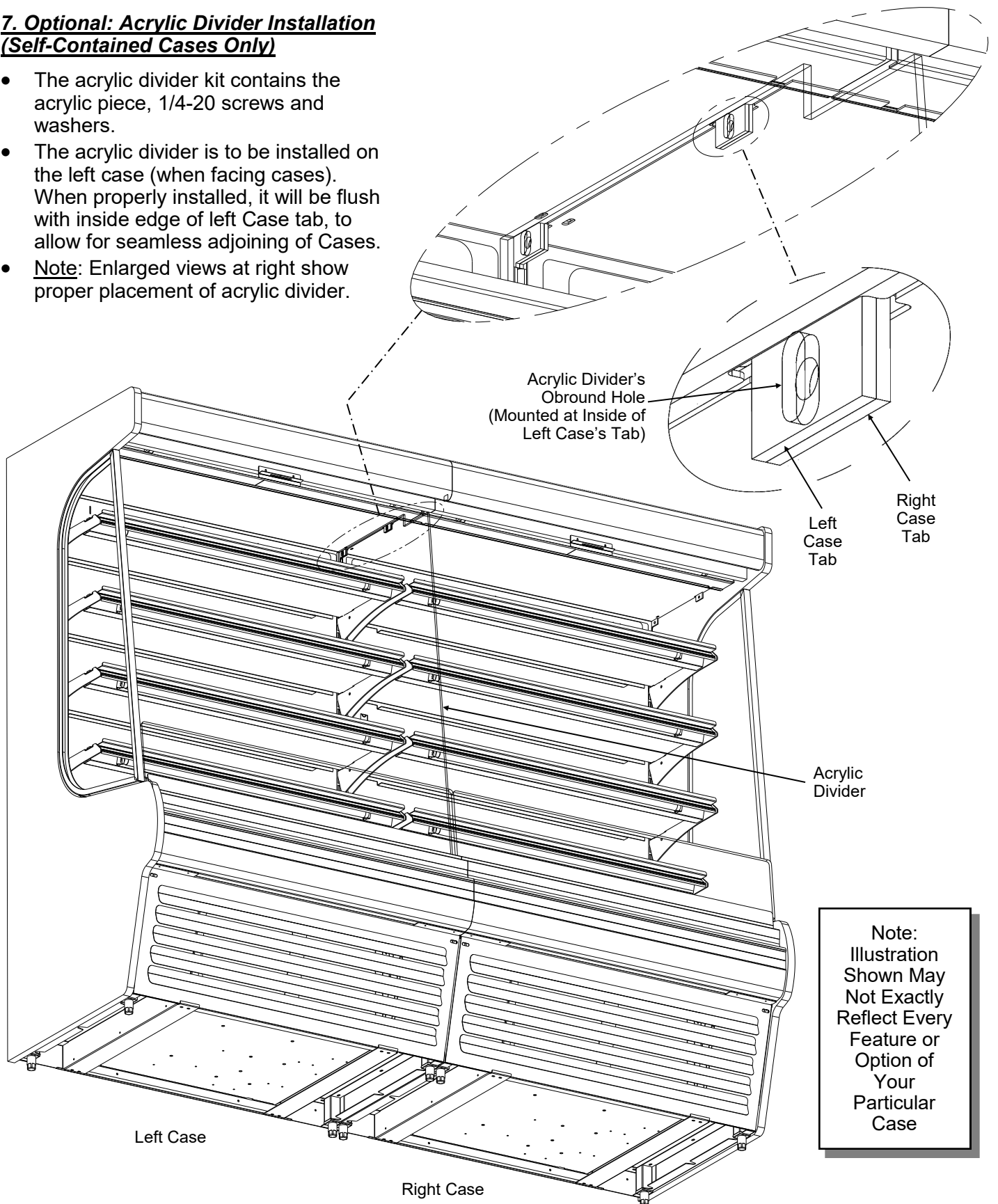


Silver, Black or Clear Silicone Sealant Conforming To NSF/ANSI 51 Specs (For Sanitation Bead Applications)

INSTALLATION, CONTINUED: ACRYLIC DIVIDER INSTALLATION (OPTIONAL)

7. Optional: Acrylic Divider Installation **(Self-Contained Cases Only)**

- The acrylic divider kit contains the acrylic piece, 1/4-20 screws and washers.
- The acrylic divider is to be installed on the left case (when facing cases). When properly installed, it will be flush with inside edge of left Case tab, to allow for seamless adjoining of Cases.
- **Note:** Enlarged views at right show proper placement of acrylic divider.



MAIN POWER SWITCH - START-UP / TEMPERATURE CONTROLLER / LIGHT SWITCH

1. Main Power Switch - Start-Up

- Remove the front grille simply by lifting up and off (no screw removal required).
- Turn on the main power switch. Main power switch is on the left hand side of unit (accessible after front grille has been removed). Evaporator coil fans, and compressor motor (for units with self contained refrigeration) will energize.
- From the front of the case, raise the deck pans and check to see that the coil fans are all functioning properly. Caution! Rotating fan blades are sharp. Do not place fingers near rotating blades!
- Replace front grille in reverse order it was removed.

2. Temperature Controller / Thermostat

- The case temperature is set at the factory, (supply air is set for a case temp at 5 °C / 41 °F as as determined by the case size).
- The temperature is controlled by a thermostat.
- See illustration at right for thermostat location.
- If a temperature setting change is required, refer to the **PROGRAMMABLE CONTROLLER INFORMATION** section of this operating manual.

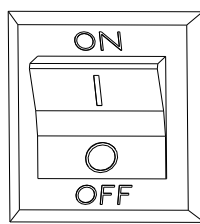
--- Sample Thermostat ---



3. Light Switch At Header, Upper-Left

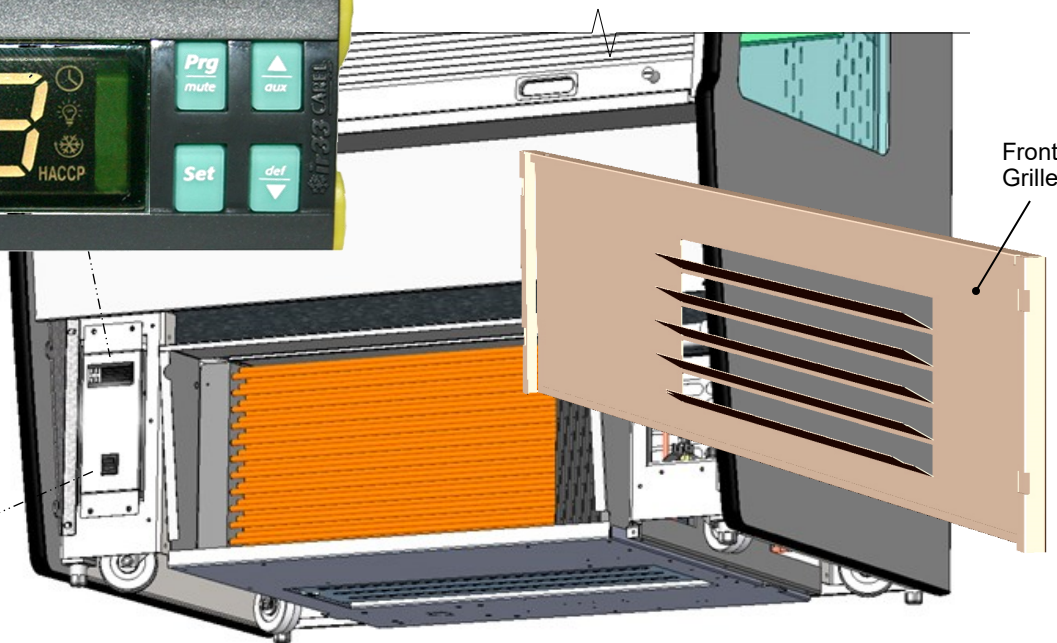
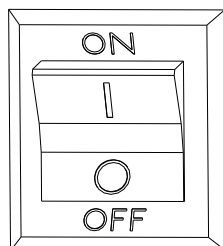
- Whether fluorescent or LED lights are used on case, switch is at header, upper-left (as shown immediately below).
- Turn on light switch.
- All lights should come on at the same time.
- Fluorescent bulbs may require a short warm-up period; initially, new fluorescent bulbs may be slightly dim or flicker.
- Whether fluorescent or LED, if lights do not turn on, check plug connections

Light Switch



--- View of Header, Upper Left (Model CO47R) ---

Main Power Switch

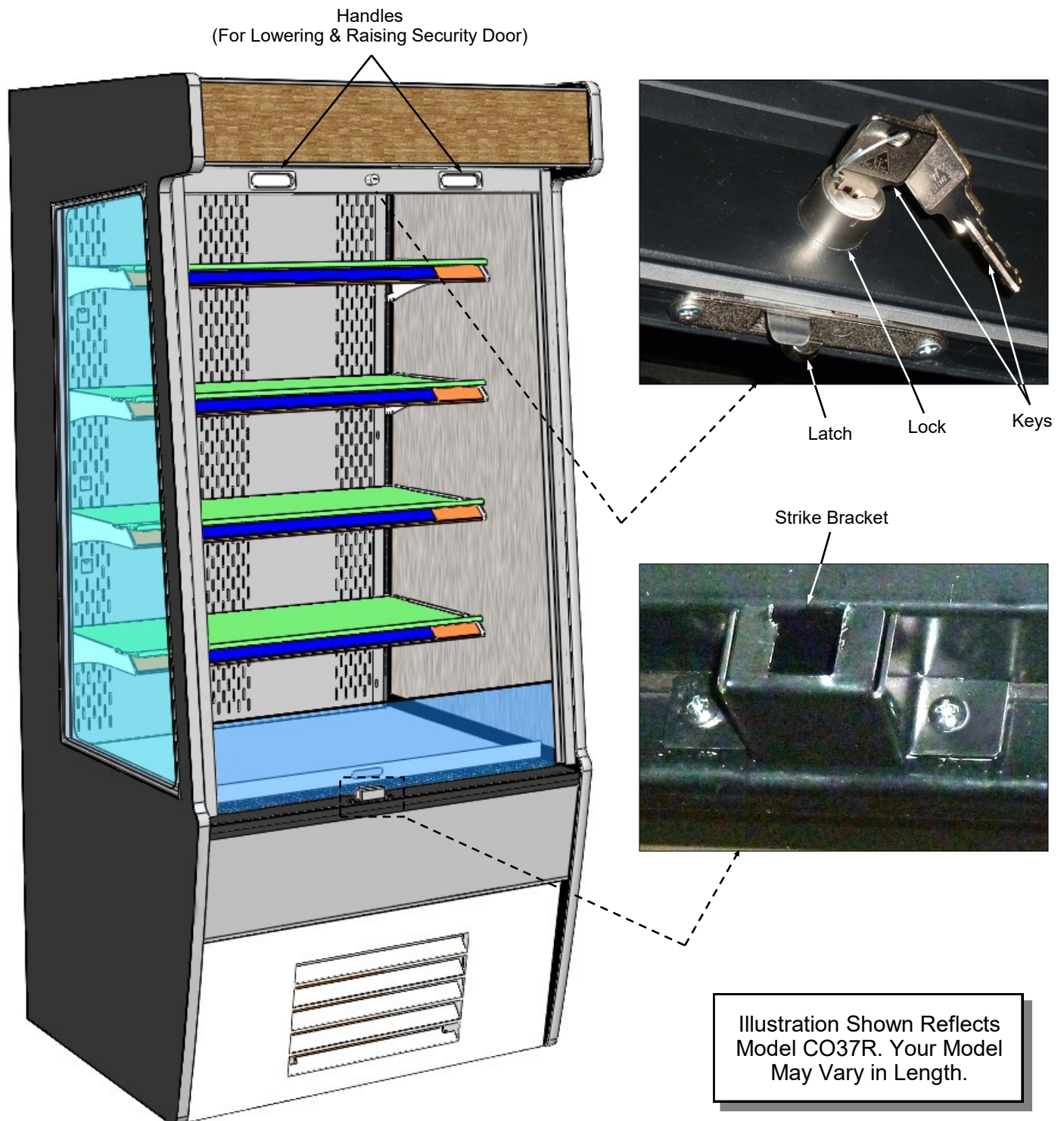


--- Case Front Access After Front Grille Removed (Model CO47R) ---

OPTIONAL ROLL DOWN SECURITY DOOR (SEE NEXT PAGE FOR EXTENDED DOOR)

Roll Down Security Door (Optional): Shown Retracted

- Optional roll down security door has two handles for grasping, lowering and raising.
- After door is lowered, key may be turned clockwise to lock latch into strike bracket.
- Turn counter-clockwise to unlock.
- Keep keys in safe and secure place.

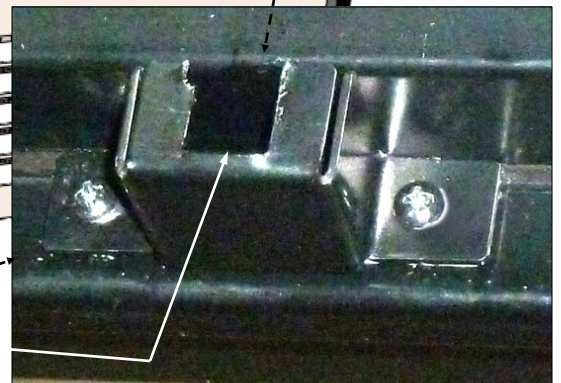
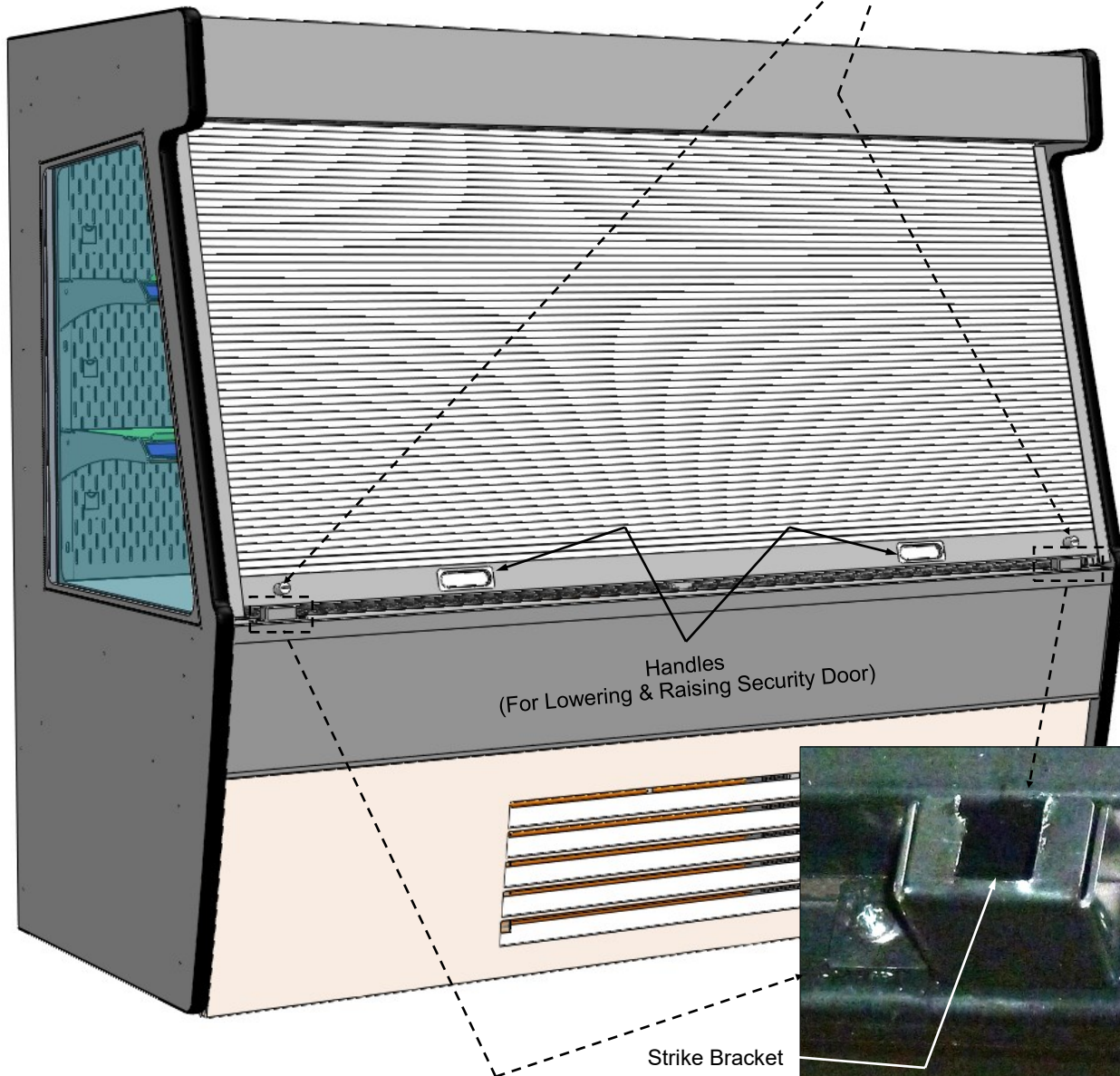
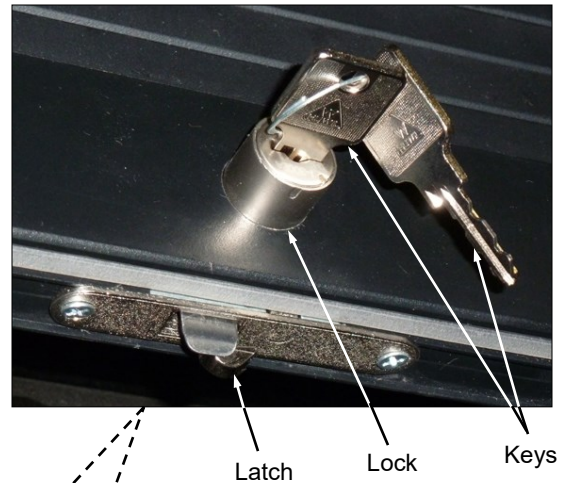


OPTIONAL ROLL DOWN SECURITY DOOR (SEE PREVIOUS PAGE FOR RETRACTED DOOR)

Roll Down Security Door (Optional): Shown Extended

- Optional roll down security door has two handles for grasping, lowering and raising.
- After door is lowered, key may be turned clockwise to lock latch into strike bracket.
- Turn counter-clockwise to unlock.
- Keep keys in safe and secure place.
- See **STIFFENER (FOR OPTIONAL ROLL DOWN SECURITY DOOR): PURPOSE / REMOVABILITY** section on next page.

Illustration Shown Reflects Model CO65R.
Your Model May Vary in Length and Height.



STIFFENER (FOR OPTIONAL ROLL DOWN SECURITY DOOR) & STIFFENER BRACKETS

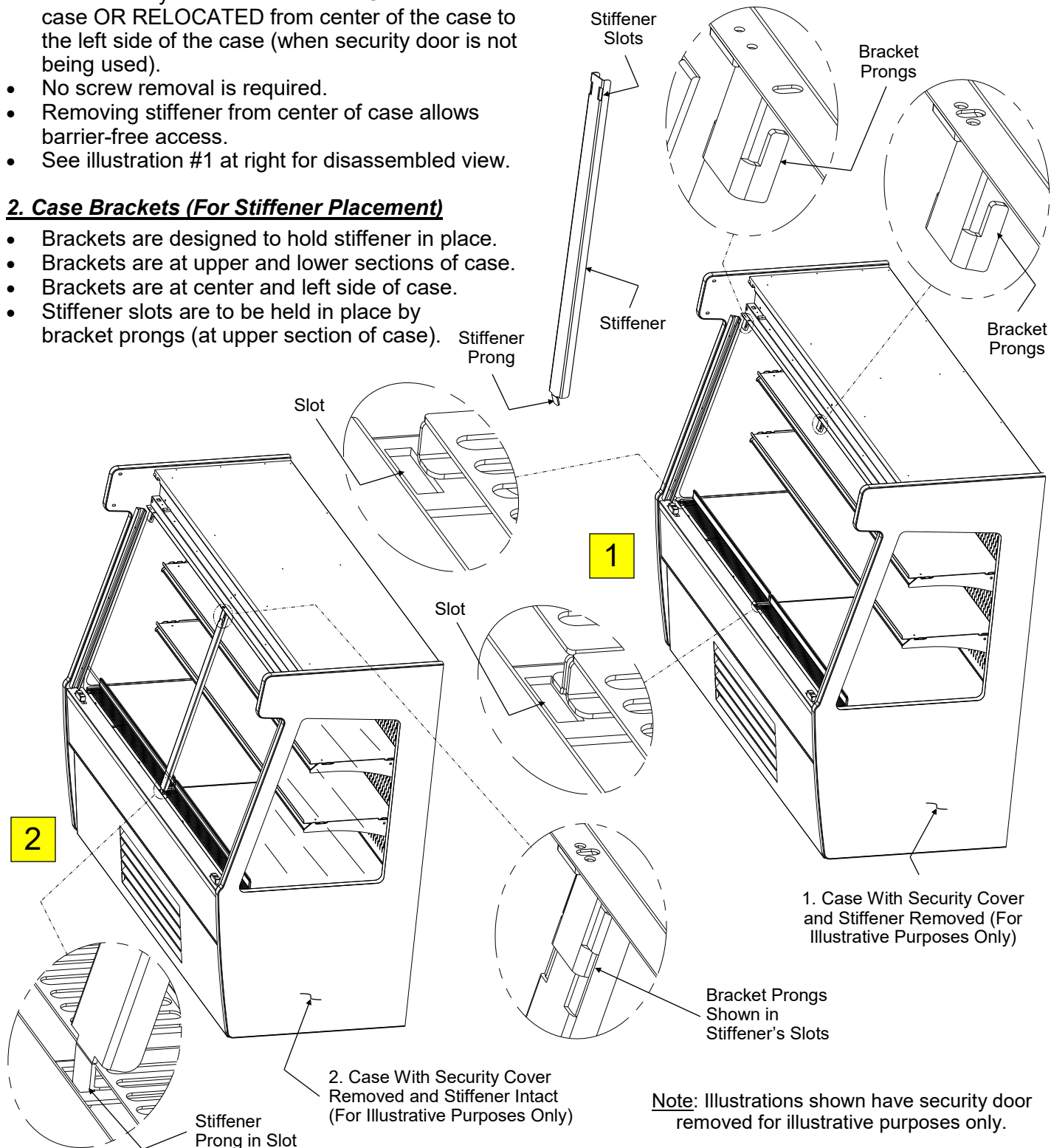
1. Stiffener (For Optional Roll Down Security Door)

- Due to its size and weight, the optional roll down security door has a stiffener provided for support.
- Stiffener may be ENTIRELY REMOVED from case OR RELOCATED from center of the case to the left side of the case (when security door is not being used).
- No screw removal is required.
- Removing stiffener from center of case allows barrier-free access.
- See illustration #1 at right for disassembled view.

2. Case Brackets (For Stiffener Placement)

- Brackets are designed to hold stiffener in place.
- Brackets are at upper and lower sections of case.
- Brackets are at center and left side of case.
- Stiffener slots are to be held in place by bracket prongs (at upper section of case).

- Stiffener prong is to be held in place by bracket slots (at lower section of case).
- See illustration #2, below-left, for view of stiffener at center position of case.



MAINTENANCE FUNDAMENTALS: LIGHT FIXTURE COMPONENT REMOVAL AND REPLACEMENT

LED Style Light Fixture Component R&R

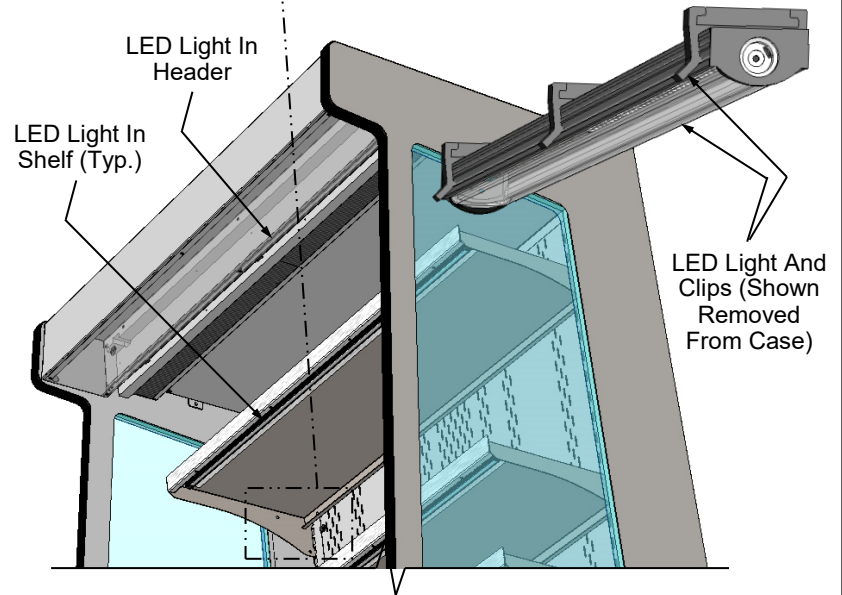
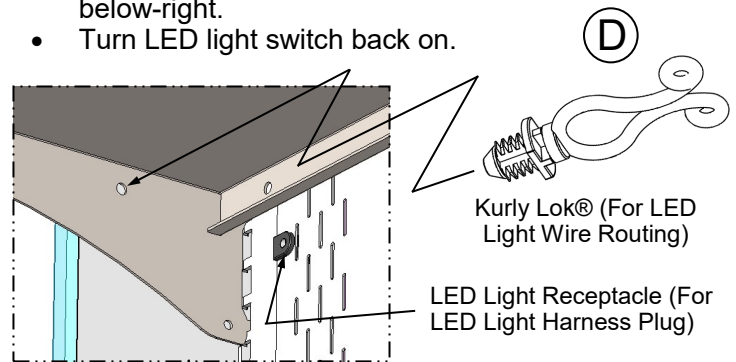
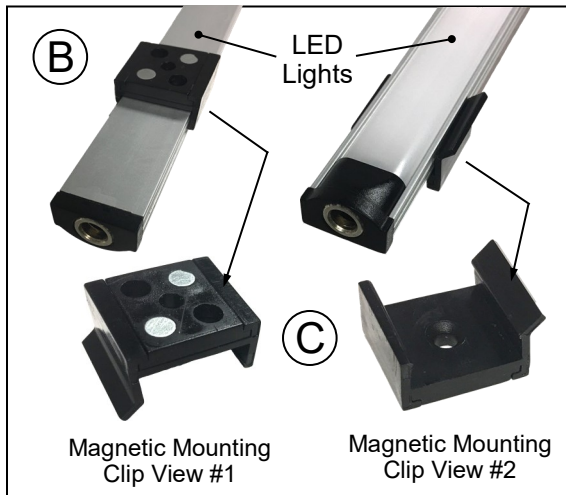
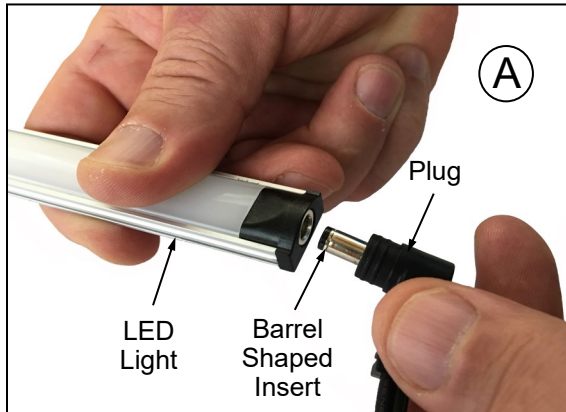
Removal of Faulty LED Lights or Other Components:

- LED lights and/or other LED related components rarely require replacement.
- If replacement parts are needed, Contact Structural Concepts' Technical Service Department for parts.
- Turn off LED light switch.
- To remove faulty LED light (or other components), 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 shelf (or header).
 - C. If mounting clips are riveted to shelf or header, simply remove LED light from mounting clips by pressing against flange part of clips with thumb while pulling downward on LED light..
 - D. If Kurly Lok® wire harness/retainer is broken, use pliers to grasp remaining piece and remove from inner shelf bracket.

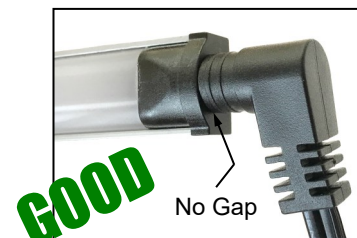
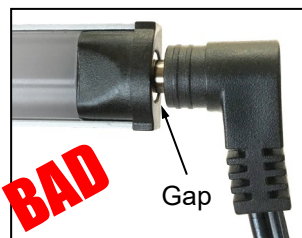
Replacement of LED Lights or Other Components:

- Attach magnetic mounting clips onto LED light (if they are not riveted to shelf or header).
- Adjust magnetic mounting clips so they are equally spaced on LED light.

- Reattach LED light assembly to its shelf/header. If mounting clips are riveted to shelf or header, simply remove LED light from mounting clips by pressing against flange part of clips with thumb while pulling downward on LED light..
- If Kurly Lok® wire harness/retainer needs replacement, contact Structural Concepts for replacement part. Insert new one where shown. Re-insert LED light wire into Kurly Lok® prongs to hold wire firmly in place. Plug LED light's plug back into receptacle.
- Press plug's barrel-shaped insert all the way 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-right.
- Turn LED light switch back on.



--- Model CO47R Partially Disassembled Model Shown Above ---



Preventive maintenance should be performed every 30 days unless conditions warrant a more frequent replacement cycle.

1. Honeycomb Air Diffuser Removal

Honeycomb is located in discharge air duct.

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

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

B. Apply pressure to collapse the honeycomb to allow it to be pulled out of honeycomb retainer.

C. Pry downward and away from honeycomb retainer.

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

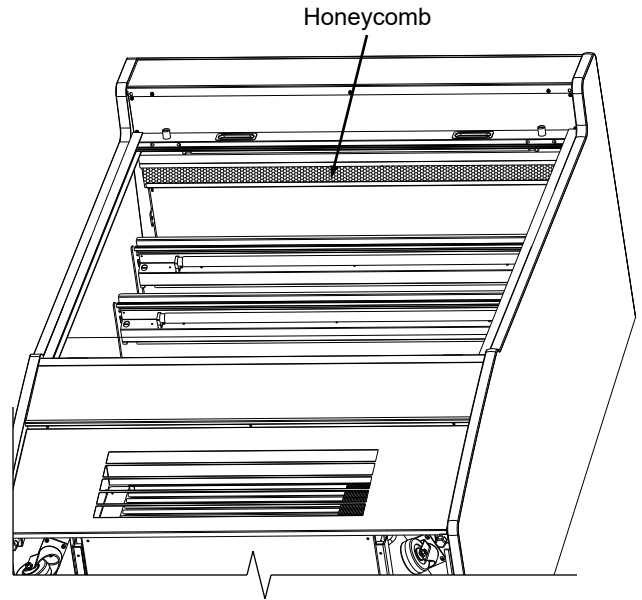
2. Honeycomb Air Diffuser Installation

D. Squeeze honeycomb to allow it to fit into honeycomb retainer.

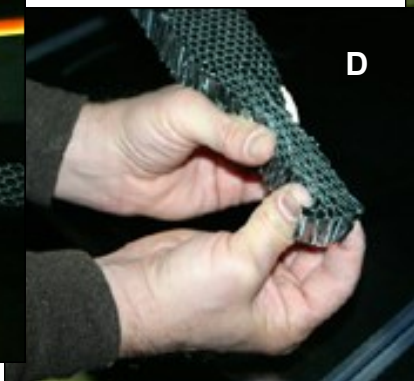
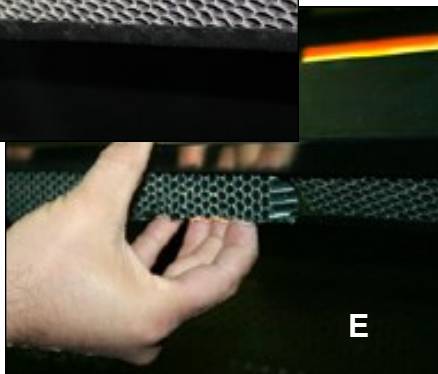
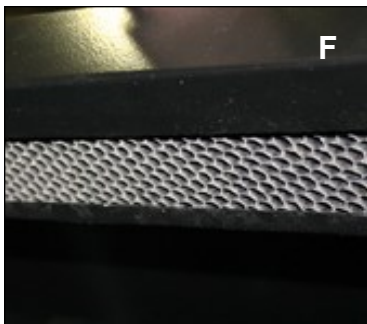
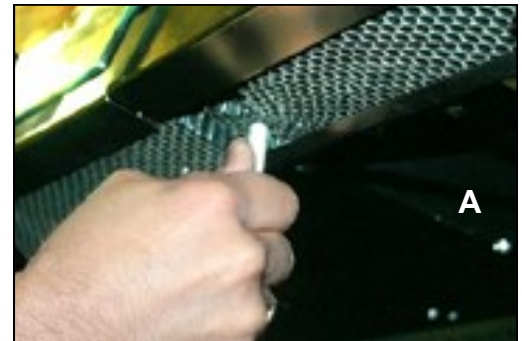
E. Carefully slide honeycomb into place.

F. Adjust honeycomb so that it fits flat against retainer. It must not be wavy or out of position.

Note: For honeycomb air diffusers in other locations, these same general instructions apply.



Note: Model features and options may vary.



1. Shelf Assembly Removal

- Shelves can be removed for maintenance, cleaning or adjustments
- Slide shelf back about 1/8 inch and rotate front up while lifting shelf assembly.
- For lighted shelving, unplug the light cord.
- Slide light assembly back about 1/8 inch and rotate front up while lifting light assembly.
- Remove brackets. Note it may be necessary to remove the nylon shipping bracket retainer. Pliers will be required to accomplish this task.

2. Adjustable Shelves

- Adjustment of the angle of the shelf can be made, not the position.
- Adjustments to the shelves can be made by pivoting the lower portion of the shelf bracket in the upright.
- The shelves can be adjusted to an angle of: 0, 5, and 10 degrees.

3. Light Fixture

Fixtures are located on the underside of each shelf assembly and at the top inside of case.

Removal of lamp:

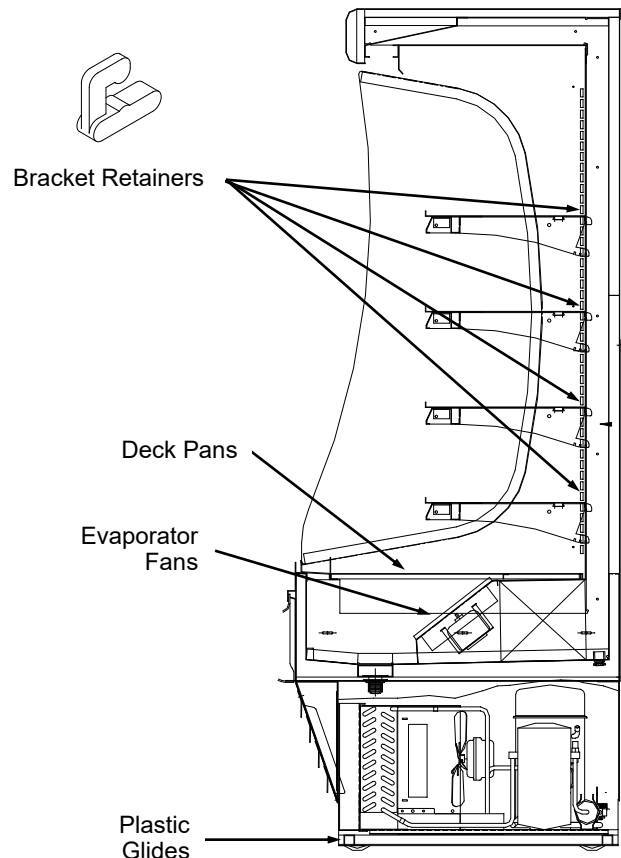
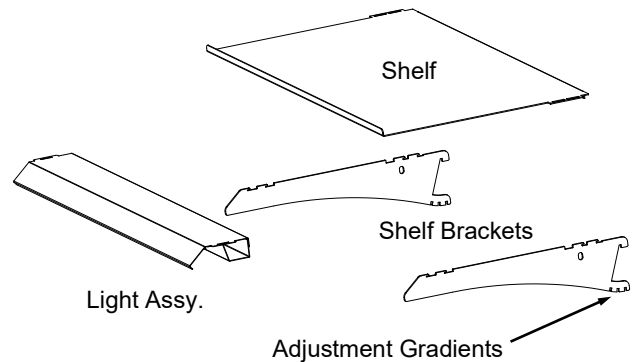
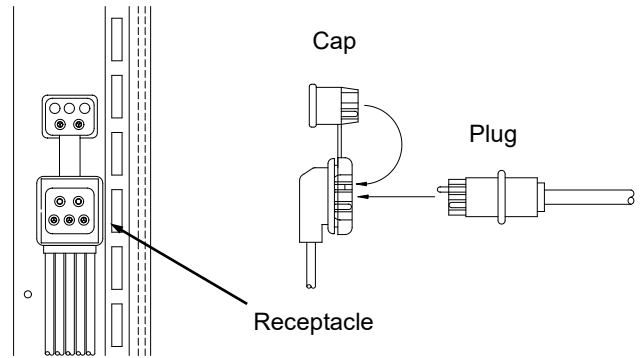
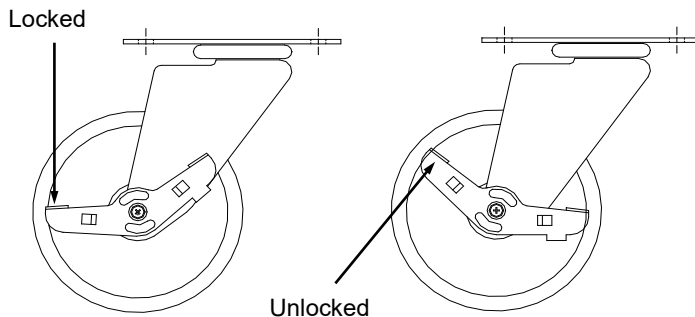
- Rotate lamp (1/4 turn) and remove bulb.

Installation of lamp:

- Align pins with slot.
- Insert pins into socket and rotate 1/4 turn to secure pin contacts in socket.

4. Caster Locking Operation

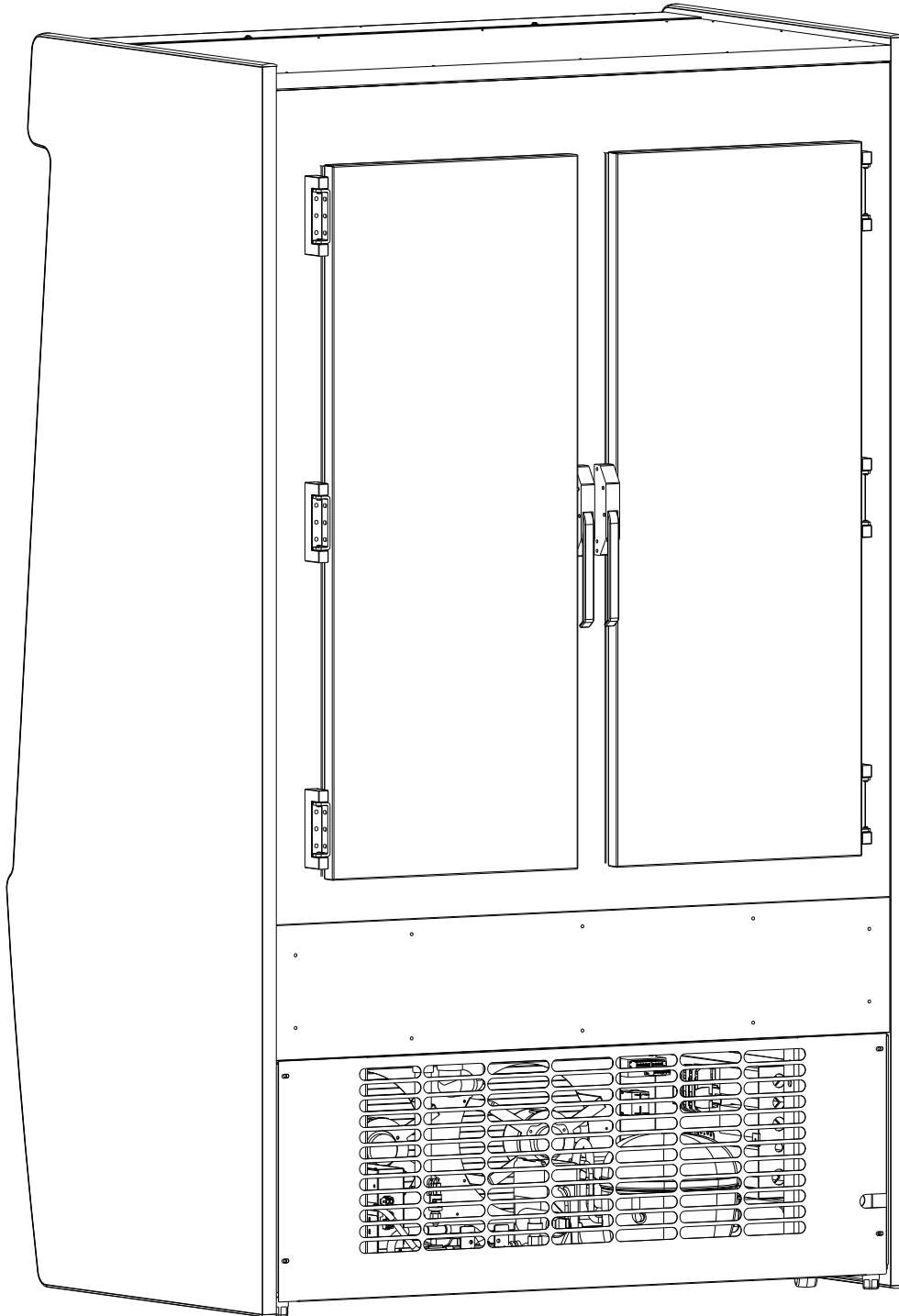
- To lock casters push down on lever, to unlock pull up the lever all the way.
- See illustration below.



MAINTENANCE FUNDAMENTALS: REAR DOORS (OPTIONAL)

Rear Doors (Optional)

- Rear doors are hinged with handles to allow access to case from rear.
- Handles and strike plates allow doors to securely latch.
- Illustration shown reflects model CO47R. Your rear door size may vary.

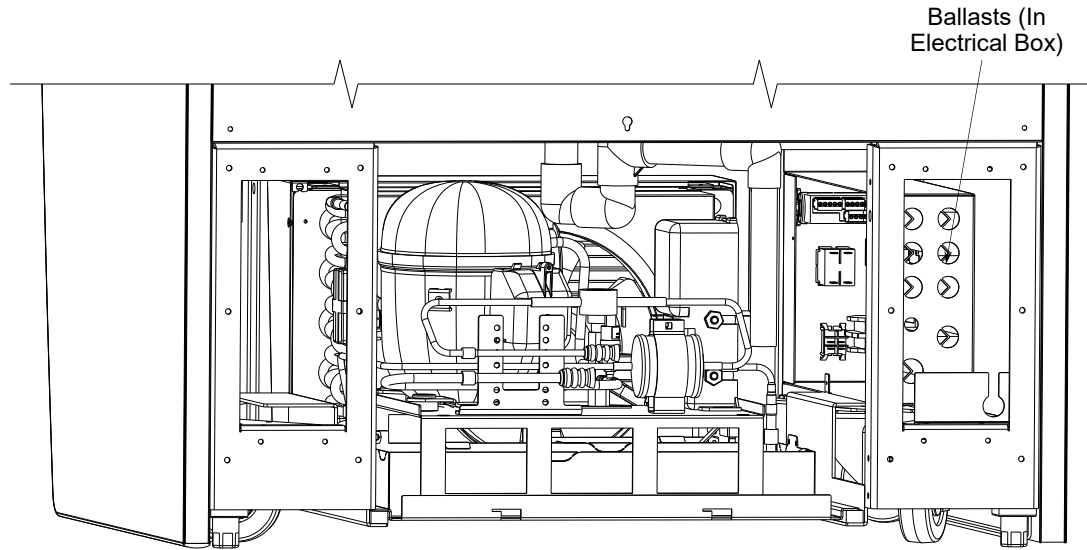


--- Model CO47R is Shown Above. Your Model May Slightly Vary. ---

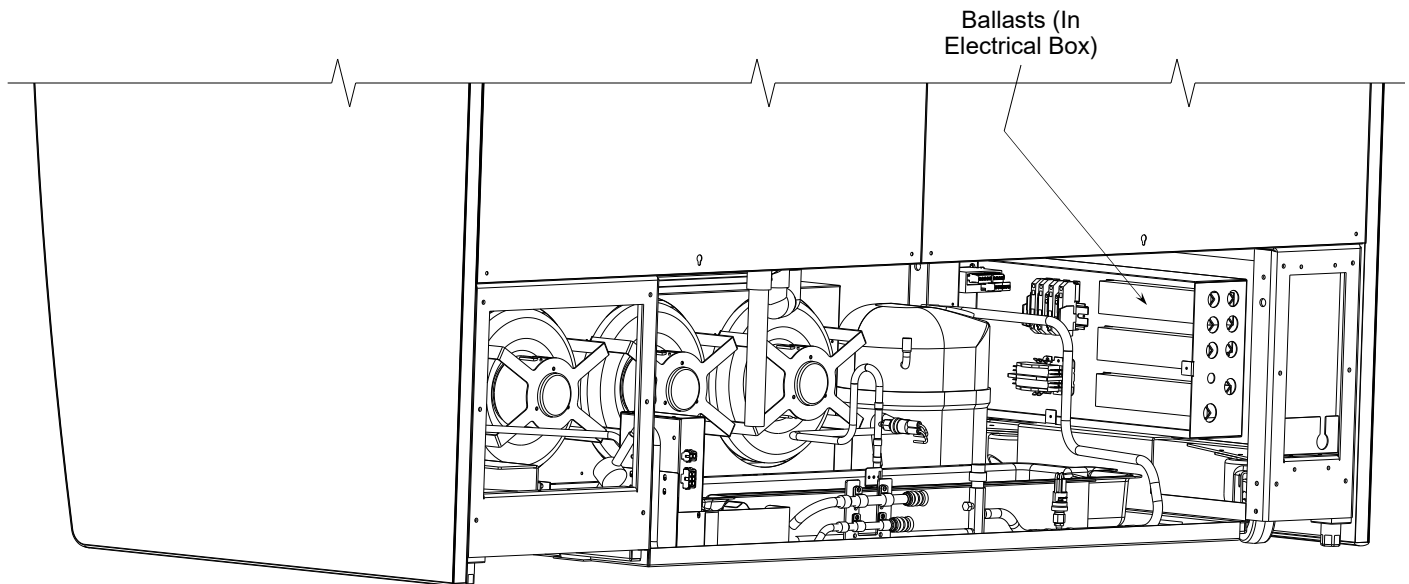
MAINTENANCE FUNDAMENTALS: BALLAST ACCESS

Ballast Access

- ***Assembly or disassembly and servicing is to be accomplished by a licensed electrical contractor.***
- Remove rear grille by lifting up and off.
- Ballast are mounted inside the electrical box.
- Illustrations shown reflect models CO37R and CO67R. Your model may slightly vary.



— Rear View of Model CO37R —
— After Rear Grille Removed —

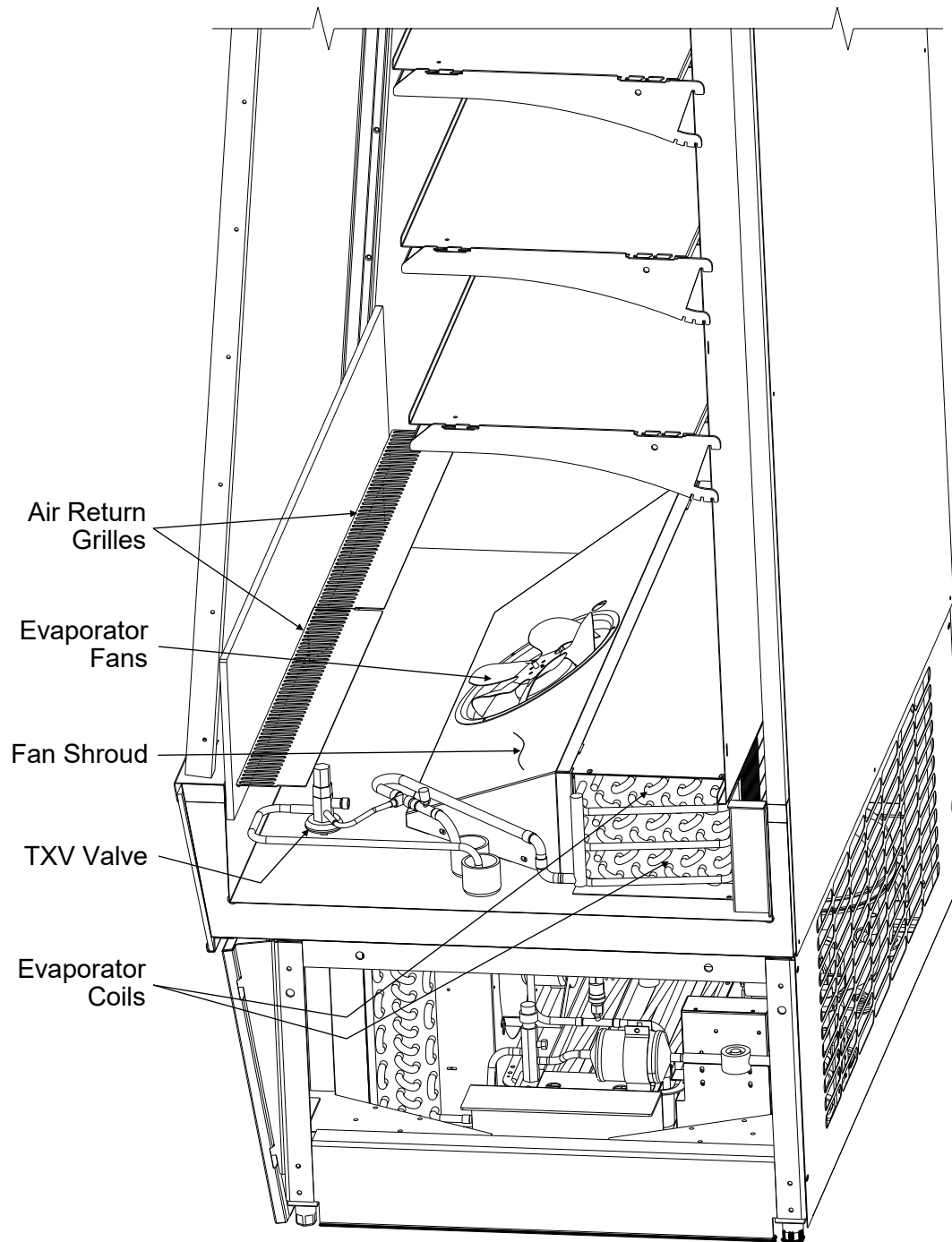


— Rear View of Model CO67R —
— After Rear Grille Removed —

EVAPORATOR COIL FANS ACCESS

Evaporator Coil Fans Access

- Remove all product.
- Remove display steps (if any).
- Remove deck pan for coil fans access.
- Caution! Turn off main power before accessing the evaporator coil / deck pan area. Rotating blades can cause severe injury!



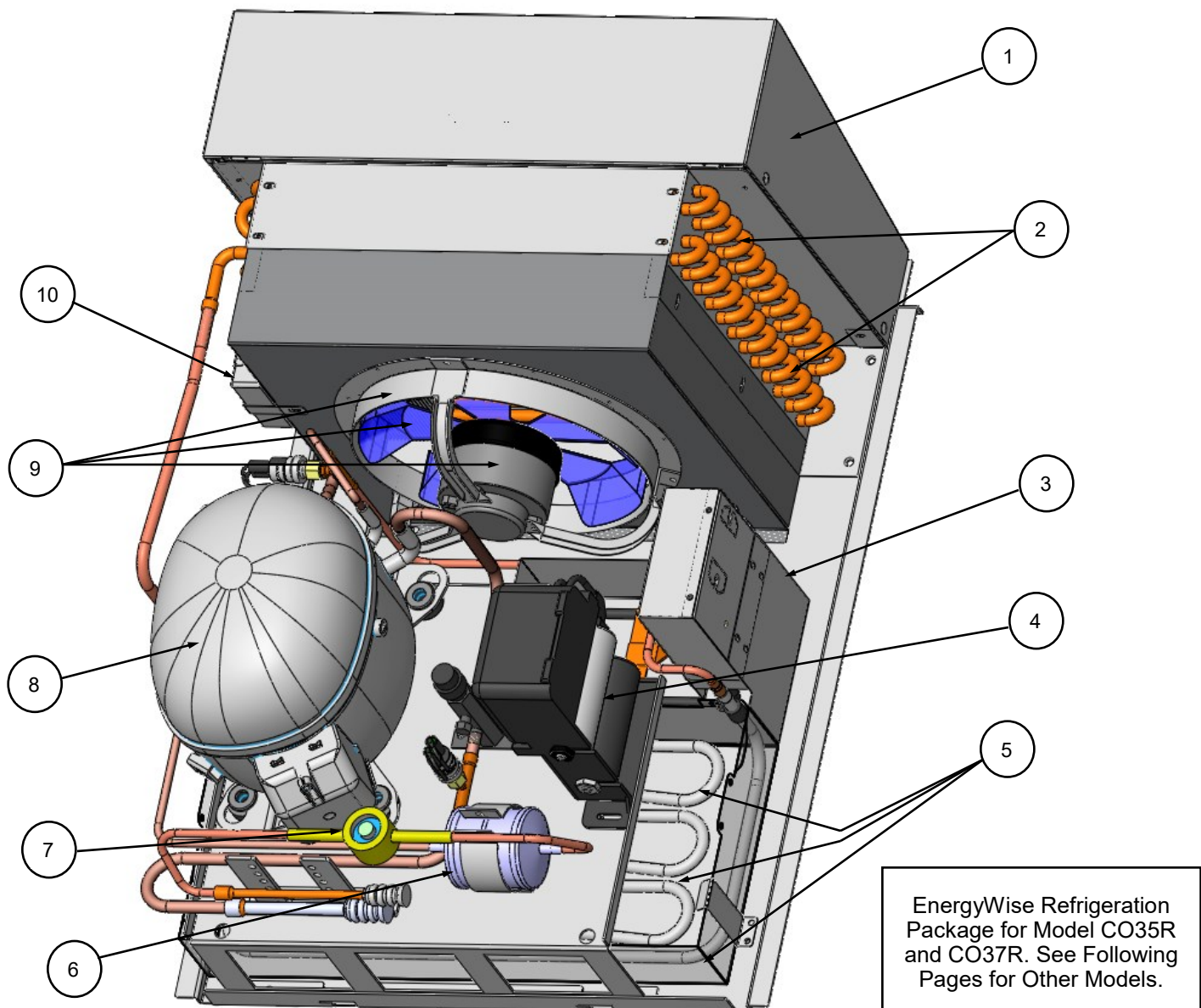
— Model CO47R Shown Above. Your Model May Slightly Vary —

CONDENSER PACKAGE LAYOUT: MODELS CO35R AND CO37R ONLY

Typical Configurations, Continued

- **Note:** Unit shown below is for models CO35R & CO37R only. Your condenser package layout may vary.
- **Caution:** Only certified refrigeration/electrical engineers or contractors are to access condenser unit.
- **Access:** Remove front grille by lifting up and off (no screw removal required). Slide out.

1	Condenser Coil Shroud (Optional: May House Clean	6	Filter / Drier
2	Condenser Coil Tubing	7	Sight Glass
3	Electrical Coil Overflow Condensate Pan	8	Refrigeration Pump
4	Embraco® Start Components	9	Fan Motor & Fan Shroud
5	Hot Gas Condensate Pan & Serpentine Rods	10	Automatic Condenser Coil Cleaner Driver

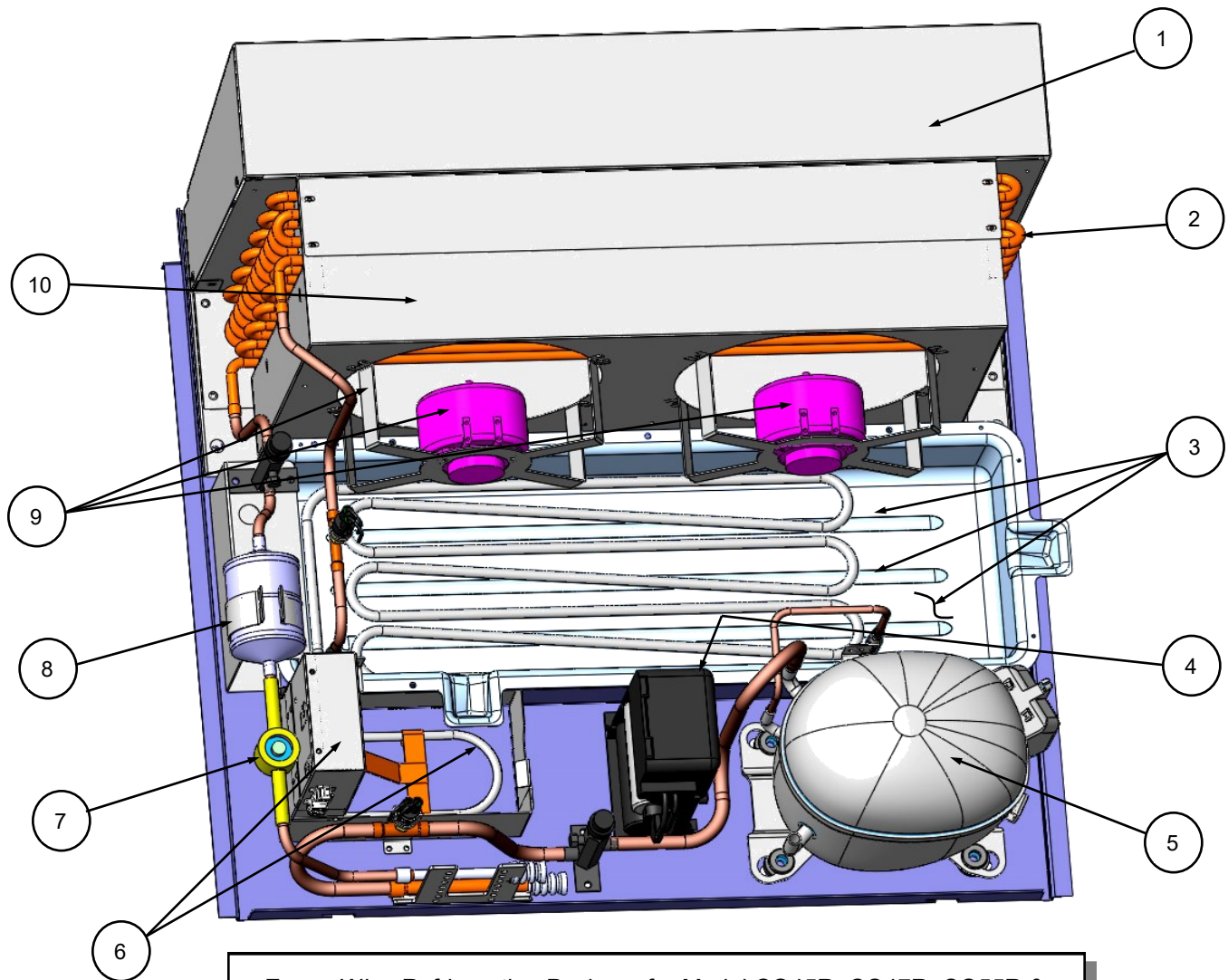


CONDENSER PACKAGE LAYOUT: MODELS CO45R, CO47R, CO55R & CO57R ONLY

Typical Configurations, Continued

- Note: Unit shown below is for Model CO45R, CO47R, CO55R & CO57R only.
- Your condenser package layout may vary.
- Caution: Only certified refrigeration/electrical engineers or contractors are to access condenser unit.
- Access: Remove front grille by lifting up and off (no screw removal required). Slide out.

1	Condenser Coil Shroud (Optional: May House Clean Sweep™ Automatic Condenser Coil Cleaner)	6	Electrical Coil Overflow Condensate Pan
2	Condenser Coil Tubing	7	Sight Glass
3	Hot Gas Condensate Pan & Serpentine Rods	8	Filter / Drier
4	Embraco® Start Components	9	Fan Motors & Fan Shroud
5	Refrigeration Pump	10	Fan Shroud



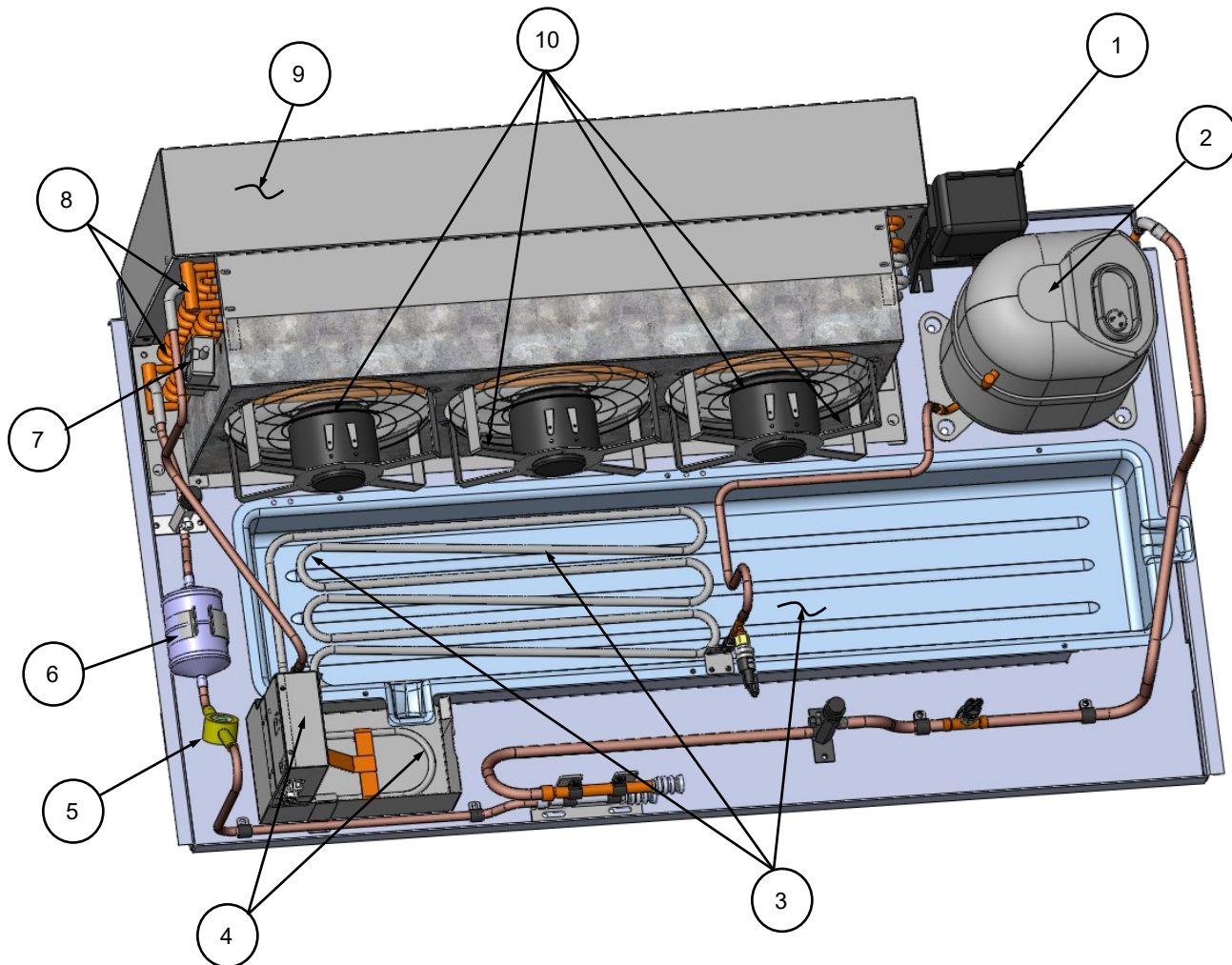
EnergyWise Refrigeration Package for Model CO45R, CO47R, CO55R & CO57R is Shown Above. See Accompanying Sheets for Other Designs.

CONDENSER PACKAGE LAYOUT: MODELS CO65R AND CO67R ONLY

Typical Configurations, Continued

- **Note:** Unit shown below is for Model CO65R and CO67R only. Your model's condenser package layout may vary.
- **Caution:** Only certified refrigeration/electrical engineers or contractors are to access condenser unit.
- **Access:** Remove front grille by lifting up and off (no screw removal is required). Slide out.

1	Embraco® Compressor Start Components	6	Filter / Drier
2	Refrigeration Pump	7	Automatic Condenser Coil Cleaner Driver
3	Hot Gas Condensate Pan & Serpentine Rods	8	Condenser Coil Tubing
4	Electrical Coil Overflow Condensate Pan	9	Condenser Coil Shroud (Optional: May House Clean Sweep™ Automatic Condenser Coil Cleaner)
5	Sight Glass	10	Fan Motors & Fan Shroud



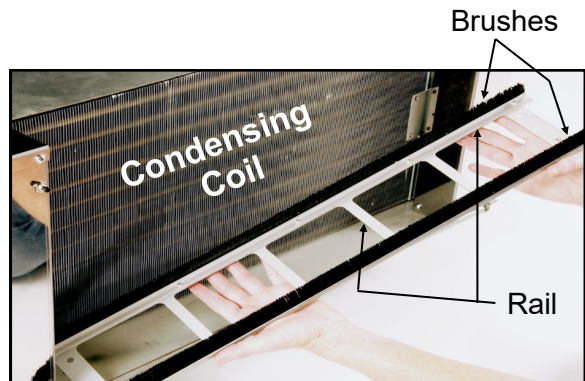
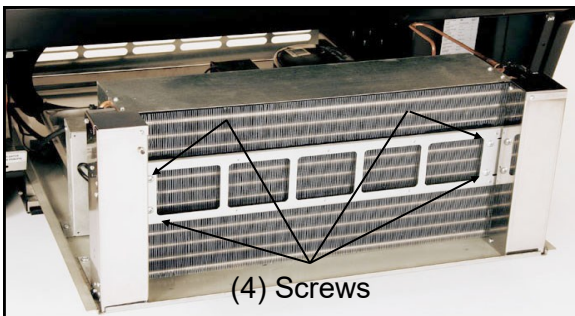
EnergyWise Refrigeration Package for Model CO67R Shown.
See Accompanying Sheets for Other Designs.

CLEANING SCHEDULE (PERFORMED BY STORE PERSONNEL & TRAINED SERVICE PROVIDERS)

Cleaning	D*	W*	M*	Q*	Task
Clean Case Exterior	X				Acrylic must be cleaned with a mild soap and water solution and a soft cloth (<i>Never use a household cleaner on acrylic.</i>)
Clean Case Interior	X				Shelves and decks can be cleaned with a warm soap and water solution.
		X			Remove decks. Clean with soap and water.
		X			Vacuum tub under deck. Clean with soap and water. Wipe dry with clean cloth.
		X			Keep drains clean and free of debris which could clog the drain and rob the case of needed refrigeration.
Clean Condensing Coil		X			Clean the condenser coil. Using air pressure if available, or an industrial strength vacuum, clean the dust and dirt that collects on condenser coil. Be careful not to damage the fins on the coil.
Magnetic Condenser Coil Filter		X			<p>Magnetic Condenser Coil Filter (Self-Contained Units Only):</p> <ul style="list-style-type: none"> • This filter prevent dust particles from entering condenser coil. • It is accessible at case rear. • Clean magnetic condenser coil filter by following either step 1 or 2; then follow step 3: <ol style="list-style-type: none"> 1. Magnetic condenser coil filter is dishwasher safe. Remove from case (no screw removal required) and use a rag or soft-bristled brush to wipe off excess dust particles from filter. Run in normal dishwasher cycle. Remove from dishwasher. Dry with soft cloth / paper towel. Return to case. 2. If not using dishwasher, remove magnetic condenser coil filter from case. Use a rag or soft-bristled brush to wipe off excess dust particles from filter. Submerge in warm, soapy water. Use soft-bristled brush to remove dust, dirt, grease and grime that collects on filter. Rinse thoroughly. 3. Dry with soft cloth or paper towel or allow to air dry. Replace.
Evaporator Fan Shroud Area (Trained Svc. Providers Only)			X		<u>Evaporator Fan Shroud Area (Under Decking):</u> <i>Caution! Due to rotating fans in area, turn off case and disconnect plug from wall outlet before beginning fan shroud / tub area cleaning!</i> 1) Turn off power. 2) Remove decks from case. 3) Clean fan shroud area (and surrounding tub area) with moist cloth.
Tub & Drain (Trained Svc. Providers Only)				X	<u>Tub & Drain:</u> <i>Caution! Due to rotating fans, turn off case. Disconnect plug from wall outlet before beginning tub & drain cleaning!</i> Vacuum tub under decks. Clean with soap and water solution. Wipe dry with clean cloth. Keep drain free of debris to prevent clogging.

*D = Daily / *W = Weekly / *M = Monthly / *Q = Quarterly

Preventive Maintenance	Freq.	Instructions
Case Exterior	Monthly	<p>Condensing Coil:</p> <ul style="list-style-type: none"> To remove rear grille, lift slots up and off hooks (no screw removal required). Use air pressure or industrial strength vacuum; clean dust and dirt that may collect on the Condenser Coil. See illustration below. Caution! Coil fins are sharp. Handle with care! Replace rear grille to case (no screws required). See illustration below.
	Qtly.	<p>Clean Sweep™ Condensing Coil (Optional): <i>Disconnect power from case before cleaning Clean Sweep™ Condenser Coil!</i></p> <ul style="list-style-type: none"> Remove front grille (no screw removal required). Slide/roll out condensing unit assembly (at case front). 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 Condensing Coil: Use air pressure or industrial strength vacuum; clean the dust and dirt that may collect on the 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 illustration below.



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

WARNING! TURN OFF CASE BEFORE PERFORMING PREVENTIVE MAINTENANCE!

Preventive Maintenance	Frequency	Instructions
Case Exterior	Quarterly	<p>Compressor Area: <i>Disconnect power from case before cleaning condenser coil!</i></p> <ul style="list-style-type: none"> • Slide/Roll out from under case. • Use moist cloth to wipe off dust & debris that collects on various parts.
	Quarterly	<p>Hot Gas Evaporator Pan: Use a de-scaling solution (such as CLR® that will prevent corrosion, lime and rust) to clean pan. Use spray bottle to evenly spread solution throughout. Rinse thoroughly with spray bottle filled with clean water and sponge.</p>
	Quarterly	<p>Under Case Cleaning: Once refrigeration package is clear of unit, vacuum under case to remove all dust and dirt that may collect under case.</p>
Case Interior	Quarterly	<p>Tub, Coil, Drain, Fan Blades, Motors, Brackets:</p> <p><i>Caution! Disconnect power from the case before cleaning the Tub, Coil, Fan, Motor and Drain Area!</i></p> <ul style="list-style-type: none"> • Remove Decking, Sub-Deck and Fan Shroud. • Use vacuum to clean Evaporator Coils. • Clean Tub, Coil and Drain with warm water, clean cloth, brush and mild soap solution. • Remove any debris that may clog drain. • Clean Fan Blades, Motors and Brackets by wiping down with moist cloth.
	Quarterly	<p>Honeycomb: See MAINTENANCE FUNDAMENTALS: HONEYCOMB AIR DIFFUSERS section in this manual for cleaning specifics.</p>

TROUBLESHOOTING (TO BE PERFORMED BY STORE PERSONNEL)

Condition	Troubleshooting
Product is Drying Out	Check the relative humidity in the store.
Water Is On The Floor	Call service provider.
Fan Emits Excessive Noise	Call service provider.
Case Lights Are Not Working	Check that light switch is in the <i>on</i> position.
	Check that ALL of the light cords and plugs are properly connected. See MAINTENANCE FUNDAMENTALS: SHELF ASSEMBLY / SHELVES / CASTER LOCKING OPERATION section in this manual for specifics.
	LED Lights: check that plugs are properly inserted into LED light orifices. See MAINTENANCE FUNDAMENTALS: LIGHT FIXTURES section of manual.
	If case lights still do NOT come on, call service provider.
Case is Not Holding Proper Temperature	If a large amount of warm product was added to the case, it will take time for the temperature to adjust. Product must be pre-chilled before placing in case.
	Check that the case is not in the sun or near a heat or air-conditioning vent. See OVERVIEW / CONDITION / COMPLIANCE / WARNINGS / PRECAUTIONS / WIRING section in this manual for specifics.
	If case is located near front doors, temperature fluctuation can hinder unit's ability to maintain temperature.
	Check that condenser coil air filter and condenser coil has been cleaned. See CLEANING SCHEDULE (PERFORMED BY STORE PERSONNEL & TRAINED SERVICE PROVIDERS) section in this manual for specifics.
	Check air return grilles (area at front of decking) for obstructions. DO NOT set product on air grilles as this will prevent proper airflow!
	If case still is not holding proper temperature, call service provider.

Condition	Troubleshooting
Case Not Lining Up	See Installation Section for instructions on properly aligning case (alongside other cases) and adjusting levelers.
Water Is On 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 evaporator pan (or floor drain, for remote units).
	Check store conditions. To prevent condensation in Type 1 environments, maximum conditions are to be 55% humidity / 75° Fahrenheit. For Type 2, maximum conditions are to be 55% humidity / 80° Fahrenheit. See serial label (at case rear near main power switch) for condition Type of your case.
	Check that hot gas condenser pan is operating properly.
	Check that overflow condenser pan is properly plugged in or connected.
	<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, evaporator pan should function properly and water will no longer overflow onto flooring.
	<p>Caution! Wicking material (if any on your particular hot gas loop system) may be dirty or worn and need replacement (Hot Gas Evaporator 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.
	Check that the fan shroud is properly secured.
Fans Are Not Working	Check that the MAIN power switch is on.
	Check that fans are plugged in at the fan shroud.
	Check for foreign material obstructing fan performance.
	Check that fan blades freely rotate within fan shrouds.
	Check that power is going to fans.
	Check that fan wiring is connected on terminal blocks.
Digital Control Display Is Blank	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.
System Not Operating	Check that the utility power is on.
	Check that the MAIN power switch is on.
	Check the circuit breaker box for tripped circuits.

Condition	Troubleshooting
Case Lights Are Not Working	Check that light switch is in the <i>on</i> position.
	Check that ALL of the light cords and plugs are properly connected. See MAINTENANCE FUNDAMENTALS: SHELF ASSEMBLY / SHELVES / CASTER LOCKING OPERATION section in this manual for specifics.
	LED Lights: check that plugs are properly inserted into LED light orifices. See MAINTENANCE FUNDAMENTALS: LIGHT FIXTURES section of manual.
	Service Technicians Only: Check voltage at LED drivers. If voltage is entering but not exiting, LED driver may be faulty.
	If case lights still do NOT come on, call service provider.
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.
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 / CONDITION / COMPLIANCE / WARNINGS / PRECAUTIONS / 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 / CONDITION / COMPLIANCE / WARNINGS / PRECAUTIONS / 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.

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

Oasis

MODEL NRS3648RXV-SAMPLE
SERIAL NO. 12345X30DZ098765



Intertek



Intertek

SAMPLE ONLY

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

SAMPLE ONLY

ELECTRICAL RATING
REFRIGERANT
DESIGN PRESSURE
MINIMUM CIRCUIT AMPACITY
MAXIMUM OVERCURRENT

6-8 °F
6 defrosts per day, 45 °F

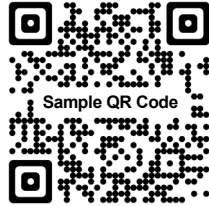
SAMPLE ONLY

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

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

SAMPLE ONLY

SCAN FOR PRODUCT LITERATURE



Sample QR Code

SAMPLE ONLY

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

--- 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.



Carel® PJEZ Platform



Carel® ir33 Platform



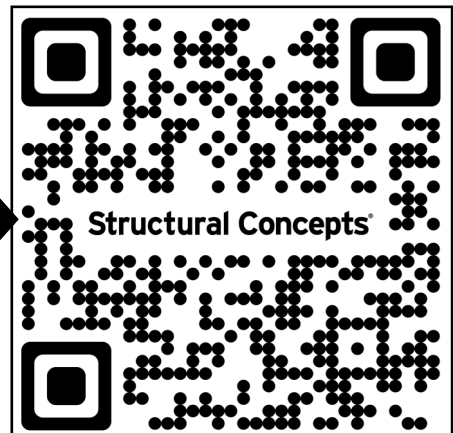
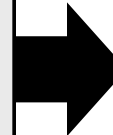
Carel® iJF Platform



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.**

