

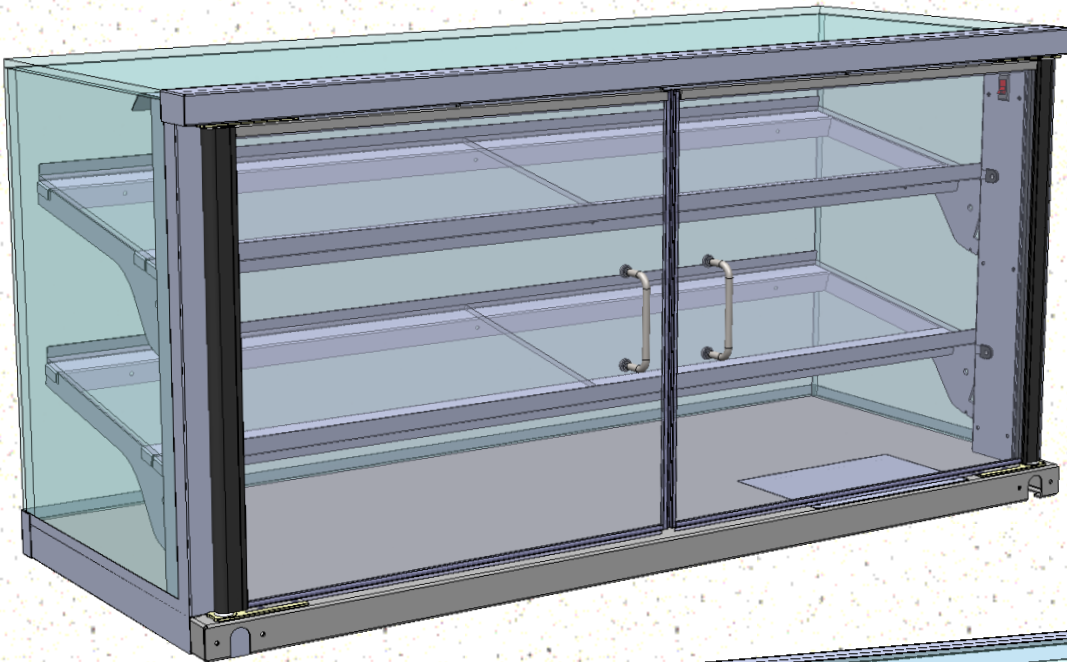
***Impulse!***<sup>TM</sup>  
S E R I E S

## INSTALLATION & OPERATING MANUAL

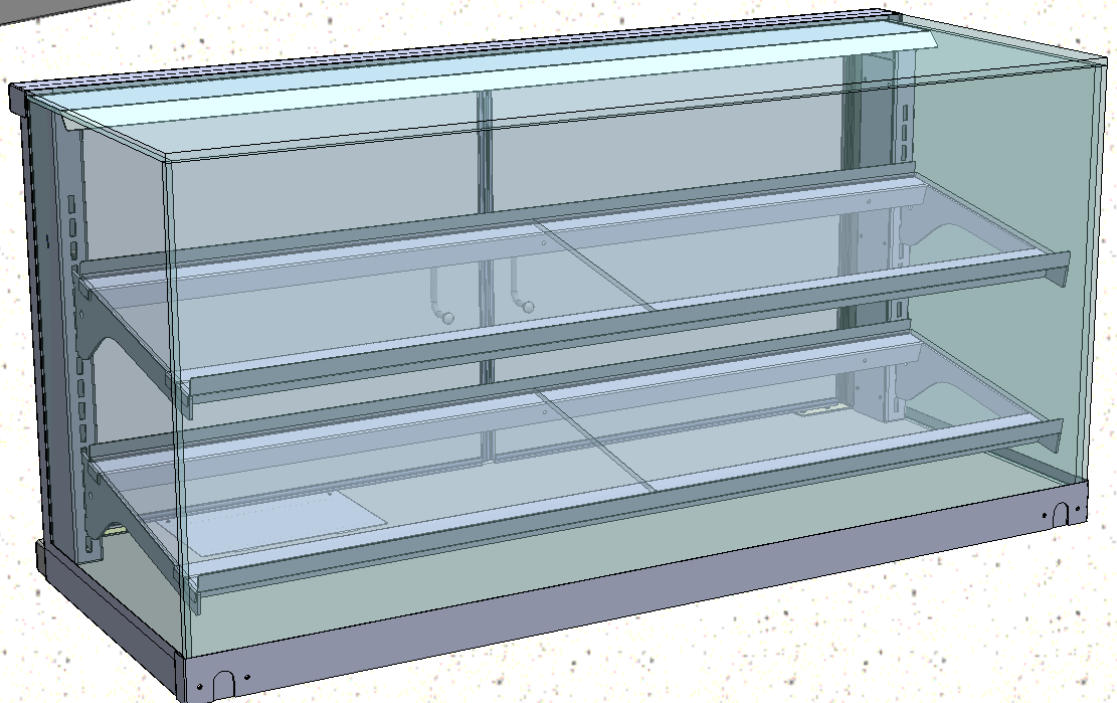
**SCC P/N  
21-05852**

### SELF-SERVICE / SERVICE COUNTERTOP AMBIENT DISPLAY UNITS

- > UV-BONDED GLASS > HINGED DOORS WITH HANDLES
- > PRODUCT IS ACCESSED VIA HINGED DOORS > LED DRIVER BOX IS AT CASE UNDERSIDE
- > APPLICABLE TO THE FOLLOWING MODELS: CGSV3622, CGSV4522, CGSV4530, CGSV6022, AND CGSV7222. MAY ALSO BE APPLICABLE TO MODELS NOT LISTED HEREIN.



← **Model CGSV4522  
As Self-Service Unit**



→ **Model CGSV4522  
As Service Unit**



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**OVERVIEW**

- These Impulse™ Series merchandisers are designed to merchandise packaged products at ambient product temperatures.
- The unique design allows merchandisers to be utilized as either self-service OR service units.
- These cases should be installed and operated according to this operating manual's instructions to ensure proper performance.
- Improper use will void warranty.

**TYPE 1 CONDITIONS**

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

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

**COMPLIANCE**

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

**WARNINGS**

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

**PRECAUTIONS, CORD/PLUG MAINTENANCE & WIRING DIAGRAM INFORMATION**

- See next page for **PRECAUTIONS, CORD/PLUG MAINTENANCE** and **WIRING DIAGRAM** information.



**ATTENTION  
CONTRACTORS**

**COMPLIANCE**

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

**WARNING**

**ELECTRICAL  
HAZARD**

**WARNING**

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



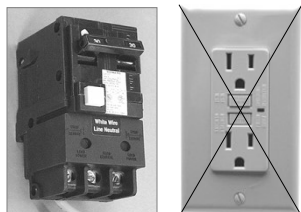
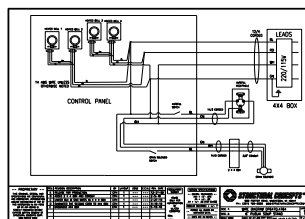
**WARNING: This product can expose you to chemicals, including Urethane (Ethyl Carbamate), which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to [P65Warnings.ca.gov](http://P65Warnings.ca.gov).**

**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****CAUTION****CAUTION! LAMP REPLACEMENT GUIDELINES**

LED lamps 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! ADVERSE CONDITIONS / SPACING ISSUES**

- Performance issues caused by adverse conditions are **NOT** warranted.
- Unit must not be exposed to any heat source (ovens, fryers, etc.).

**CAUTION! TOP GLASS WEIGHT LOAD LIMIT**

- To prevent sagging or breakage, do not exceed 5 LBS (2.3 KG) weight load per top glass section (between posts and/or supports).
- To prevent scratching or marring, do not place **ANY** items on glass.

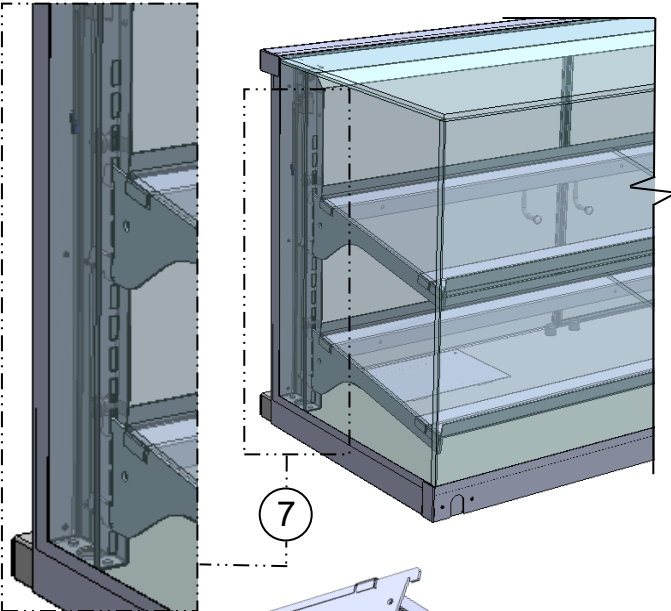
**WIRING DIAGRAM FORMAT & LOCATION**

- 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.

## CASE AT SHIPMENT / BLOCK REMOVAL / SEPARATELY SHIPPED SHELVES & THEIR PLACEMENT

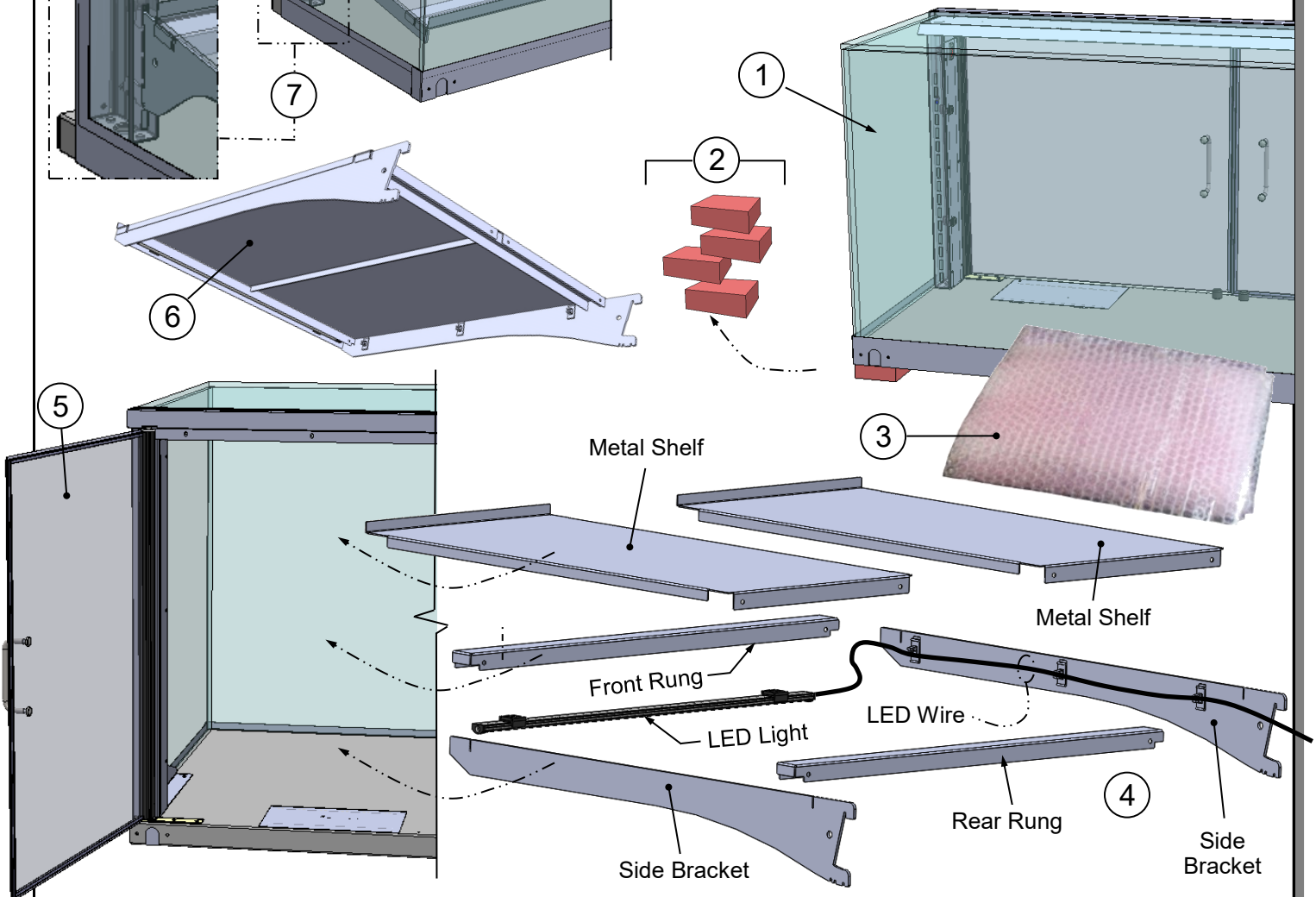
### Follow These Instructions For Proper Case Removal From Skid / Shipping Block Removal / Shelving Component Access & Placement, Etc.

1. View of case at shipment (no shelves installed / skid not shown).
2. Remove shipping blocks from case underside (attached to skid with screws). Set case on counter.
3. Carefully remove separately shipped shelving from its protective bubble wrap.



4. Open case's hinged door. Follow steps A through E to place shelving components into case ONE AT A TIME.  
**Note: Insert lowest shelf components first, followed by top shelf components.**
  - A. Side brackets: Insert into upright slots (following bracket/slot pattern shown in view #7).
  - B. Bottom shelf: LED lighting is optional. If LED light is in kit, attach under front rung. Attach front rung between shelving brackets. Insert LED plug into light. Route wires into wire clips that are attached to side bracket. Connect the opposite-end LED plug into upright connectors.
  - C. Rear rungs: Attach to shelving brackets.
  - D. Metal shelving: Attach atop shelving brackets.
  - E. Top shelf: LED lighting is standard. Follow items A-D (above) shelving component attachment instructions.
5. View of case awaiting shelving components.
6. View of assembled shelf (for illustrative purposes only).
7. View of recommended slot spacing after shelving has been properly inserted into case.

> After shelving has been properly placed in case (and LED lights have been properly connected), turn lights on.  
 > **Note:** Service case shown. This process is also applicable to self-service cases. See next page for slot spacing guide.



## SELF-SERVICE MODE VS. SERVICE MODE VS. RANDOM SHELVING POSITIONING

### **1. Self-Service Mode Shelving Position**

- Shelves may be positioned in the “up” position to merchandise as a self-service case.
- Number of open slots above, between and below shelving remains the same as unit in service mode.
- See illustration #1 below.

### **2. Service Mode Shelving Position**

- Shelves may be positioned in the “down”

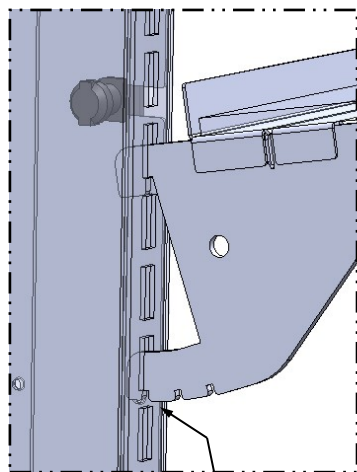
position to merchandise as a service case.

- Number of open slots above, between and below shelving remains the same as unit in self-service mode.
- See illustration #2 below.

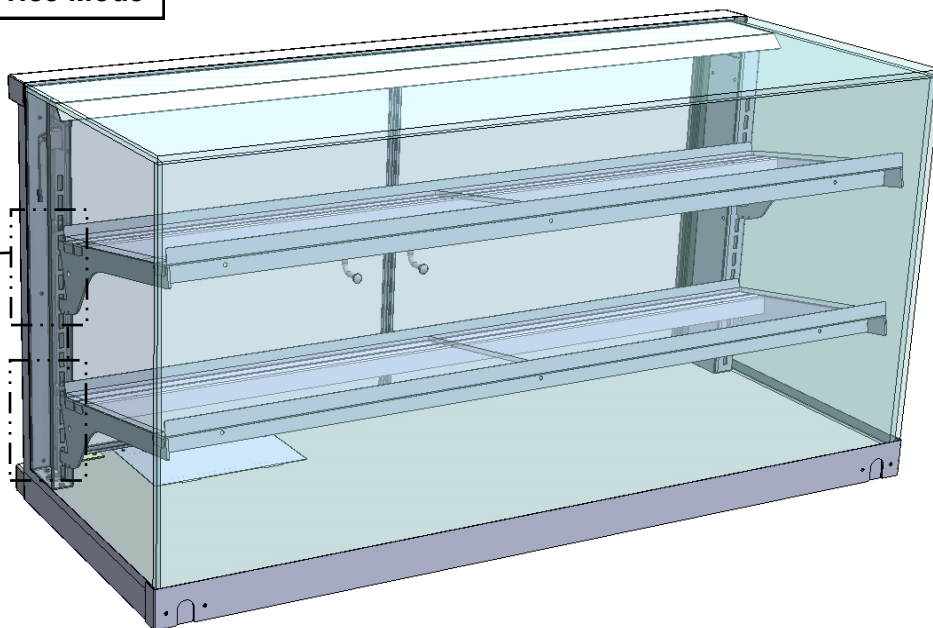
### **3. Random Mode Shelving Position**

- Shelves may be adjusted to second notch at will.
- Shelves may also be raised or lowered to desired slot along uprights.

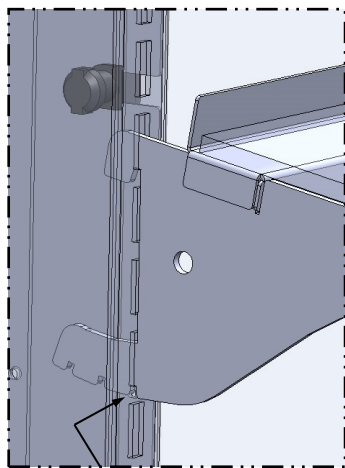
#### **1. Merchandiser In Self-Service Mode**



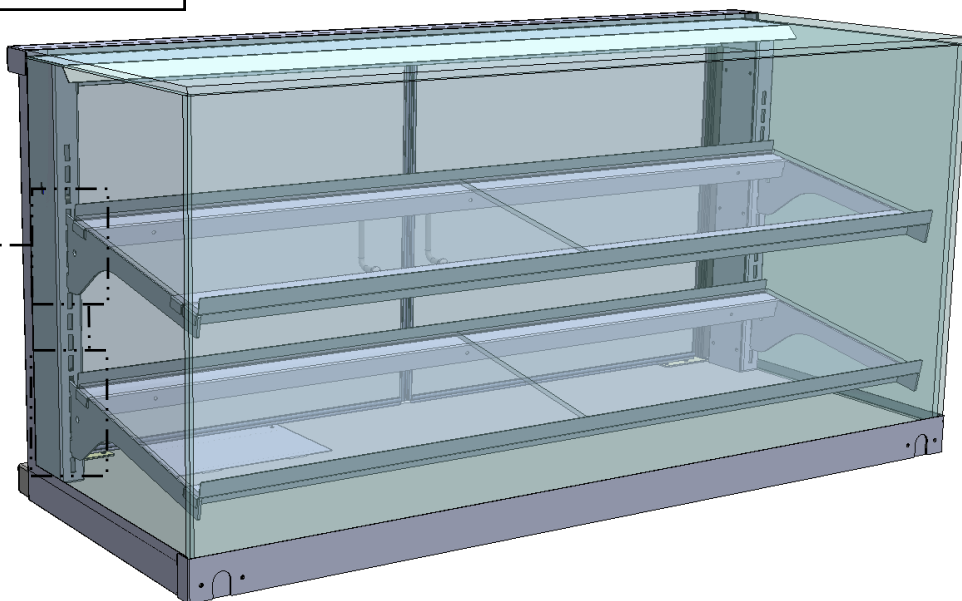
Shelving Brackets  
Set At First Notch



#### **2. Merchandiser In Service Mode**



Shelving Brackets  
Set At Third Notch





## CASE STARTUP / LED LIGHT FIXTURE REPOSITIONING (SERVICE VS. SELF-SERVICE / LED DRIVER)

### 1. Case Startup

- Case will be energized when plugged into outlet.
- Lights will turn on when rocker switch (located at case upright) is turned on.

### 2. LED Light Fixtures

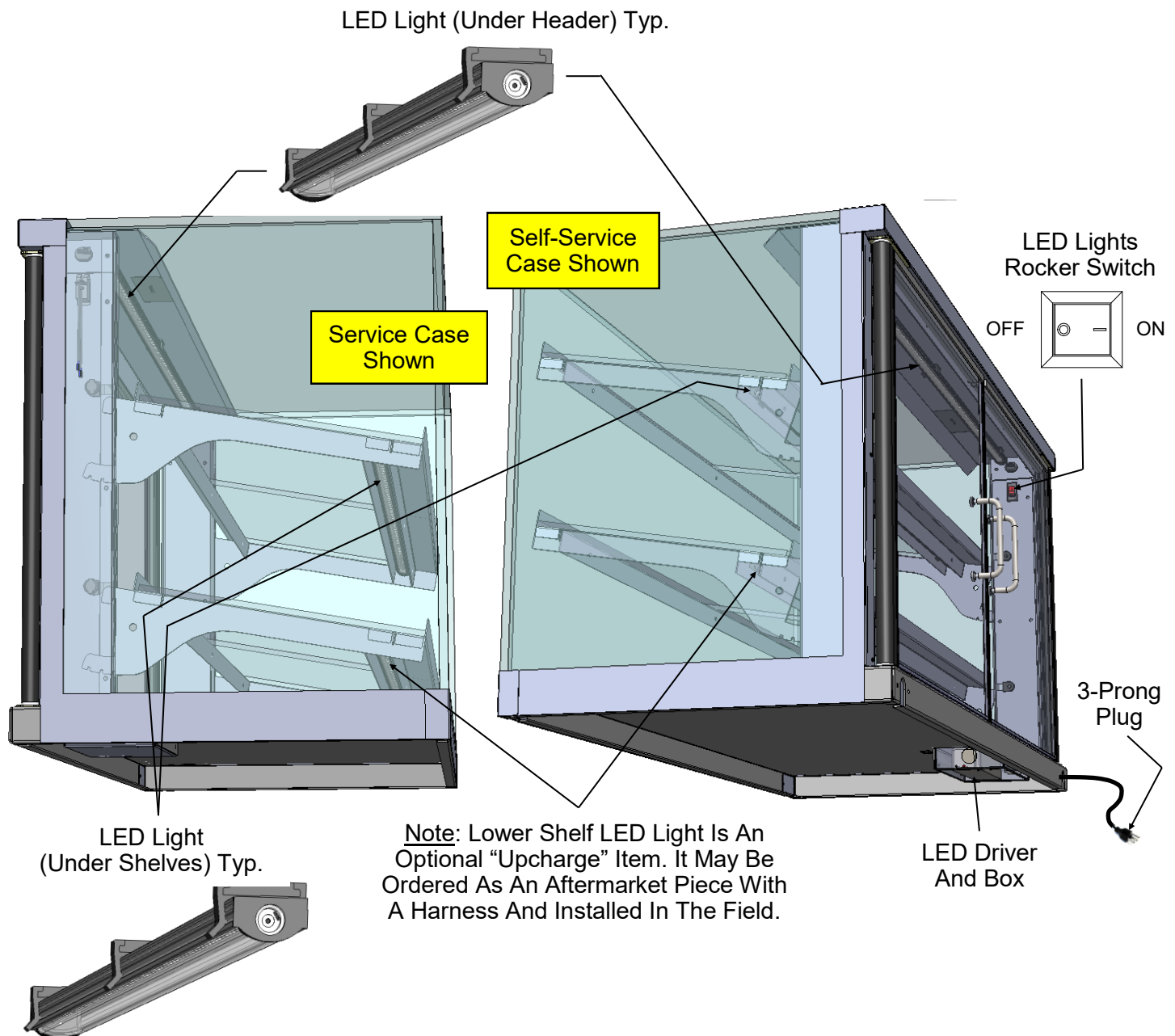
- LED lights are located at both header and shelving of case (as shown below).
- Check that ALL of the light plugs are properly connected to the LED light.
- Plug must be inserted ALL THE WAY into the LED light orifice (with no gap) to work properly.

### 3. LED Light Fixture Repositioning

- Service cases have LED lights opposite uprights.
- Self-Service cases have LED lights positioned near uprights.
- **Important! You must reposition LED lights if changing case from service to self service (or vice versa). See below for illustrations.**

### 4. LED Driver

- LED driver box is located at rear-underside of unit.
- See next page for access instructions.



## LED STYLE LIGHT FIXTURES

### 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.

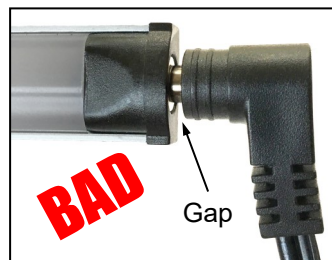
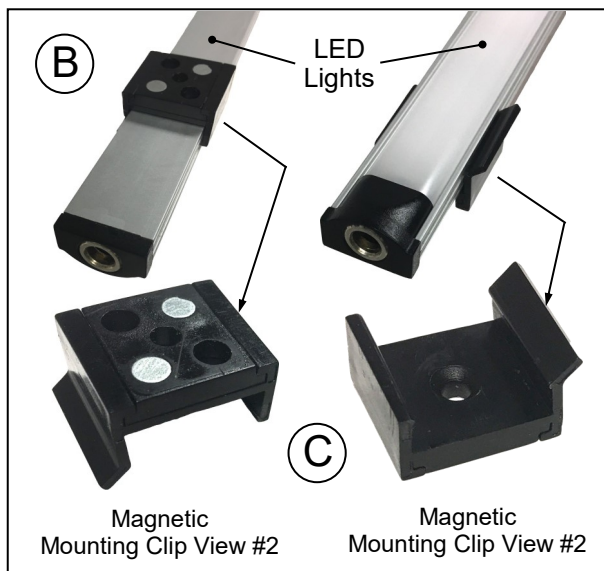
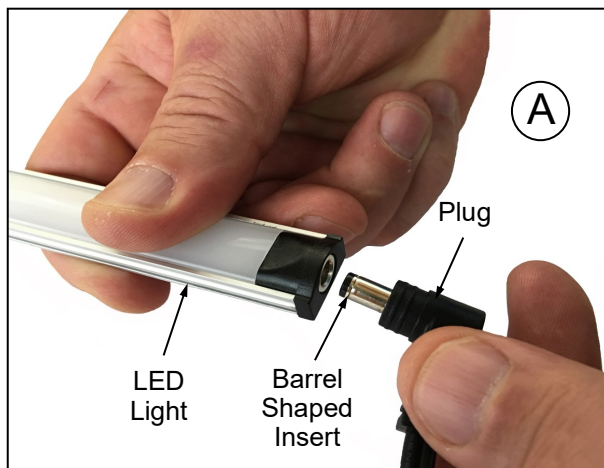
>> Note: Mounting clips MAY be riveted to shelf or header. In such instances, simply remove LED light from mounting clips by pressing against flange part of clips with thumb.

#### *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.





## HINGED DOORS / LED DRIVER BOX ACCESS

### **1. Hinged Doors**

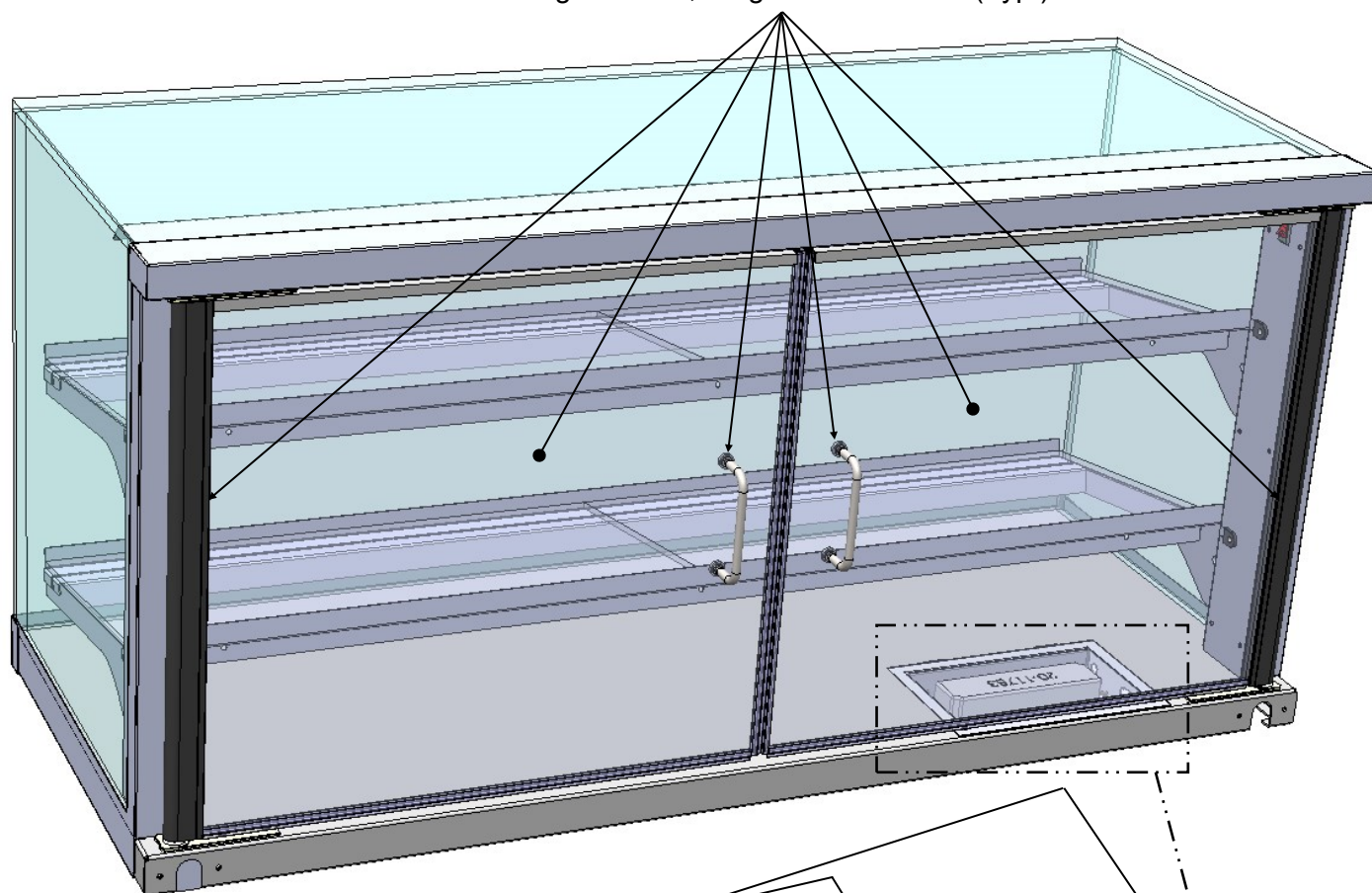
- Hinged doors are illustrated below.
- Simply grasp handles and open doors to access product.

### **2. LED Driver Access Box**

- Caution! Only certified electricians should access LED driver box!

- Access LED driver by opening hinged door.
- Remove LED driver box cover (via removal of two screws).
- Remove cover tabs by lifting up and out of the slots (that are in deck pan).

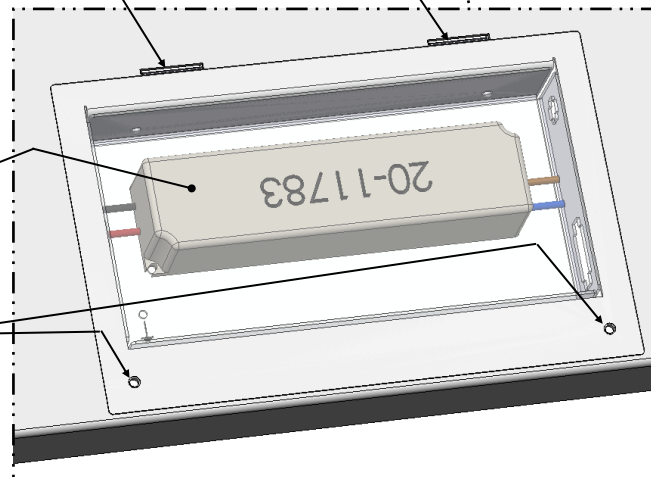
Hinged Doors, Hinges and Handles (Typ.)



Led Driver Tabs (That Slide In Deck Pan Slots)

Led Driver

LED Driver Box Cover Retaining Screws



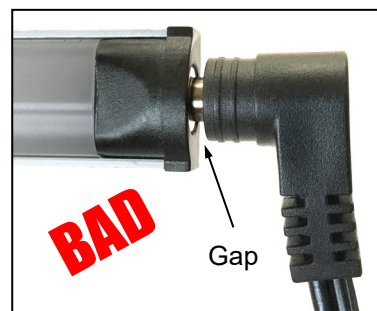
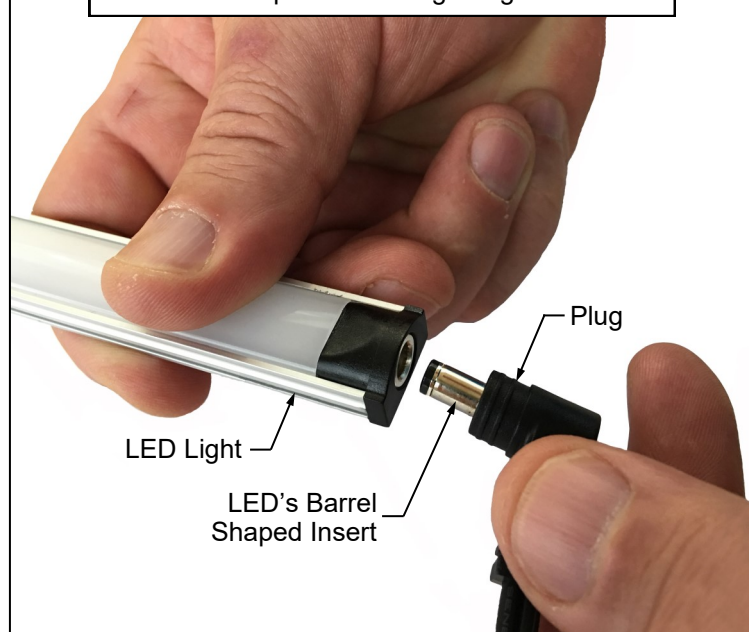
## CLEANING SCHEDULE

Cleaning	Daily	Weekly	Task
Interior/Exterior	X		Clean all glass surfaces with a household or commercial glass cleaner and a soft cloth.
	X		Clean the deck pan and shelving with damp cloth. For stubborn stains or hardened residue, use hot, soapy water and soft-bristled brush. <b>Caution! Do not use brushes or pads with metal bristles or coils to clean this unit as they will scratch and mar surfaces.</b>
		X	<p><b>Stainless Steel Surfaces:</b></p> <ul style="list-style-type: none"> <li>• Wash with a solution of hand dishwashing liquid detergent and water; or a solution of baking soda and water. Rinse and polish dry with paper towel or soft cloth.</li> <li>• Never use scouring powders or steel wool as they will scratch stainless steel.</li> <li>• Brighten by polishing with a cloth dipped in vinegar or in ammonia; sprinkle baking soda on sponge and rub gently; rinse. Polish dry with paper towel.</li> <li>• Remove streaks or heat stains from stainless steel by rubbing with club soda.</li> </ul>

## TROUBLESHOOTING

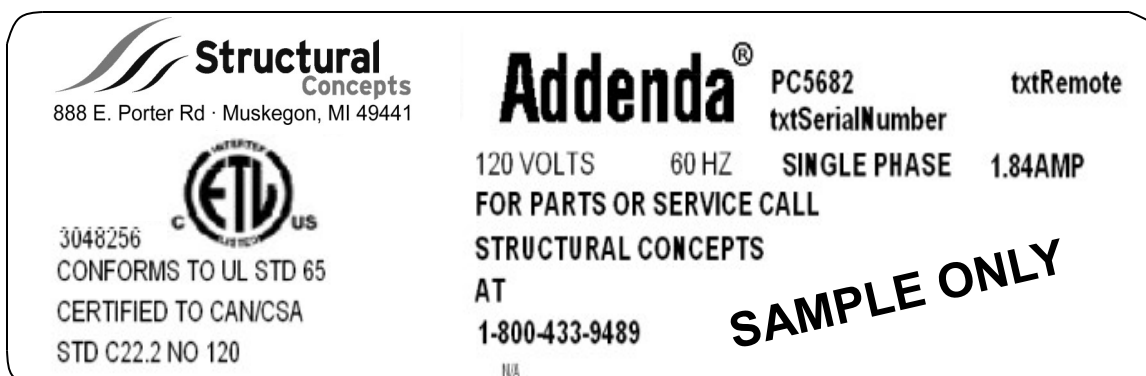
<b>System is not Operating</b>	Confirm the utility power is on (authorized personnel only).
	Check the circuit breaker box for tripped circuits (authorized personnel only).
<b>Case Lights Not Working</b>	Check that light switch is in the <i>ON</i> position. <ul style="list-style-type: none"> <li>• See <b>CASE STARTUP / LED LIGHT REMOVAL &amp; REPLACEMENT / LED DRIVER BOX</b> section in manual for switch location (regardless of case design).</li> </ul>
	If case is not hard-wired, check that power cord is properly connected to wall outlet.
	Check that ALL of the light plugs are properly connected to the LED light. <ul style="list-style-type: none"> <li>• Plug must be inserted ALL THE WAY into the LED light orifice (with no gap).</li> <li>• See illustrations below.</li> </ul>
	Power may not be reaching the case. <ul style="list-style-type: none"> <li>• Contact store management to have trained service provider perform troubleshooting.</li> </ul>
	If case light still do not come on, it may need to be replaced. <ul style="list-style-type: none"> <li>• Contact Structural Concepts' Technical Service Department for replacement light (see <b>TECHNICAL SERVICE</b> section of this manual for contact information).</li> <li>• To replace, disconnect plug from existing LED light. Disconnect LED light from its brackets. Replace with new LED light. Insert plug ALL THE WAY into LED light orifice.</li> </ul>

--- "Barrel-Shaped" LED Plug & Light Fixture ---



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

- Serial labels are located near the electrical access on your case.
- Serial labels contain electrical Information, as well as regulatory standards to which the case conforms.
- For additional technical information and service, see the *TECHNICAL SERVICE* page in this manual for instructions on contacting Structural Concepts' Technical Service Department.
- See image below for sample serial label.



----- Sample Serial Label -----

## 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.)**

# LIMITED WARRANTY

**Overview:** All sales by Structural Concepts Corporation (hereafter referred to as "SCC") are subject to the following limited warranty. "Goods" refers to the product or products being sold by SCC.

**Warranty Scope:** Warranty is for equipment sold in the United States, Canada, Mexico and Puerto Rico. Equipment sold elsewhere may carry modified warranties.

**Warranty; Remedies; Limitations:** The limit of liability of SCC toward the exchange cost of the original compressor motor (and/or any other components) is one year parts and labor. If any Goods are found to be of faulty material or workmanship within one year of the original F.O.B. (free on board) unit shipment, SCC will, at its option (after inspection by an authorized representative), replace or pay the reasonable cost of replacement of the faulty Goods. If warranty claim is not made within this one year time period, SCC is not bound to warrant Goods. A motor-compressor (and/or any other components) replaced during the warranty shall not exceed manufacturer's current established wholesaler's exchange price. If replacement motor-compressor (and/or other components) is available via storage facility, parts truck, etc., SCC mandates that readily accessible replacement components be used toward repair of Goods; in such instances, SCC will replace such equipment (at its own expense) after confirmation of its use/placement on defective unit. SCC shall not be charged an additional fee, up-charge or expense for such replacement Goods. If SCC is unable to repair or replace the defective Goods, SCC shall issue a credit to the Purchaser for full or partial purchase price, as SCC shall determine. The replacement or payment in the manner described above shall be the sole and exclusive remedy to Purchaser for a breach of this warranty. If any Goods are defective or fail to conform to this warranty, SCC will furnish instructions for their disposition. No Goods shall be returned to SCC without its prior consent.

SCC's liability for any defect in the Goods shall not exceed the purchase price of the Goods. SCC SHALL HAVE NO LIABILITY TO PURCHASER FOR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, LOST PROFITS, OR OTHER ECONOMIC INJURY DUE TO ANY DEFECT IN THE GOODS OR ANY BREACH OF SCC. SCC SHALL NOT BE LIABLE TO THE PURCHASER IN TORT FOR ANY NEGLIGENT DESIGN OR MANUFACTURE OF THE GOODS, OR FOR THE OMISSION OF ANY WARNING THEREFROM.

SCC shall have no obligation or liability under this warranty for claims arising from any other party's (including Purchaser's) negligence or misuse of the Goods or environmental conditions. This warranty does not apply to any claim or damage arising from or caused by improper storage, handling, installation, maintenance, or from fire, flood, accidents, structural defects, building settlement or movement, acts of God, or other causes beyond SCC's control.

Except as expressly stated herein, SCC makes no warranty, express, implied, statutory or otherwise as to any parts or goods not manufactured by SCC. SCC shall warrant such parts or Goods only (I) against such defects, (II) for such periods of time, and (III) with such remedies, as are expressly warranted by the manufacturer of such parts or Goods. Notwithstanding the foregoing, any warranty with respect to such parts or Goods and any remedies available as a result of a breach thereof shall be subject to all of the procedures, limitations, and exclusions set forth herein.

THE WARRANTIES HEREIN ARE IN LIEU OF ALL WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE. IN PARTICULAR, SCC MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representative, agent or dealer of SCC has authority to modify, expand, or extend this Warranty, to waive any of the limitations or exclusions, or to make any different or additional warranties with respect to Goods.

**Period of Limitations:** No claim, suit or other proceeding may be brought by Purchaser for any breach of the foregoing warranty or this Agreement by SCC or in any way arising out of this Agreement or relating to the Goods after one year from the date of the breach. In the interpretation of this limitation on action for a breach by SCC, it is expressly agreed that there are no warranties of future performance of the goods that would extend that period of limitation herein contained for bringing an action.

**Indemnifications:** Purchaser agrees to indemnify, hold harmless, and defend SCC if so requested, from any and all liabilities, as defined herein, suffered, or incurred by SCC as a result of, or in connection with, any act, omission, or use of the Goods by Purchaser, its employees or customers, or any breach of this Agreement by Purchaser. Liabilities shall include all costs, claims, damages, judgments, and expenses (including reasonable attorney fees and costs).

**Remedies of SCC:** SCC's rights and remedies shall be cumulative and may be exercised from time to time. In a proceeding or action relating to the breach of this Agreement by Purchaser, Purchaser shall reimburse SCC for reasonable costs and attorney's fees incurred by SCC. No waiver by SCC of any breach of Purchaser shall be effective unless in writing nor operate as a waiver of any other breach of the same term thereafter. SCC shall not lose any right because it has not exercised it in the past.

**Applicable Law.** This Agreement is made in Michigan; it is governed by and interpreted according to Michigan law. Any lawsuit arising out of this Agreement or the Goods may be handled by a federal or state court whose district includes Muskegon County, Michigan, and Purchaser consents that such court shall have personal jurisdiction over Purchaser.

**LED Lighting Components Within Lighting System:** Supermarket: 5-year LED warranty from date of shipment. Foodservice: 2-year LED warranty from date of shipment. After one year, warranty does not include labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of either defective part or replacement parts. Remedy of repair or provision of a replacement part without charge shall be the exclusive remedy for any warranty claim. The replacement LED and/or power supply assumes the unused portion of warranty remaining on unit(s). A 90-day warranty will apply for any LED sold as a service part. Warranty claim must include serial and model number of unit as well as date code on defective LED lighting component(s). Manufacturer may request return of defective part(s) at customer's expense to initiate claim.

**Glass Material:** Glass (UV-bonded glass, glass sneeze guards, glass enclosures, glass held in place via posts, etc.) is only warranted to FIRST POINT OF DELIVERY.

**Miscellaneous:** If any provision of this Agreement is found to be invalid or unenforceable under any law, the provision shall be ineffective to that extent and for the duration of the illegality, but the remaining provisions shall be unaffected. Purchaser shall not assign any of its rights nor delegate any of these obligations under this Agreement without prior written consent of SCC. This Agreement shall be binding upon and inure to the benefit of SCC and Purchaser and each of their legal representatives, successors and assignees. SCC warrants its products to be free of defects in materials and workmanship under normal use and service for a period of one (1) year from the date of delivery.

This warranty is extended only to the original purchaser for use of the Goods. It does not cover normal wear parts such as plastic tongs, tong holders, tong cables, bag holders, or acrylic dividers.

**General Conditions:** All service labor and/or parts charges are subject to approval by SCC. Contact Customer Service Dept. in writing, by phone, fax or email.

All claims must contain the following information: (1) model & serial code number of equipment; (2) the date and place of installation; (3) the name and address of the agency which performed the installation; (4) the date of the equipment failure; and (5) a complete description of the equipment failure and all circumstances relating to that failure.

Once the claim has been determined to be a true warranty claim by SCC's Customer Service Department, the following procedure will be taken: (1) replacement parts will be sent at no charge from SCC on a freight prepaid basis; (2) reimbursement for service labor will be paid if the following conditions have been met - (a) prior approval of service agency was awarded from the Customer Service Department; and (b) an itemized statement of all labor charges incurred is received by the Customer Service Department. The cost of the service labor reimbursement will be based on straight time rates and reasonable time for the repair of the defect.

If problems occur with any compressor, notify SCC's Customer Service Department immediately. Any attempt to repair or alter the unit without prior consent from the Customer Service Department will render any warranty claim null and void. This warranty and protection plan does not apply to any condensing unit or any part thereof which has been subject to accident, negligence, misuse, or abuse, or which has not been operated in accordance with the manufacturer's recommendations or if the serial number of the unit has been altered, defaced, or removed.

**One Year Limit of Liability:** After SCC's one-year parts and labor warranty on the original F.O.B. (free on board) unit has expired, SCC is not liable for either the equipment or labor costs of repairing or replacing the motor compressor, nor any other components that were included in the original F.O.B. (free on board) unit.