

CAREFULLY FOLLOW THESE INSTRUCTIONS

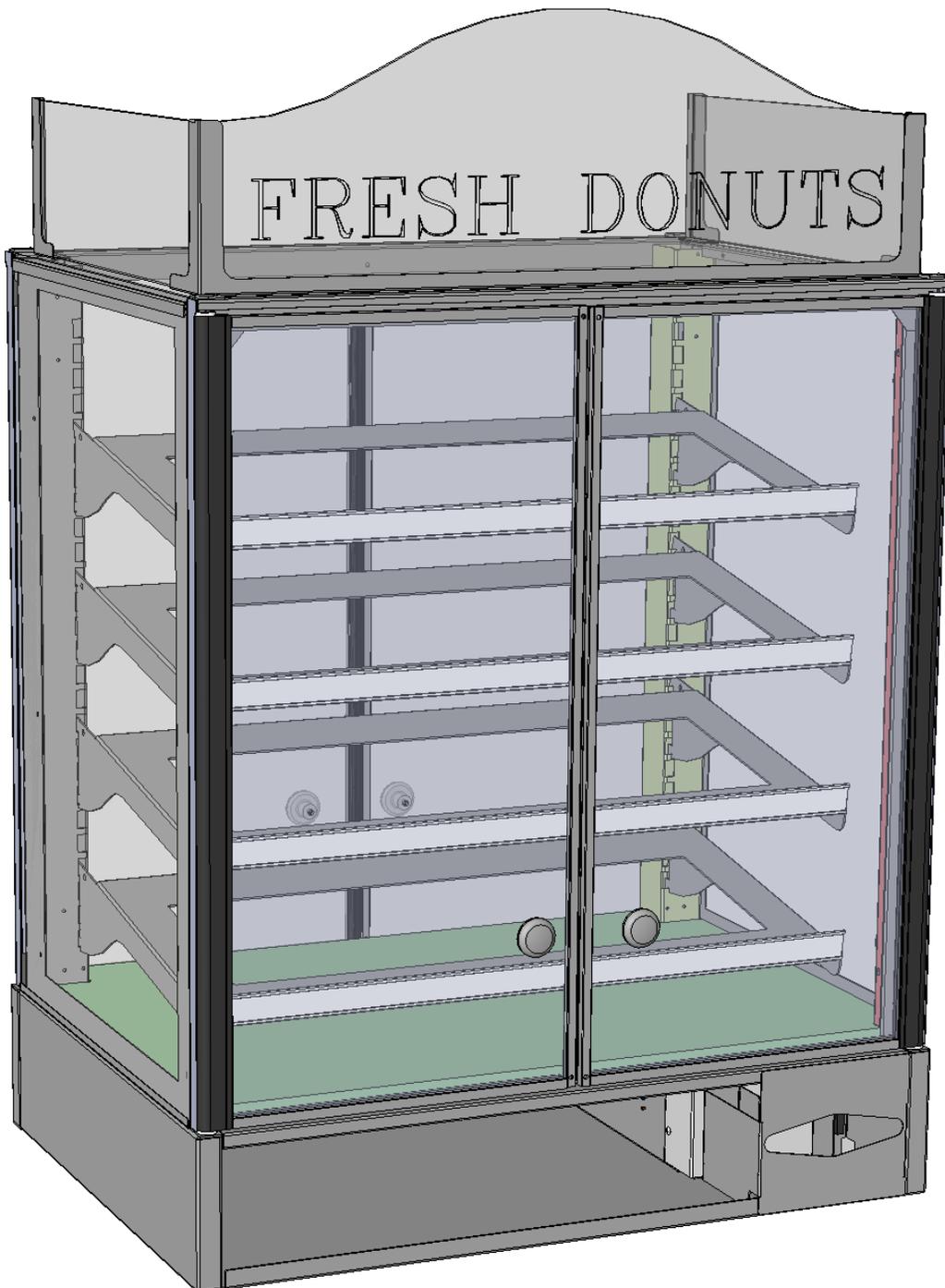
# IMPULSE

## USER MANUAL

SCC P/N  
99425

SELF-SERVICE AMBIENT COUNTERTOP UNITS

>> MODELS CSC3223 / CSC3223.4254 / CSC3223.4817



**Structural Concepts®**

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

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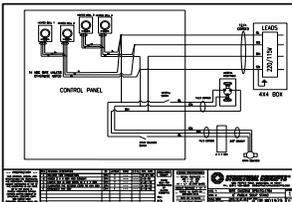
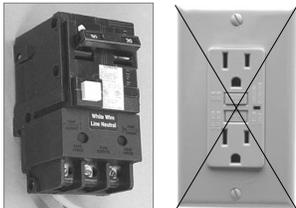
## OVERVIEW AND WARNINGS

### OVERVIEW

- The Structural Concepts non-refrigerated service cases are designed to merchandise unpackaged bakery products at ambient temperatures.
- These cases should be installed and operated according to the following instructions to ensure proper performance.



**ATTENTION  
CONTRACTORS**



- This unit is designed for the display of products in ambient store conditions where temperatures and humidity are maintained at a maximum of 75° F and 55% relative humidity.

### COMPLIANCE

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

#### COMPLIANCE

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

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

#### WARNING

**Risk of electric shock.**  
*Disconnect ALL ELECTRICAL SOURCES before servicing.*

#### 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.

#### WIRING DIAGRAM FORMAT & LOCATION

- Each case has its own wiring diagram folded & 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.

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

## INSTALLATION

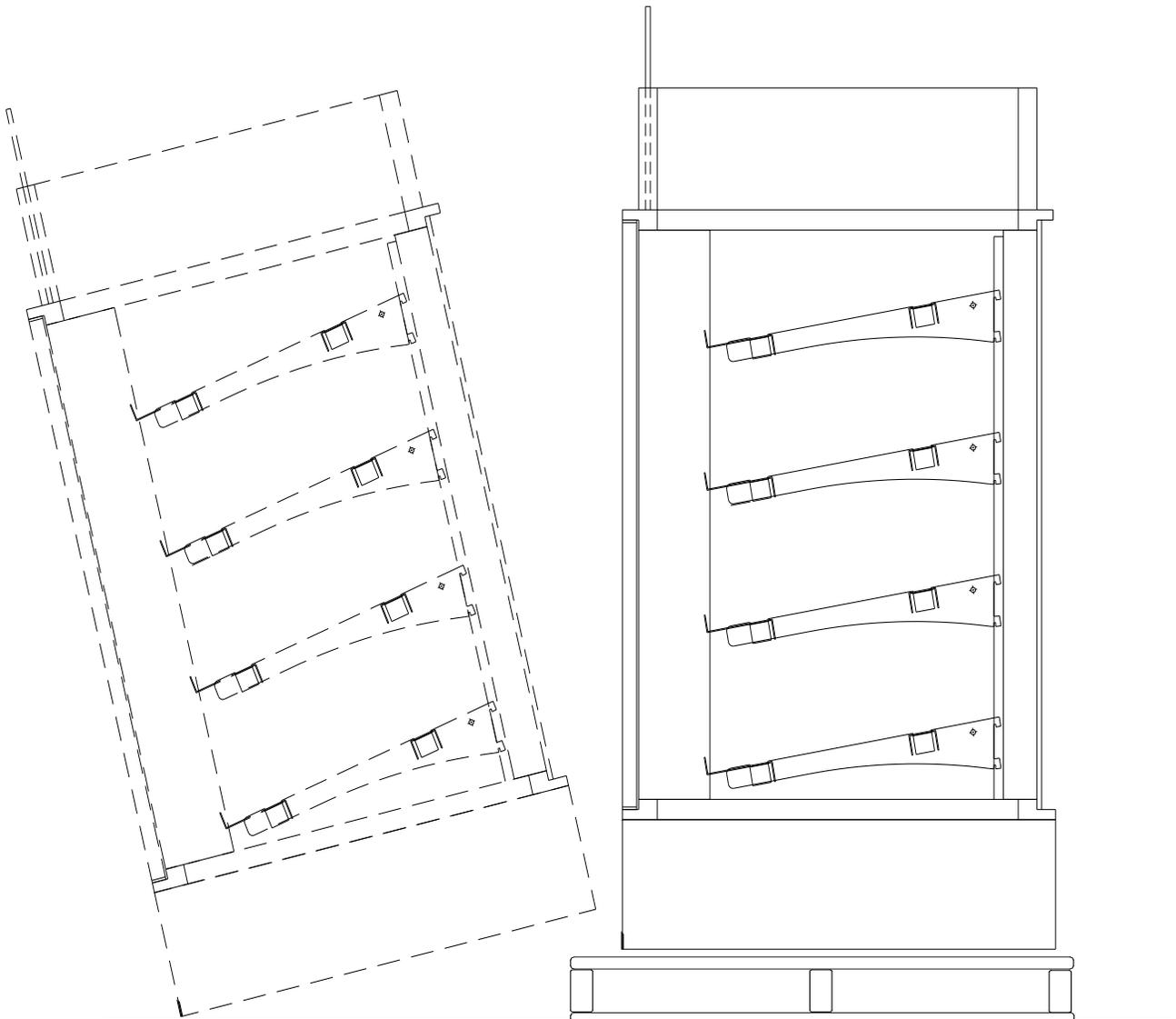
### **1. Remove Unit From Skid**

- Position the unit near a suitable electrical outlet.
- Caution: Case must always remain supported or center of gravity will allow case to fall.
- Slide unit to rear of skid and tip backward off skid.

### **2. Position and Level Units**

***For your safety, equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.***

Lift unit with suitable prying bar and blocking. Use care to lift in manner to minimize damage to case. Rotate leveler to obtain proper height to stabilize and level the unit.



← Carefully Slide Unit  
Out From Skid

## START-UP AND OPERATION

**For your safety, equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.**

### **1. Set-up Counter Top Unit**

- Remove case from skid and place on counter in the position at which the case will reside.
- **Note:** The following steps must be completed before this display case may be put in service.
- 1. *After case is in position, apply a steady bead of silicone around the base and counter top.*
- 2. *Allow 24 hours for the silicone to dry before using the case.*
- Electrical 120V stub up connections are provided in the light switch box.

### **2. Merchandiser Start-Up**

- Do not use an extension cord with this appliance.
- Do not operate this equipment with a damaged cord, plug or outlet.
- Insure the power switch is off.
- Plug cord into a certified 120V electrical outlet with ground.

### **3. LED Lights Only**

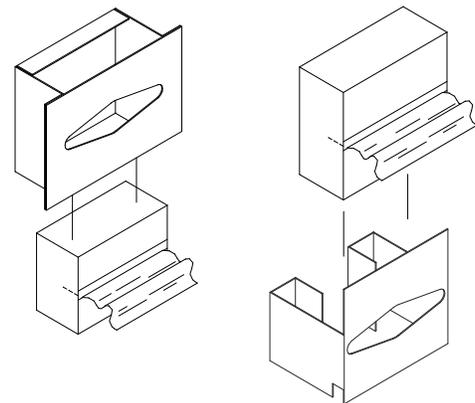
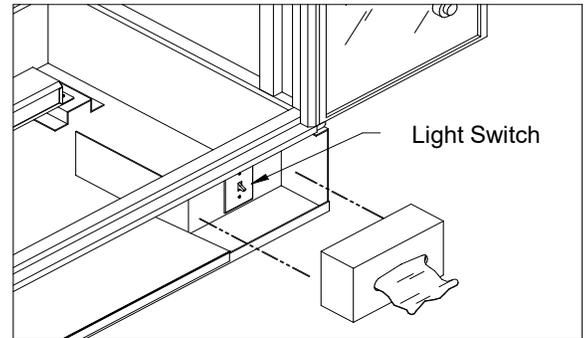
- Lights will come on when case is plugged in and light switch is turned on.

### **4. Tissue Dispenser**

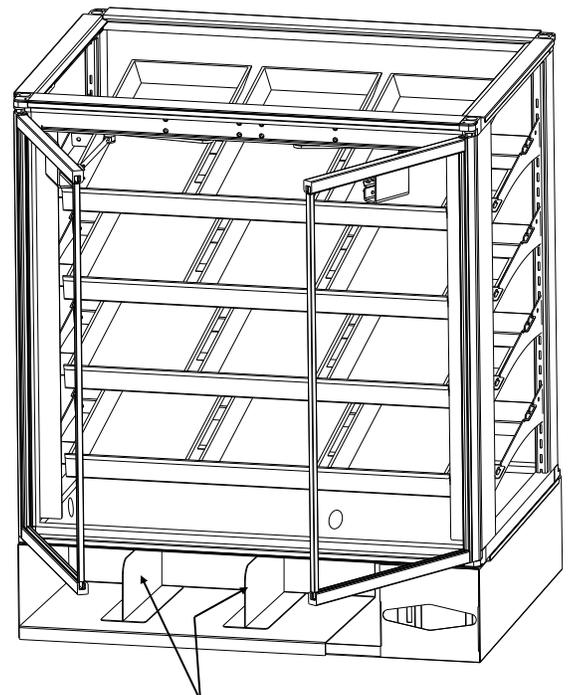
- Remove tissue dispenser.
- Place a tissue box into the dispenser as shown.

### **5. Adjustable Front Storage Area Dividers (Optional)**

- Dividers are held in place with magnetic tape strips.
- Dividers may be adjusted to reflect varying widths.
- Dividers may be entirely removed from case.



— Tissue Dispensers —



Adjustable Front Storage Dividers  
(Retained With Magnetic Tape)

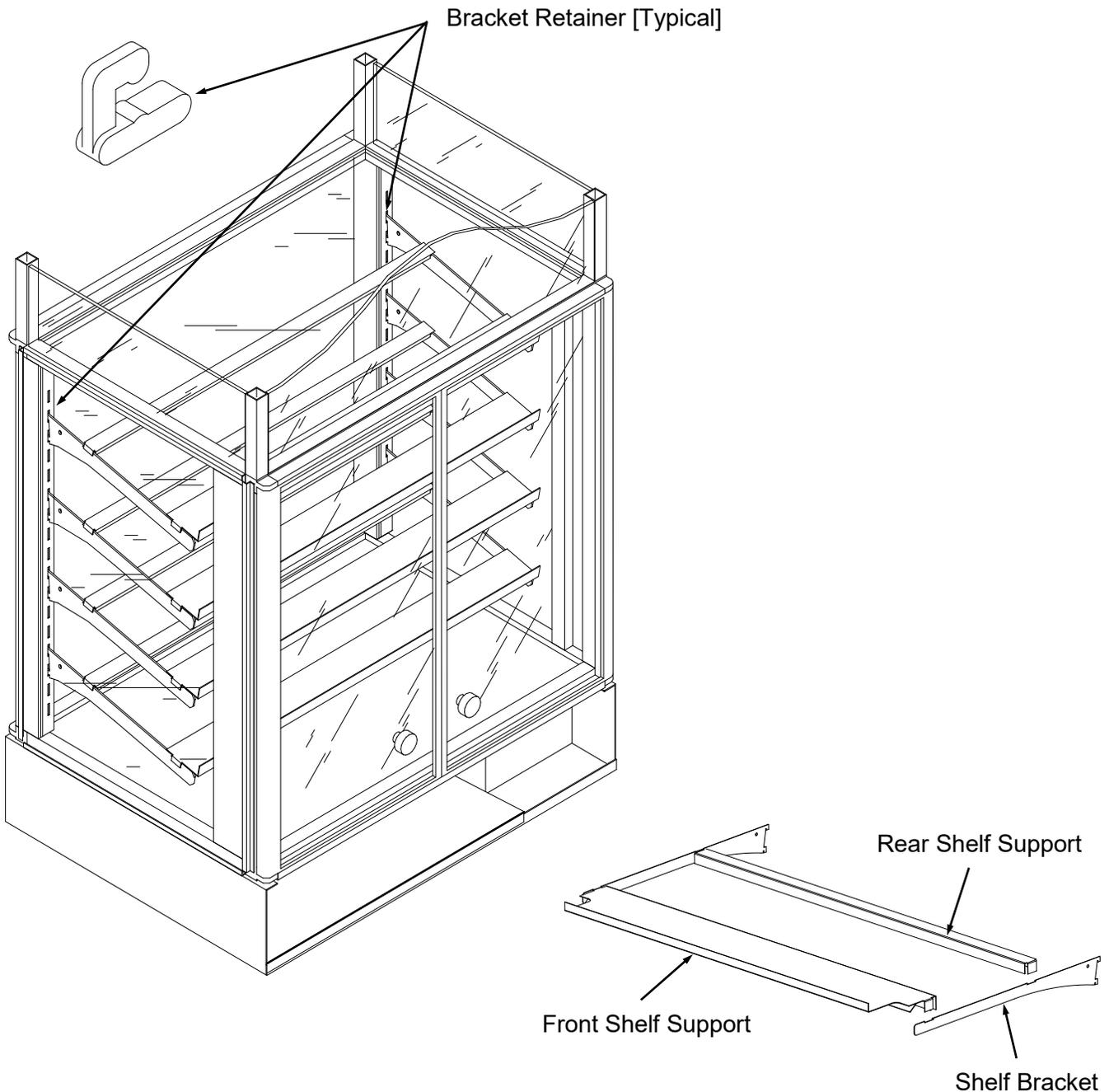
**1. Shelf Assembly Removal**

- Shelves can be removed for repositioning, removal (for individual merchandising requirements) and cleaning.
- Slide the front shelf support back rotate up and lift straight up to separate from brackets.
- Slide the rear shelf support back rotate up and lift straight up to separate from brackets.

- Remove brackets. Note: It may be necessary to remove the nylon shipping bracket retainers. Pliers will be required to accomplish this task.

**2. Decking Removal**

- Remove lower shelf assembly.
- Remove interior deck by pushing up from underneath in the bag storage area.
- See illustration at lower right.



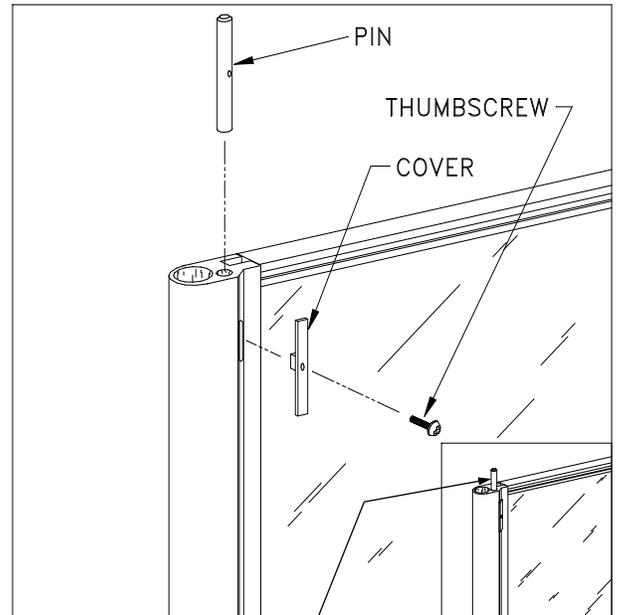
**1. Door "Hold Open" Feature**

To reposition the shelving or restock the shelves, it is first helpful to use the door 'hold open' feature.

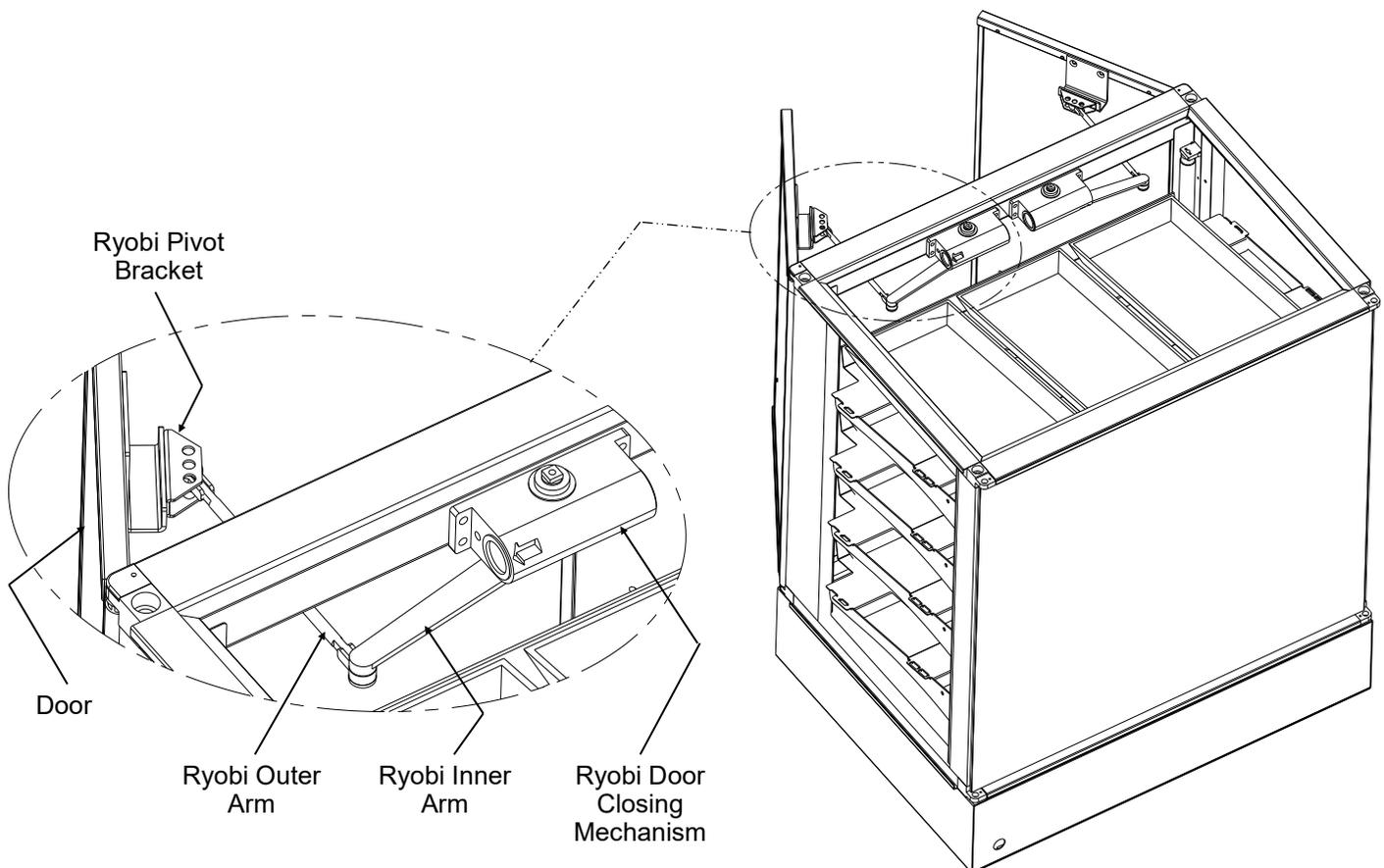
- Open the door all the way (See light fixture).
  - **Caution damage will result if pin is not lowered before attempting to close the doors.**
  - Inside the unit, at the top of each door hinge, is the pin slide cover.
- Slide the pin cover up until the pin extends approximately 1/2 inch above the door hinge.
- Release the door assembly allowing the pin to rest on the outer door frame.
- To close, fully open the door and retract the pin into the hinge and allow the door to close.

**2. Ryobi Door Closing Mechanism (Optional)**

- Certain models (such as CDR4817) use the Ryobi door closing mechanism.
- When opened approximately 90°, door 'catches' and stays open.
- When pressure is applied to close door, 'catch' releases and door closes normally.



**PIN EXTENSION**



## LIGHT FIXTURES - LED

### LED Style Light Fixtures

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

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

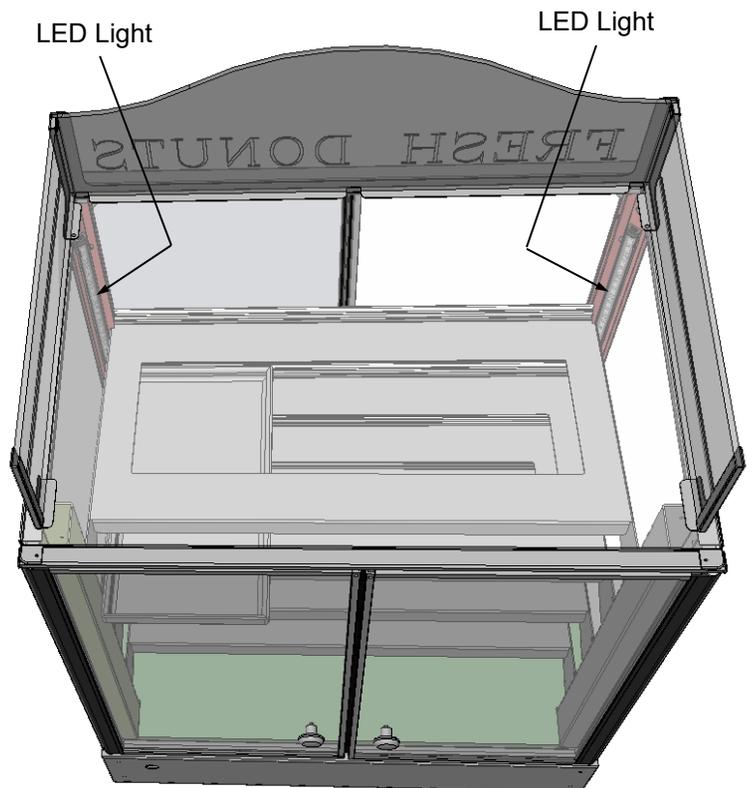
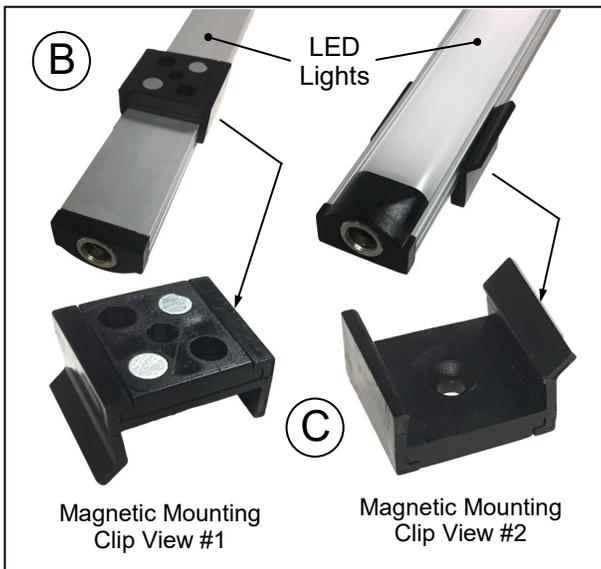
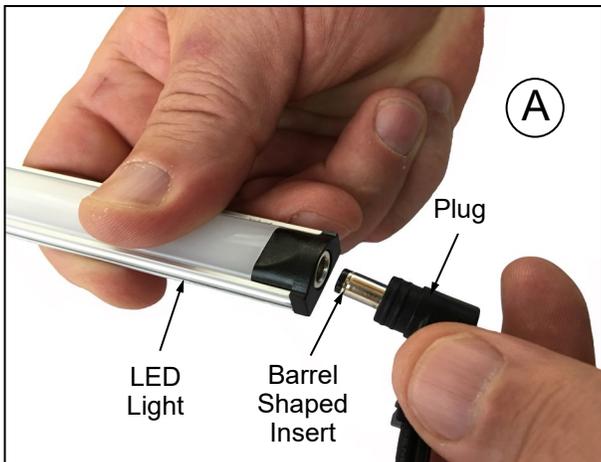
>> Note: Mounting clips MAY be riveted to shelf or header. In such instances, simply remove LED light from mounting clips by pressing against flange part of clips with thumb.

#### *Replacement of LED lights:*

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

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

- Press plug's barrel-shaped insert 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.



## TROUBLESHOOTING / CLEANING SCHEDULE

### Troubleshooting

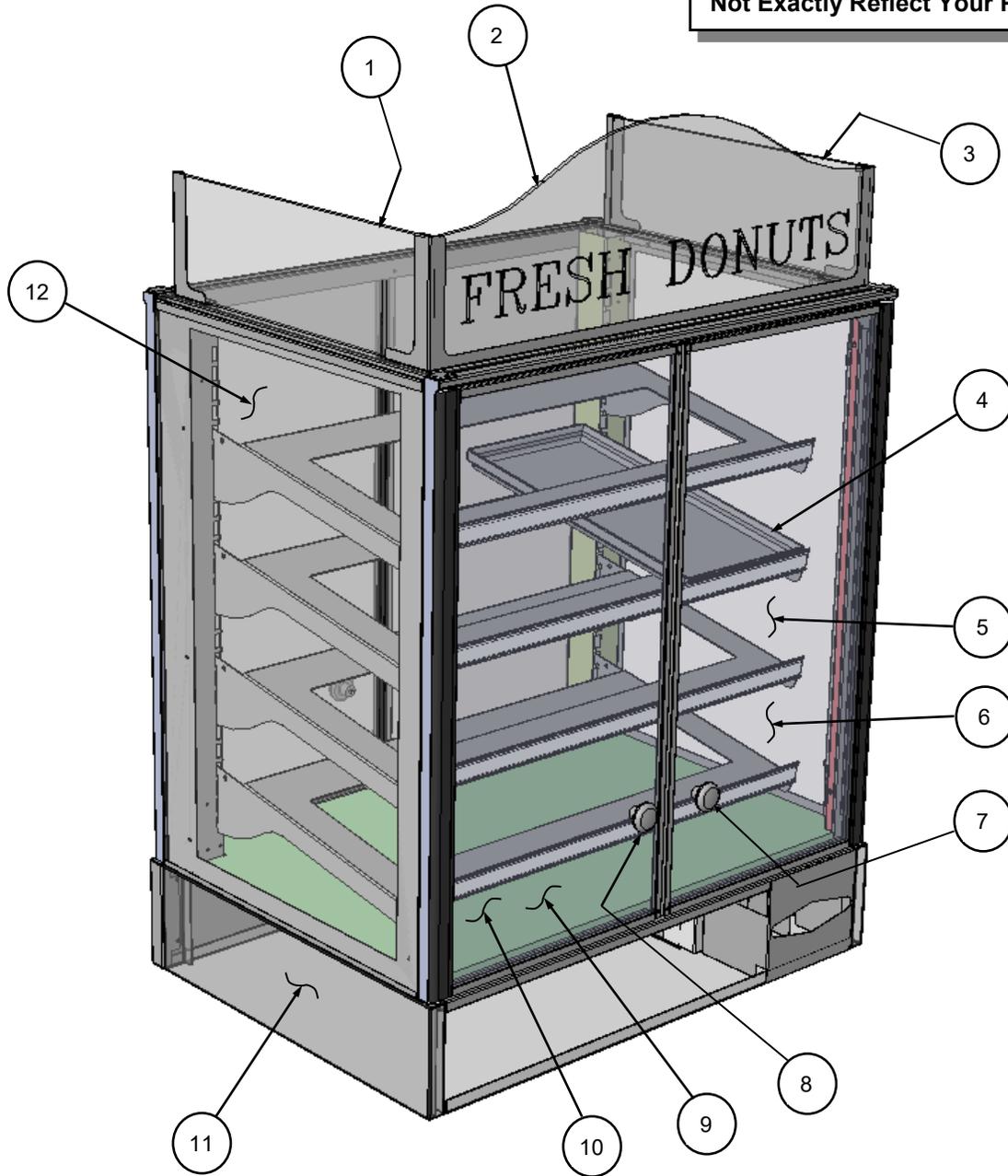
Issue	Resolution
<b>Case Lights Not Working</b>	Check LED lights for proper installation and connection. See <b>LIGHT FIXTURES - LED</b> section in manual for illustrations.
	Check for burned out LED lights.
<b>System is not Operating</b>	Confirm the utility power is on.
	Check the circuit breaker box for tripped circuits.

### Cleaning Schedule

Cleaning	Daily	Weekly	Monthly	Task
Clean Case Exterior	X			Clean all case exterior surfaces with a household or commercial glass cleaner and a soft cloth.
Clean Case Interior	X			Clean the interior case deck and shelving surfaces with a warm water and mild soap solution.

## ILLUSTRATED PARTS BREAKDOWN

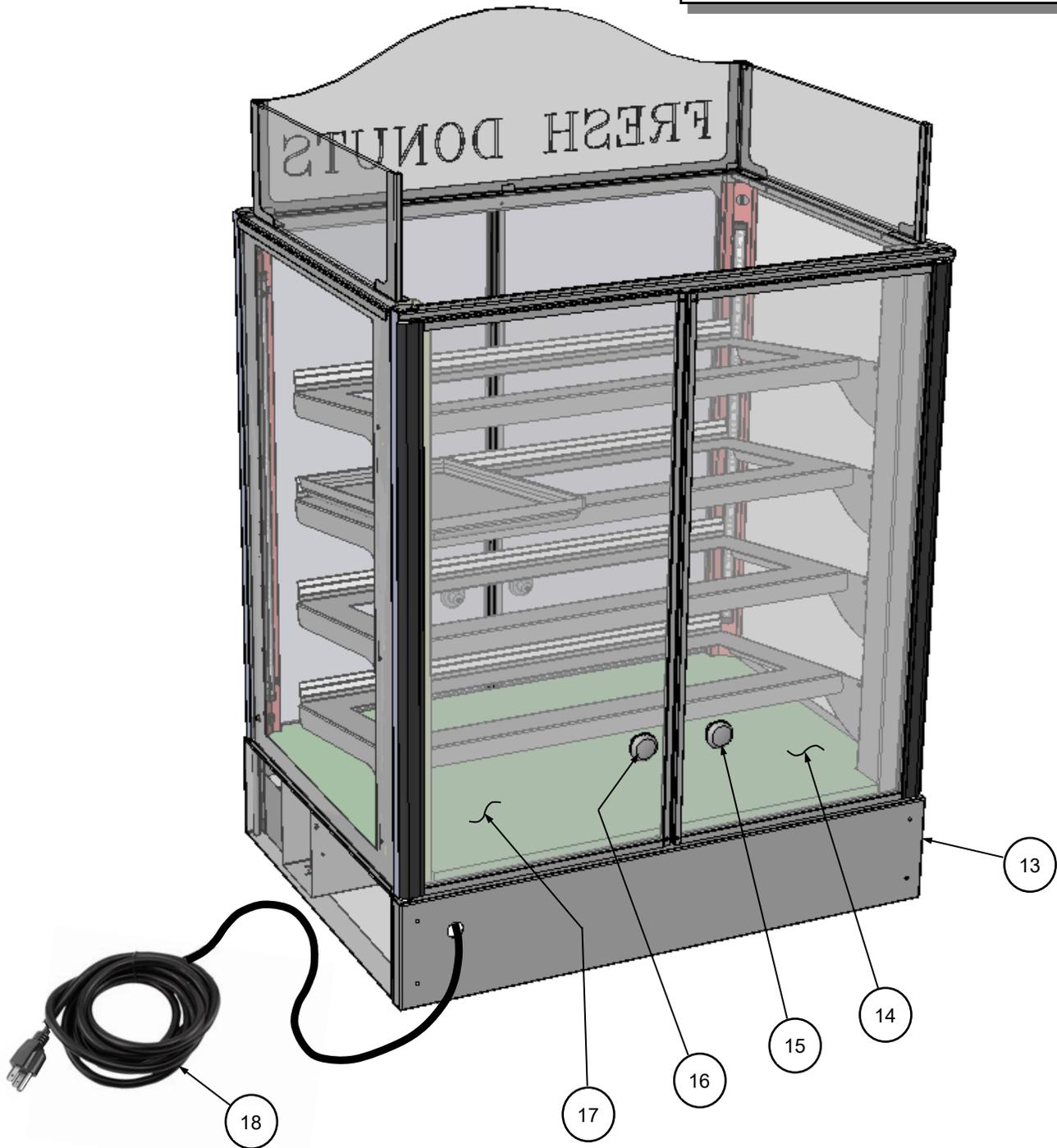
Note: Depending Upon Features And Options Chosen, Illustration Shown May Not Exactly Reflect Your Particular Case.



1	Header_Sign_Upper_End	5	Exterior_Glass_End_Right	9	Deck_Base_Wood
2	Header_Sign_Upper_Left	6	Door_Glass_Frt_Right	10	Door_Glass_Frt_Left
3	Header_Sign_Upper_Right	7	Knob_Door_Plastic_Right	11	Frame_Base
4	Bin_Tray_Shelf_Fiberglas	8	Knob_Door_Plastic_Left	12	Exterior_Glass_End_Left

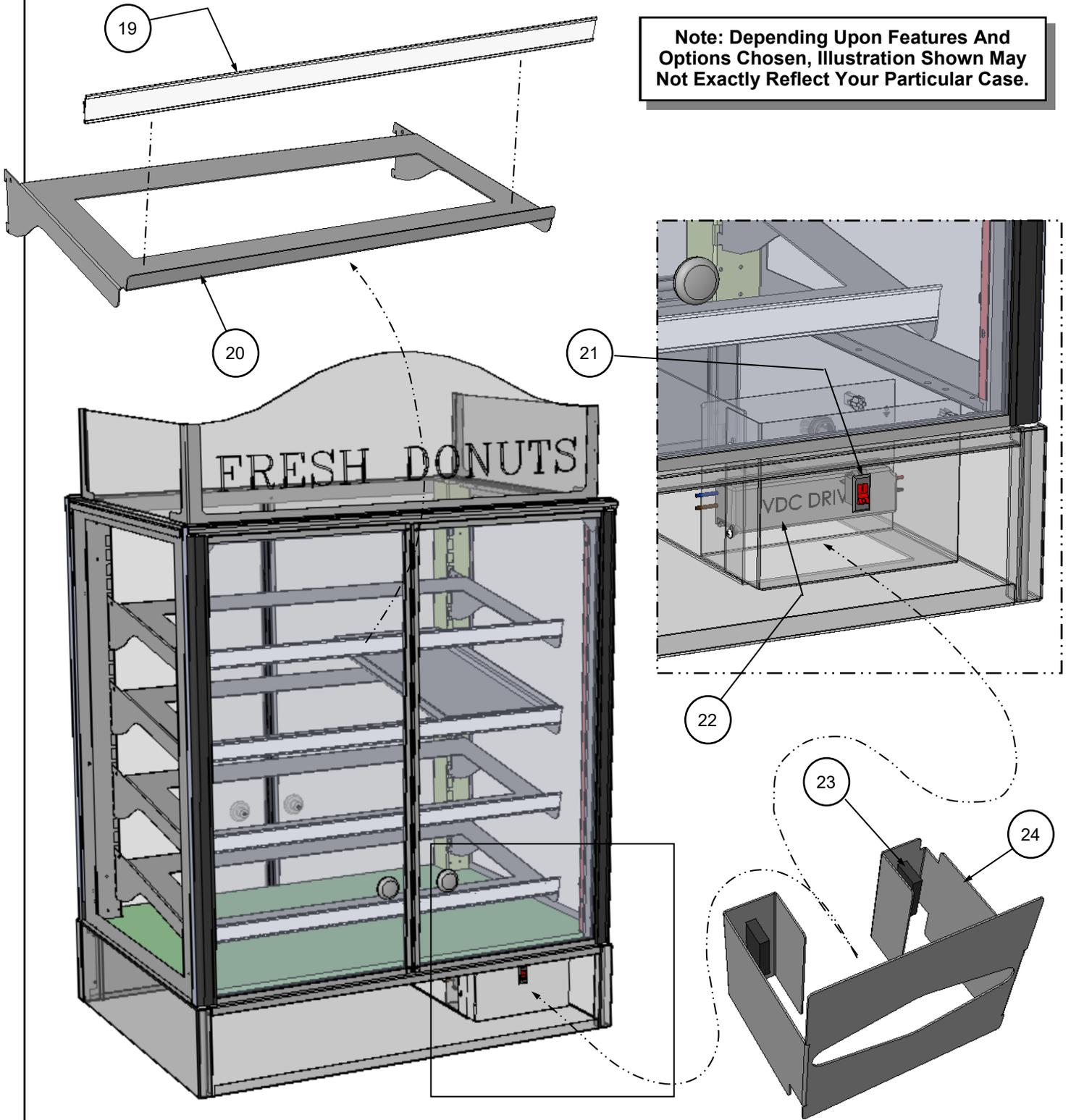
ILLUSTRATED PARTS BREAKDOWN, CONT'D

Note: Depending Upon Features And Options Chosen, Illustration Shown May Not Exactly Reflect Your Particular Case.



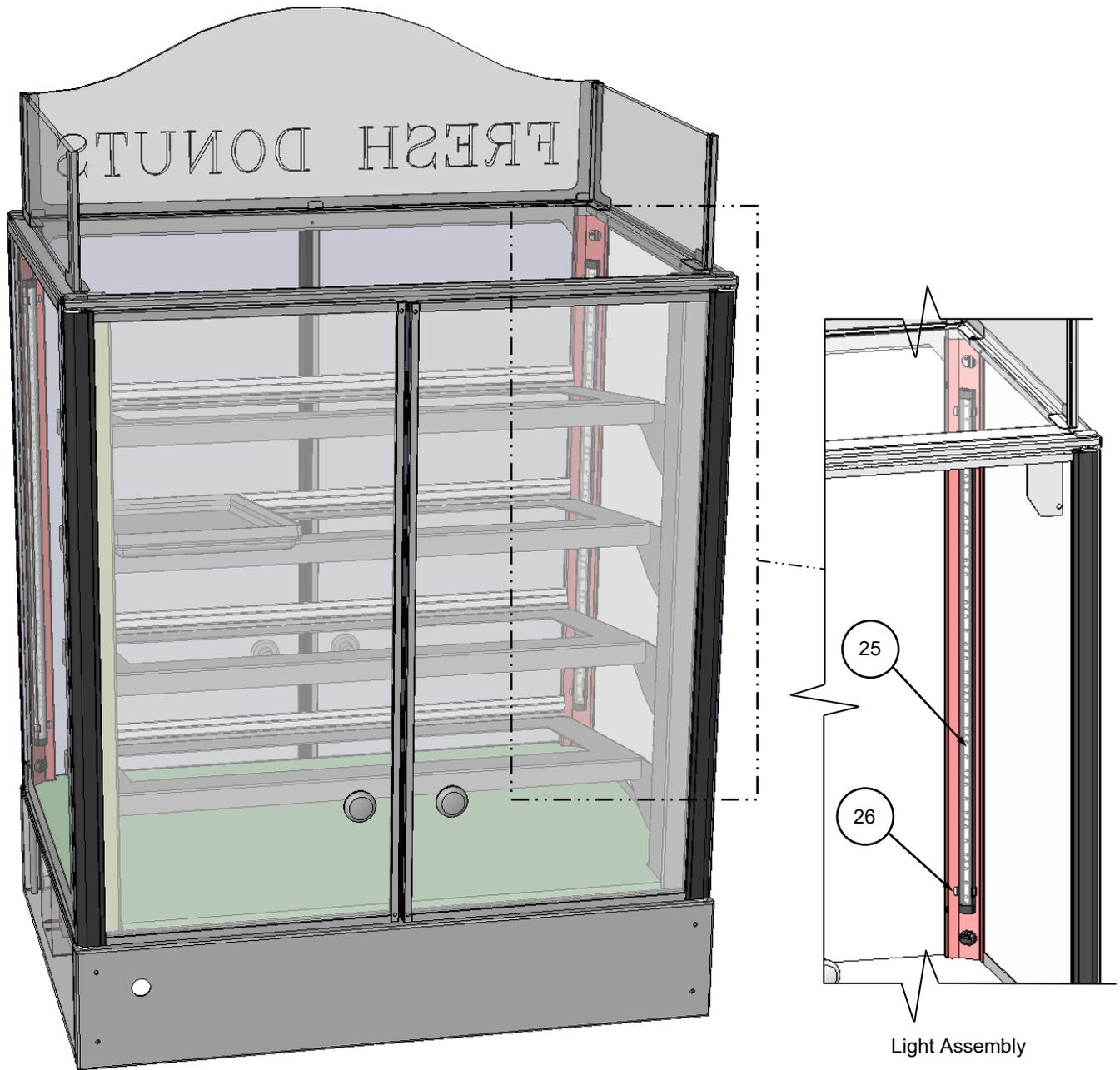
13	Panel_Back_Lower_Base	15	Knob_Door_Rear_Right	17	Door_Glass_Rear_Left
14	Door_Glass_Rear_Right	16	Knob_Door_Rear_Left	18	Cord_Power

**ILLUSTRATED PARTS BREAKDOWN, CONT'D**



19	Channel_Price (Typ.)	21	Switch_Light	23	Magnet_Tissue Dispenser (Typ.)
20	Shelf (Typ.)	22	Driver_VCD	24	Dispenser_Tissue

ILLUSTRATED PARTS BREAKDOWN, CONT'D



25 | Light\_LED (Typ.)

26 | Clip\_Retaining\_LED (Typ.)

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

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

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

**Structural Concepts®**

888 E. Porter Rd - Muskegon, MI 49441



Intertek

3048256

CONFORMS TO UL STD 970

**SAMPLE ONLY**

Certified to Can/CSA C22.2 No. 9.0/0.4

**Fusion**

SHS5454.7981

2688037CA408728

120 VOLTS 60 HZ SINGLE PHASE 2.0 AMP

FOR PARTS OR SERVICE CALL

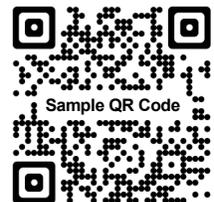
STRUCTURAL CONCEPTS

AT 1-800-433-9490

**SAMPLE ONLY**

**SAMPLE ONLY**

SCAN FOR PRODUCT LITERATURE



Sample QR Code

--- Sample Serial Label For Ambient/Heated Cases ---

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

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

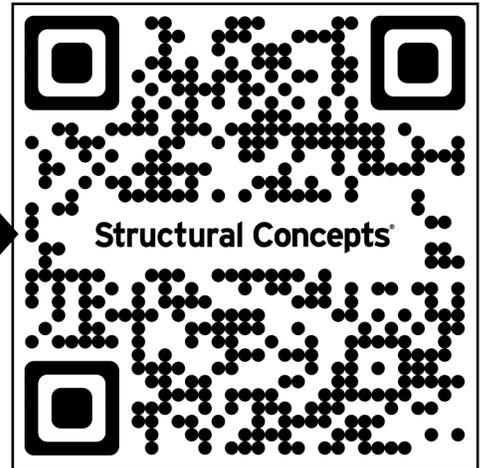
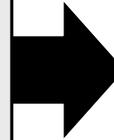
**DAYS/HOURS AVAILABLE:**  
MONDAY - FRIDAY (CLOSED HOLIDAYS)  
8:00 AM to 8:00 PM EST

**YOU MUST HAVE THE FOLLOWING INFO AVAILABLE  
BEFORE CONTACTING STRUCTURAL CONCEPTS:**

SERIAL NO. / MODEL NO. / STORE NO. / STORE  
ADDRESS / DETAILS (PHOTOS, LEAK LOCATIONS,  
DAMAGE, STORE'S AMBIENT CONDITIONS, ETC.)

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

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



DATE DUE / COMMENTS: \_\_\_\_\_

**ROUTINGS / SIGNOFF**

ROUTED TO:	DEPARTMENT	INITIALS	SIGNOFF DATE	COMMENTS
LINDA KARR	REG. COMPLIANCE			
JASON PAQUETTE	REFRIG. ENGINEERING			
BILL KANGAS	REFRIG. ENGINEERING			
RUSS STONE	PROD. ENGINEERING			
CHRIS GORT	TECHNICAL WRITER			
BILL VANDERLINDE	PROJ. MANAGEMENT			
VERN DEBOER	PROJ. MANAGEMENT			
FRED VANDONKELAAR	PROJ. MANAGEMENT			
BERT OGBORN	TECHNICAL WRITER	BRO	09/22/2023	

**REVISIONS**

REV LEVEL	DATE	BY	REVISION(S)
A	08.28.2003	KStroup	RELEASE FOR PRODUCTION
B	03.30.2005	BRO	Impulse Model had been Velo. Removed model CSC13223 from this Oper. Manual. CSF4231 (floor model) now transferred to Oper. Manual 99696.
C	8.23.2007	RMW	Replaced Tech Info Sheet with Serial Label Data Sheet. Removed wiring diagram and added new logos.
D	4.22.2008	BRO	Added LED lighting as it relates to CSC3223.4254. <u>Note:</u> Billwork reflects this CDR being added to this manual. However, Q4254 not shown on cover sheet.
E	6.29.2010	BRO	Added model CDR4817 to manual. Added optional Ryobi door mechanism; showed optional dividers to front storage area.
F	6.19.2012	BRO	Revised Warranty Sheet, Overview/Warnings Sheet and Matting, etc.
G	6.20.2012	BRO	Listed [on Cover] P/N 20-16813 as Corresponding Field Service Parts List. Dropped Refrigeration Data from Serial Label Sheet. Combined Troubleshooting and Cleaning Schedule pages.
H	2.11.2013	BRO	GFCI now mandated.
I	8.27.2019	CTG/BO	Updated Warranty Sheet, Added LED Sheet, Added P65 Warning
J	6/7/2022	BRO	<b>REVISION DESCRIPTION: REVISED MANUAL FOR QR CODE IMPLEMENTATION. REVAMPED DOCUMENT DESCRIPTION (NOW, USER MANUAL). CHANGED FILE NAME (P/N LISTED FIRST). REPLACED SCC LOGO (WITH NEW), SERIAL LABEL AND WARRANTY SHEET.</b>
K	6/19/2023	BRO	Added "Fresh" tag line to logo. Swapped out Warranty Sheet for QR Code segue to latest warranty sheet.
L	09/22/2023	BRO	CHANGED TECHNICAL SERVICE HOURS TO 8AM TO 8PM. CHANGED FAMILY PRODUCT NAME FROM FUSION TO IMPULSE. CHANGED COVER SHEET MODEL FROM OLD LINE DRAWING TO 3D ISOMETRIC SOLID WORKS MODEL REVISED THE FIELD SERVICE PARTS LIST TO REFLECT THE LATEST MODEL'S (CSC3223) DESIGN. REMOVED REFERENCE TO A SEPARATE FSPL (P/N 20-16813).