

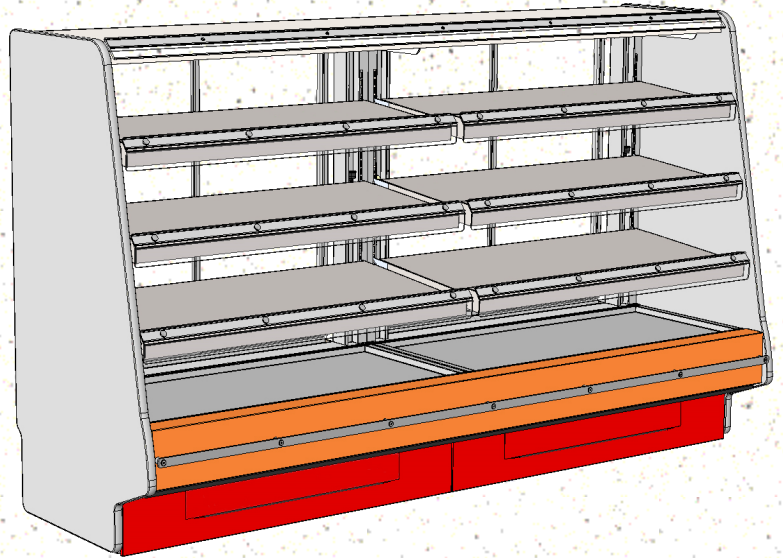
# G-SERIES INSTALLATION AND OPERATING MANUAL

P/N 20-17518

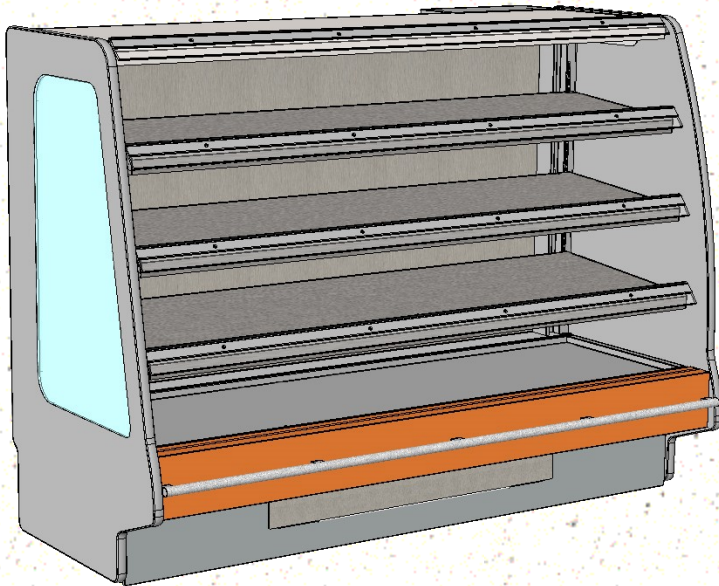
G-SERIES HEATED SHELVING, SELF-SERVICE 55 1/4", 60" and 66 1/4" TALL MERCHANDISERS



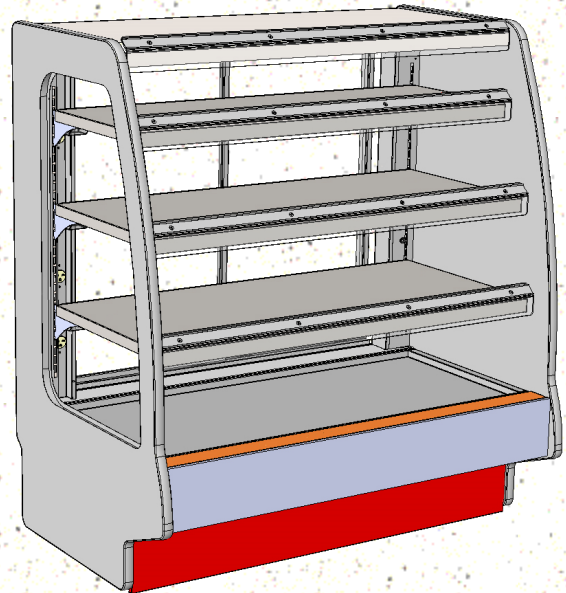
Standard 3-Shelf Model GHSS460H (Shown Stocked For Illustrative Purposes Only)



Standard 3-Shelf Model GHSS856HLB (With Stainless Steel Front Bumper)



Standard 3-Shelf Model GHSS656HLB (With Stainless Steel Front Bumper)



Standard 3-Shelf Model GHSS456HLB Optional Controls Placement (Either Front or Rear) With LEDs (Instead of Incandescent Lights)

**Note: See Next Page For Partial List Of Models That This Manual Is Applicable To.**

**Important!** See Installation Section Of This Manual For Specifics On Confirming Proper Placement of "Danger - HOT" Labels Heated Shelves



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**This Manual Is Applicable To The Following Models\***

**GHSS452HLB / GHSS456HLB / GHSS460H / GHSS460HLB / GMSS467H / GMSS667H  
GMSS867H / GHSS652HLB / GHSS656HLB / GHSS660H / GHSS856HLB**

**\*This Manual May Be Applicable To Models Not Listed Above or Herein.**

**OVERVIEW**

This merchandiser is designed for dry heating operations throughout the product area. The heat is generated from heated shelving and deck conduction.

- These merchandisers should be installed and operated according to this operating manual's instructions to insure proper performance.
- These merchandisers are designed for display of perishable, packaged products.
- These heated units are designed to hold pre-heated hot foods at 140 °F to 165 °F (60 °C to 74 °C).
- Product must be pre-heated before placing in merchandiser. This case is NOT designed to heat product from cold or ambient condition.
- All heating elements are thermostat controlled for individual adjustment.
- Overhead incandescent lamps are used throughout.

**TYPE "1" CONDITION**

- This unit is designed for the display of products in ambient store conditions of 55% max. humidity and maximum temperatures of 75 °F (24 °C).

**INTEGRATED AVERAGE PRODUCT TEMPERATURE**

- The Structural Concepts G-Series Service Deli Units merchandise product at an integrated average product temperature of 150 °Fahrenheit / 66 °Celsius.

**THERMOMETERS**

- Thermometers in equipment reflect internal air temperature only (not actual food temperature).
- Use probe thermometers to determine actual product temperatures.

**COMPLIANCE**

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

**WARNINGS**

- Please read the important warnings in this document carefully as they can prevent injury or death.
- See next page for **PRECAUTIONS**.



**ATTENTION CONTRACTORS**

**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**  
 Shelves are hot! Disconnect and allow to cool before cleaning or removing from case. Incandescent lamps are hot! Turn off or disconnect and allow to cool before servicing or replacing.



**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**

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

**POWER CORD AND PLUG MAINTENANCE**

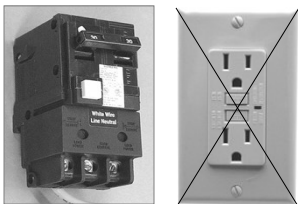
- Caution! Risk of electric shock.
- If cord or plug becomes damaged, replace only with cord and plug of same type.

**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.



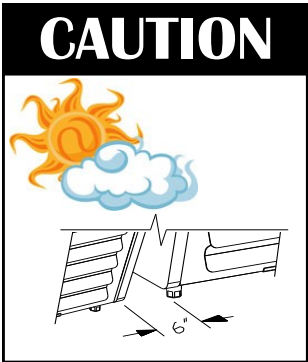
**CAUTION! LAMP REPLACEMENT GUIDELINES**  
 LED and Incandescent lamps reflect specific size, shape and overall design. Any replacements must meet factory specifications. Incandescent lamps must be replaced with similar lamps.



**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** covered by warranty.
- End panels must be tightly joined or kept at least **6-inches** away from any structure to prevent condensation.
- Unit must be kept at least **15-feet** from exterior doors, overhead HVAC vents or any air curtain disruption to maintain proper temperatures.
- Do not expose to direct sunlight or heat source (ovens, fryers, etc.).
- Keep at least **8-inch** clearance above unit for air discharge (self-contained units only).

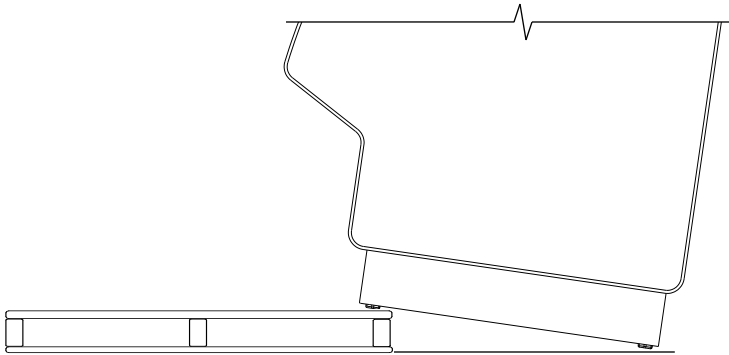


**CAUTION!**  
**DO NOT RELY ON THERMOMETERS OR THERMOSTATS FOR ACTUAL PRODUCT (FOOD) TEMPERATURES.**

- Thermometers & thermostats reflect air temperatures **ONLY**.
- For **ACTUAL** product (food) temperatures, use a calibrated food thermometer.

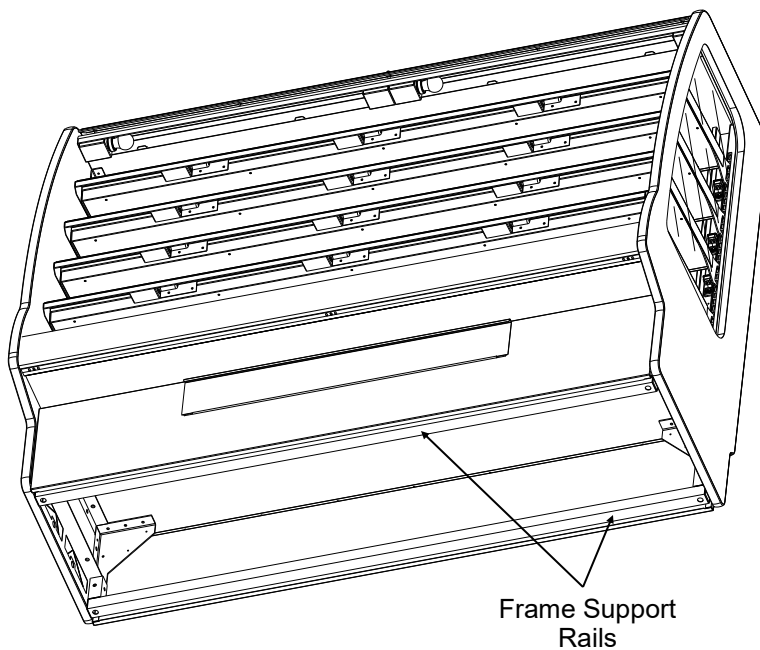
**1. Remove Unit From Skid**

- Caution: Case must always remain supported or center of gravity will allow case to fall.
- Slide unit to rear of skid and lean backward off skid.
- Slide skid out from under case while case is being supported.



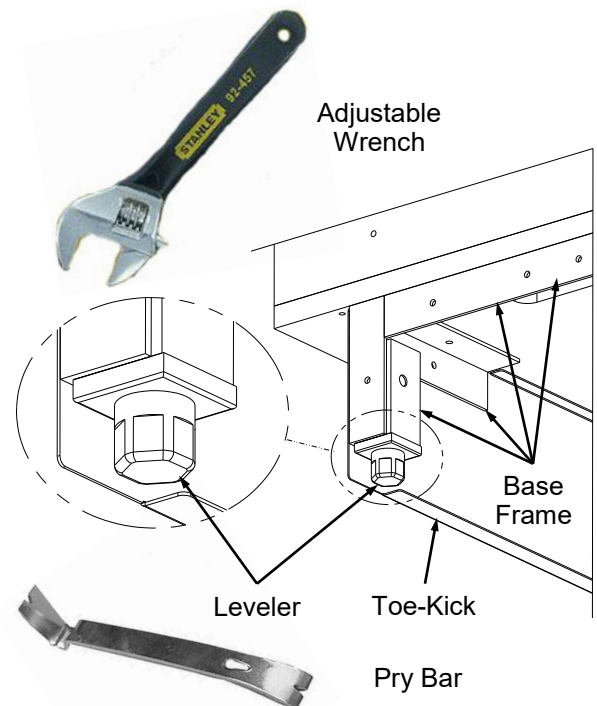
**2. Frame Support Rails Must Be Shimmed**

- Most cases have frame support rails (shown below).
- Shims will be provided with all cases that have frame support rails. Use shims to level case.
- You may need to remove front and/or rear toe-kick to access levelers
- **Note: After case is in position, it must be sealed to floor to prevent entry or leakage of liquid or moisture.**



**3. Adjust Levelers**

- Some cases have levelers. If so, after case is in proper position, adjust case so it is level and plumb (see illustration below).
- You may need to remove front and/or rear Toe-Kick to access levelers.
- Use adjustable wrench to adjust leveler.
- Depending upon case weight it may be necessary to use a pry bar to accomplish this task.
- Do not use pry bar on toe-kick as it may buckle.
- Do not use pry bar on end panel as it may chip.
- Use pry bar ONLY on base frame to avoid damaging case.
- See illustration and photo below.



## INSTALLATION, CONT'D: FIELD ACCESS WIRING CONNECTIONS/ SWITCHES / THERMOMETERS

Gain access to field wiring / electrical raceway by removing front panel (removal of screws is required).

### **4. Field Access Wiring Connections**

Field wiring connection location is at customer-right, at underside of raceway (as shown below).

### **5. Lamp Power Switch**

- Lamp switch is at customer-right.
- One (1) lamp switch controls all bulbs in unit.

### **6. Single vs. Three-Phase Selector Switch**

- Both single phase field wiring leads AND three phase field wiring leads are provided.
- Phase selector switch (see location below) must match field wiring.
- **Note:** Depending upon options chosen, phase selector switch lockout bracket may be standard.

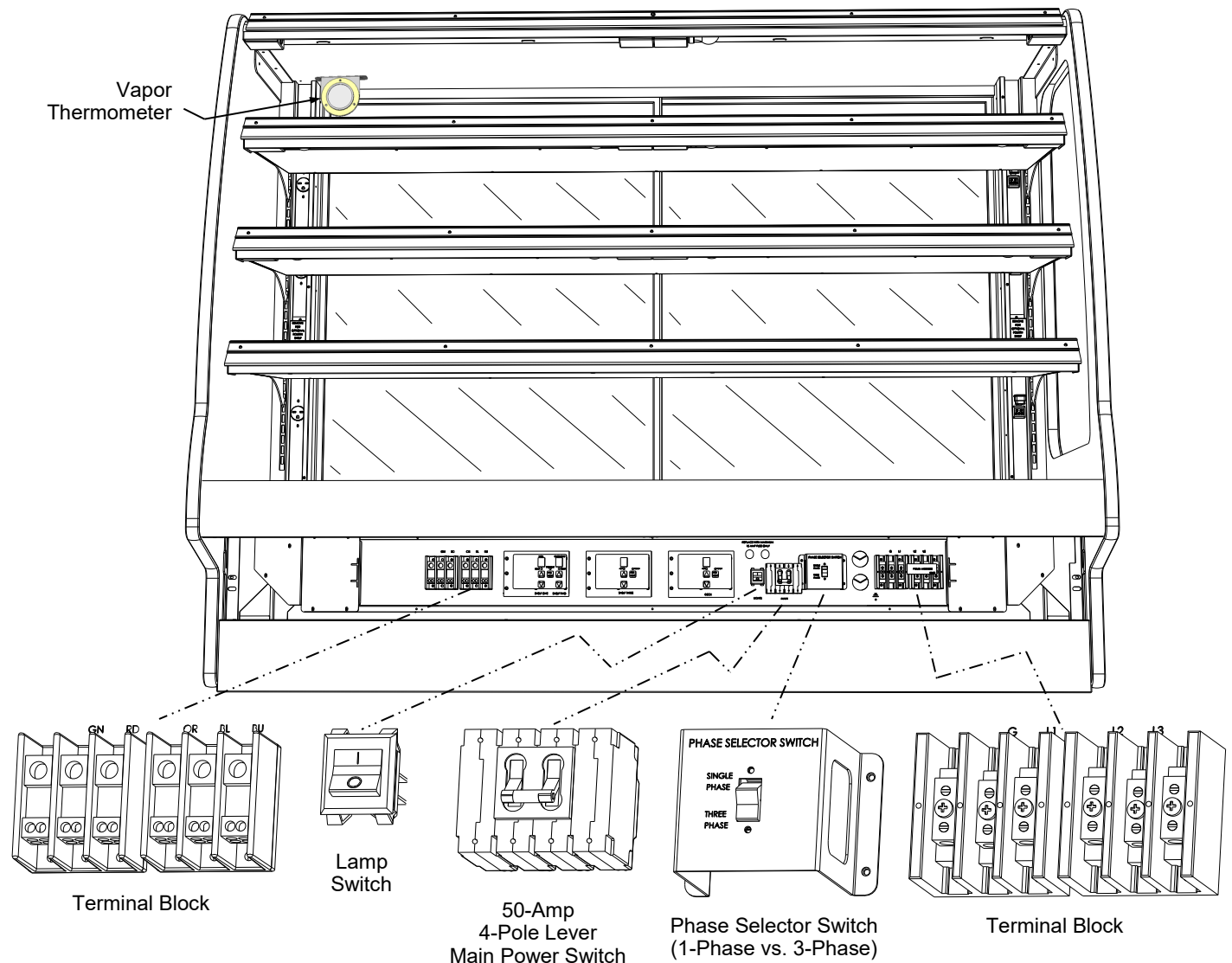
If not, optional phase selector switch lockout bracket (SCC P/N 20-35413) is available.

### **7. 50-Amp 4-Pole Lever Main Power Switch**

- See illustration below.
- Power to all lights AND heated shelves is shut off when this switch is turned off.

### **8. Thermometers**

- Thermometers in equipment reflect internal air temperature only (not actual food temperature).
- Use probe thermometers to determine actual product temperatures.
- See **Vapor Thermometer** section in manual for temperature dial design and range.

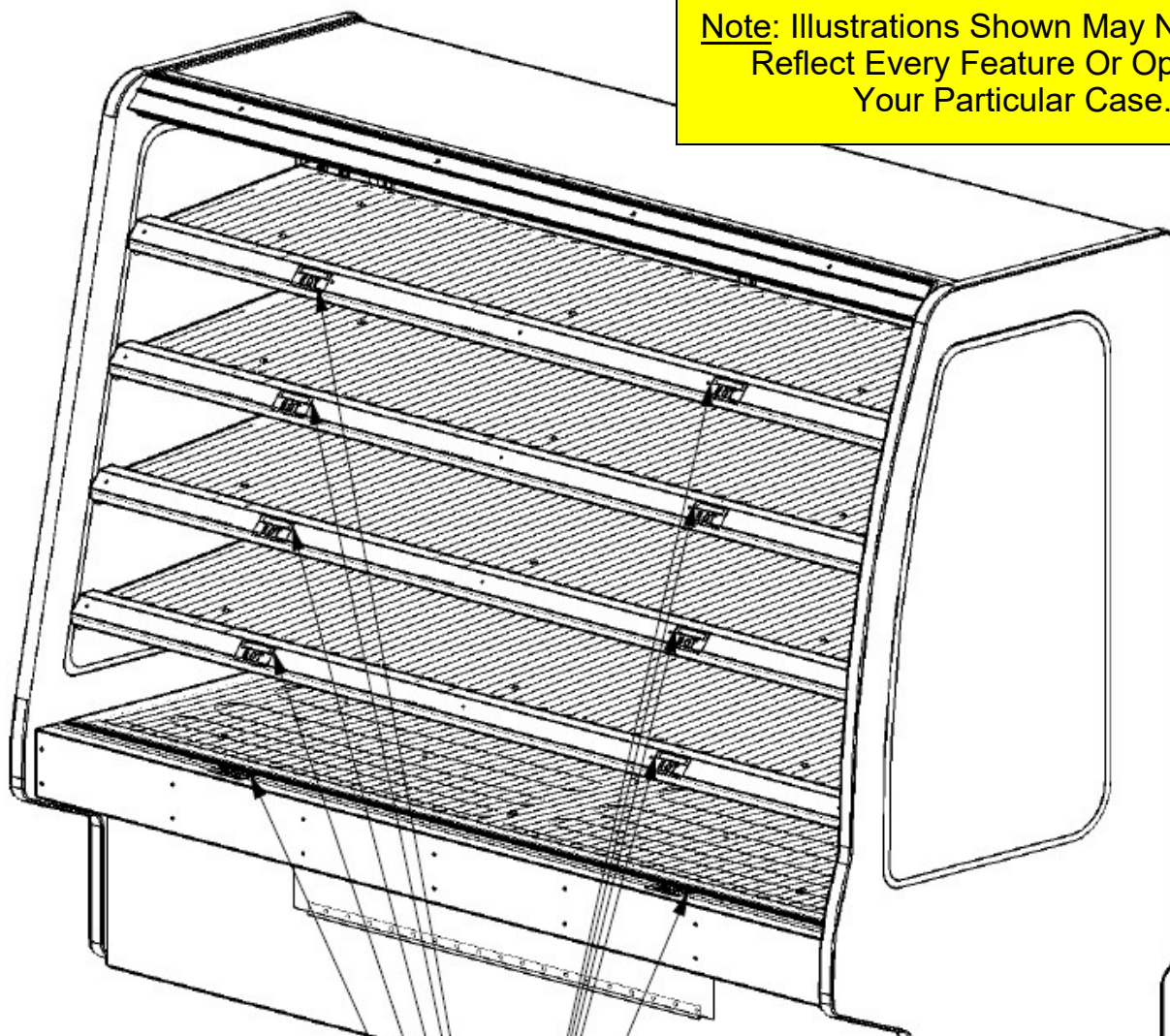


## INSTALLATION, CONT'D: IMPORTANT! HEATED SHELF "DANGER - HOT" LABEL PLACEMENT

### 9. Important! Check That "Danger - Hot" Labels Are Properly Attached To Case.

- Shelves can get extremely hot and cause severe burns.
- Illustration below shows proper placement of "Danger - Hot" Labels.
- Two labels must be placed on each shelf and lower panel (as shown below).
- If labels are not properly attached, contact Structural Concepts regarding label P/N 20-11836.
- See **SCC TECHNICAL SERVICE CONTACT INFORMATION** section in manual for contact information.

Note: Illustrations Shown May Not Exactly Reflect Every Feature Or Option Of Your Particular Case.



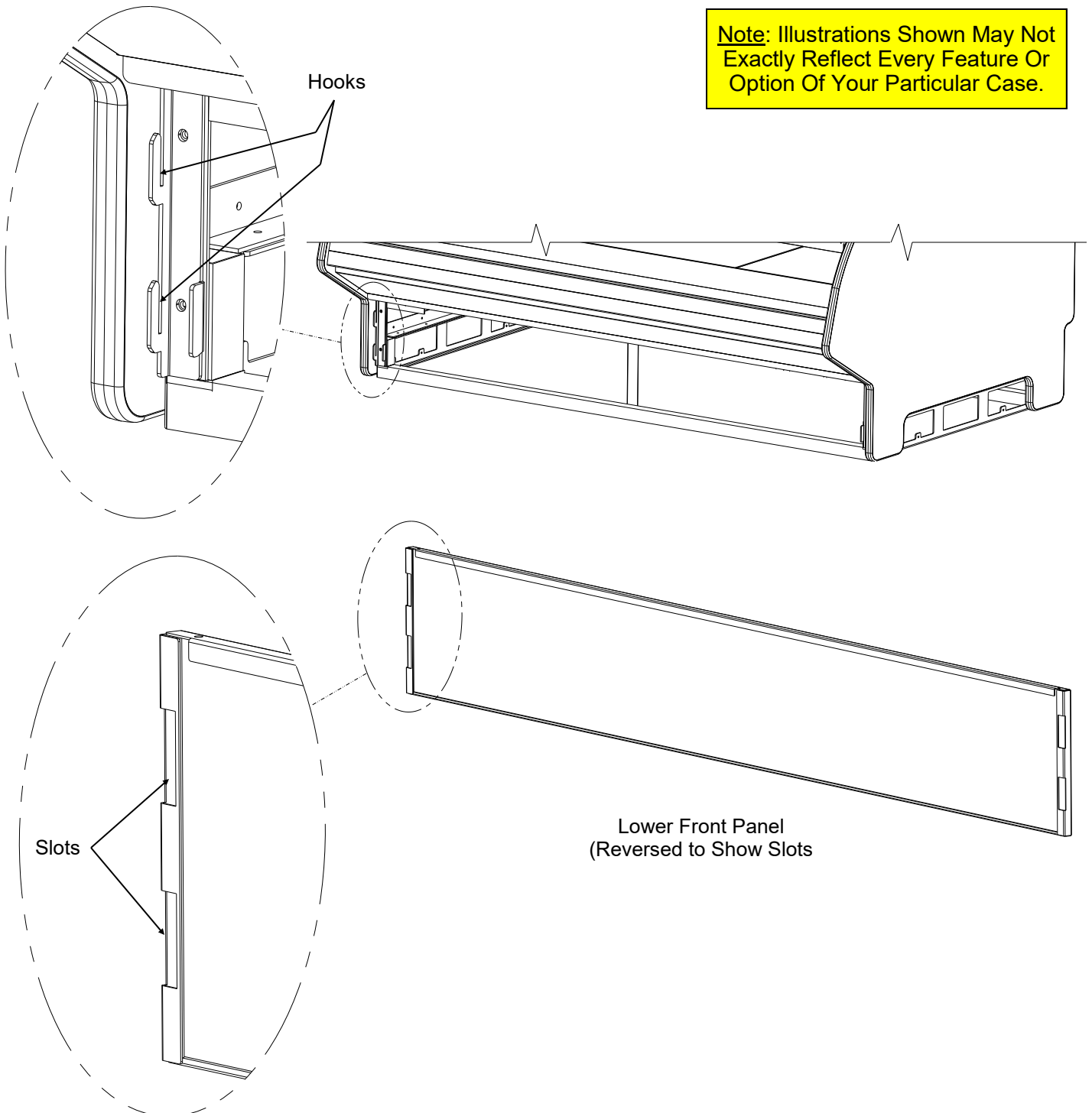
## REMOVING VERTICAL LOWER FRONT (OR REAR) PANELS

### **Removing Vertical Lower Front (or Rear) Panel**

- No screw removal is required to remove lower front panel.
- Simply lift lower front panel slots up and off case hooks.

- Replace in same manner it was removed.
- Illustrations shown may not exactly reflect every feature or option of your particular case.

**Note:** Illustrations Shown May Not Exactly Reflect Every Feature Or Option Of Your Particular Case.





**1. Merchandiser Daily Start-Up**

- Lift up hinged door at case front. All switches should be turned off.
- Temperature controls are pre-set at factory to recommended settings.
- **Caution! Deck, shelving and overhead incandescent lights are extremely hot! Do not touch unless dials have been turned off and case is cool!**
- Turn main power switch & lamp switch on. Pre-heat lights will illuminate (and stays on for approx. 30 minutes).
- After pre-heat light has turned off, place product on shelves. **Caution! Product must be placed ONLY on shelf surfaces. Do NOT place product on racks or steps; proper heat disbursement will NOT be attained!**
- **Caution!** Food MUST BE cooked PRIOR to being placed in the case. Food should be heated to a temperature of between 150 °F to 160 °F (65.6 °C - 71 °C) prior to placing it in case. **Food temperature must NOT be allowed to be below the FDA guideline of 140 °F (60 °C).**
- Use probe to check food temperature before placing in the case.
- After product is placed in the case, check product temperature with probe **AFTER ONE HOUR** to verify that proper food temperatures are being maintained.
- Heat settings have a maximum setting of “9” and a minimum setting of “1.” A setting of “0” turns heat OFF.
- **Note: User default settings are at “5”.**
- Adjust controller until desired product temperatures are reached. Should product temperatures be outside of range, adjust temperature controls for that particular area (shelf, deck or overhead) up or down by one number.
- Check food temperature again after one hour.
- Contact Structural Concepts if unable to attain proper settings. See last page in manual for contact information.

**2. Temperature Control Settings**

- Temperatures of all food products are to be at 140 °F to 165 °F (60 °C to 74 °C), for decks and shelves (including optional shelf #4).

**3. Operating Tips**

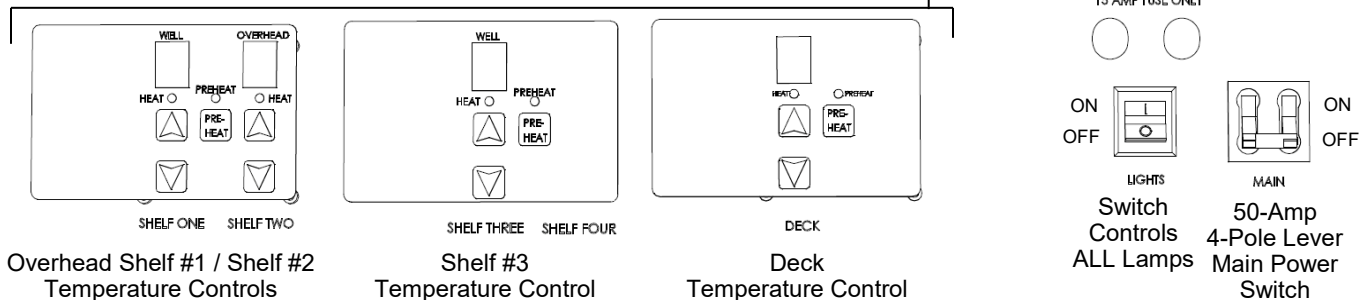
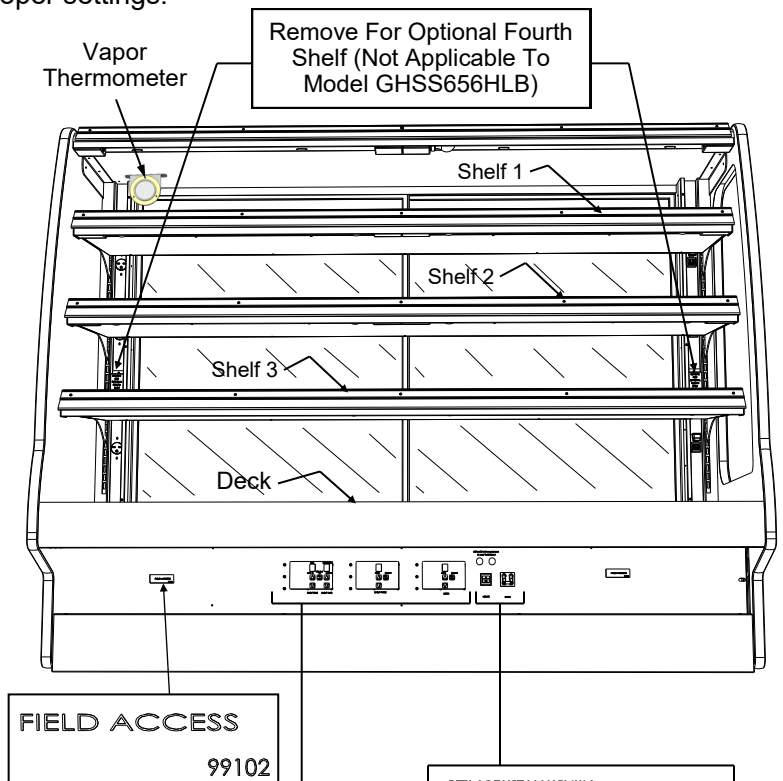
- When restocking, place new product at back and rotate older product to front of case.
- Display product expected to sell within 4-hours.
- **Clean up residue immediately.** Case will cause spills and debris to harden to the surface!

**4. Shutting Down Case**

- Remove all product from the case.
- Turn Main Power switch “OFF”.
- Allow case to cool for 45 min. before cleaning.
- See Cleaning Schedule for instructions.

**5. Optional 4-Shelf Unit**

- Case is wired for 4th shelf.
- Both receptacle and plug protective covers may be removed by accessing two (2) screws.
- See page 12 for faceplate layout of 4-shelf unit.



**START-UP & OPERATION - MODEL GHSS456HLB (REAR ACCESS) - AUTHORIZED PERSONNEL ONLY!**

**1. Merchandiser Daily Start-Up**

- Lift up hinged door at case front. All switches should be turned off.
- Temperature controls are pre-set at factory to recommended settings.
- **Caution! Deck, shelving and overhead incandescent lights are extremely hot! Do not touch unless dials have been turned off and case is cool!**
- Turn main power switch & lamp switch on. Pre-heat lights will illuminate (and stays on for approx. 30 minutes).
- After pre-heat light has turned off, place product on shelves. **Caution! Product must be placed ONLY on shelf surfaces. Do NOT place product on racks or steps; proper heat disbursement will NOT be attained!**
- **Caution!** Food MUST BE cooked PRIOR to being placed in the case. Food should be heated to a temperature of between 150 °F to 160 °F (65.6 °C - 71 °C) prior to placing it in case. **Food temperature must NOT be allowed to be below the FDA guideline of 140 °F (60 °C).**
- Use probe to check food temperature before placing in the case.
- After product is placed in the case, check product temperature with probe **AFTER ONE HOUR** to verify that proper food temperatures are being maintained.
- Heat settings have a maximum setting of “9” and a minimum setting of “1.” A setting of “0” turns heat OFF.
- **Note: User default settings are at “5”.**
- Adjust controller until desired product temperatures are reached. Should product temperatures be outside of range, adjust temperature controls for that particular area (shelf, deck or overhead) up or down by one number.
- Check food temperature again after one hour.
- Contact Structural Concepts if unable to attain proper settings. See last page in manual for contact information.

**2. Temperature Control Settings**

- Temperatures of all food products are to be at 140 °F to 165 °F (60 °C to 74 °C), for decks and shelves (including optional shelf #4).

**3. Operating Tips**

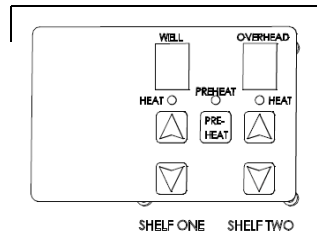
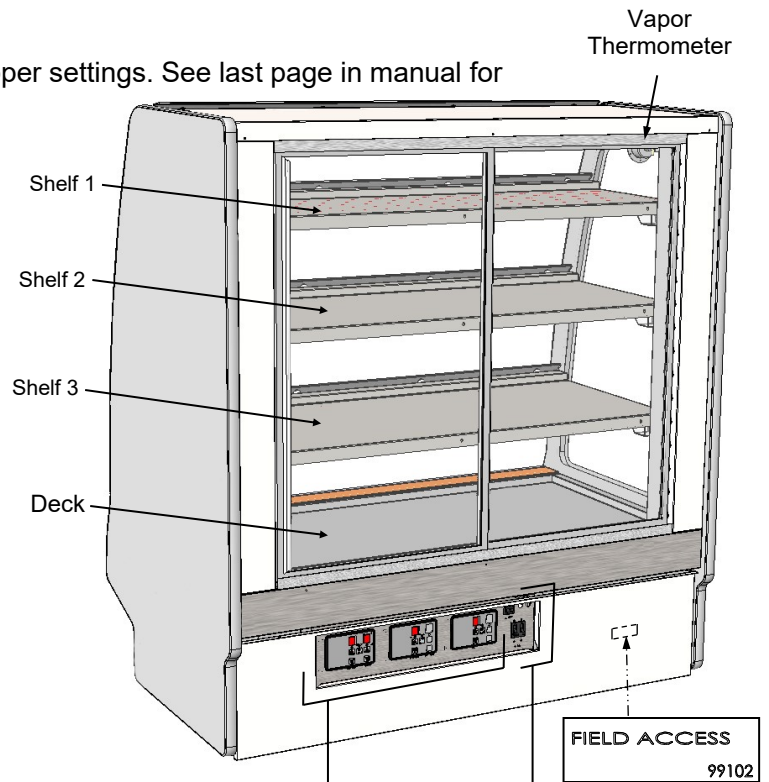
- When restocking, place new product at back and rotate older product to front of case.
- Display product expected to sell within 4-hours.
- **Clean up residue immediately.** Case will cause spills and debris to harden to the surface!

**4. Shutting Down Case**

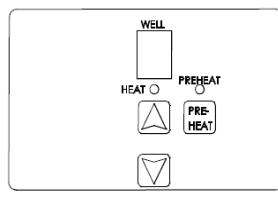
- Remove all product from the case.
- Turn Main Power Switch “OFF”.
- Allow case to cool for 45 min. before cleaning.
- See Cleaning Schedule for instructions.

**5. Optional 4-Shelf Unit**

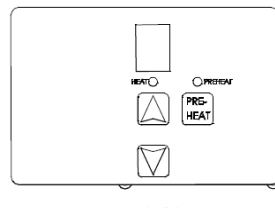
- Case is wired for 4th shelf.
- Both receptacle and plug protective covers may be removed by accessing two (2) screws.



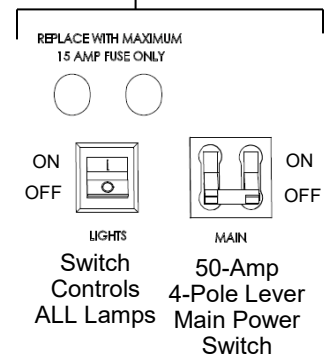
Overhead Shelf #1 / Shelf #2 Temperature Controls



Shelf #3 Temperature Control



Deck Temperature Control



# START-UP & OPERATION - MODEL GHSS460HLB - **AUTHORIZED PERSONNEL ONLY!**

## 1. Merchandiser Daily Start-Up

- Lift up hinged door at case front. All switches should be turned off.
- Temperature controls are pre-set at factory to recommended settings.
- **Caution! Deck, shelving and overhead incandescent lights are extremely hot! Do not touch unless dials have been turned off and case is cool!**
- Turn main power switch & lamp switch on. Pre-heat lights will illuminate (and stays on for approx. 30 minutes).
- After pre-heat light has turned off, place product on shelves. **Caution! Product must be placed ONLY on shelf surfaces. Do NOT place product on racks or steps; proper heat disbursement will NOT be attained!**
- **Caution!** Food MUST BE cooked PRIOR to being placed in the case. Food should be heated to a temperature of between 150 °F to 160 °F (65.6 °C - 71 °C) prior to placing it in case. **Food temperature must NOT be allowed to be below the FDA guideline of 140 °F (60 °C).**
- Use probe to check food temperature before placing in the case.
- After product is placed in the case, check product temperature with probe **AFTER ONE HOUR** to verify that proper food temperatures are being maintained.
- Heat settings have a maximum setting of “9” and a minimum setting of “1.” A setting of “0” turns heat OFF.
- **Note: User default settings are at “5”.**
- Adjust controller until desired product temperatures are reached. Should product temperatures be outside of range, adjust temperature controls for that particular area (shelf, deck or overhead) up or down by one number.
- Check food temperature again after one hour.
- Contact Structural Concepts if unable to attain proper settings. See last page in manual for contact information.

## 2. Temperature Control Settings

- Temperatures of all food products are to be at 140 °F to 165 °F (60 °C to 74 °C), for decks and shelves (including optional shelf #4).

## 3. Operating Tips

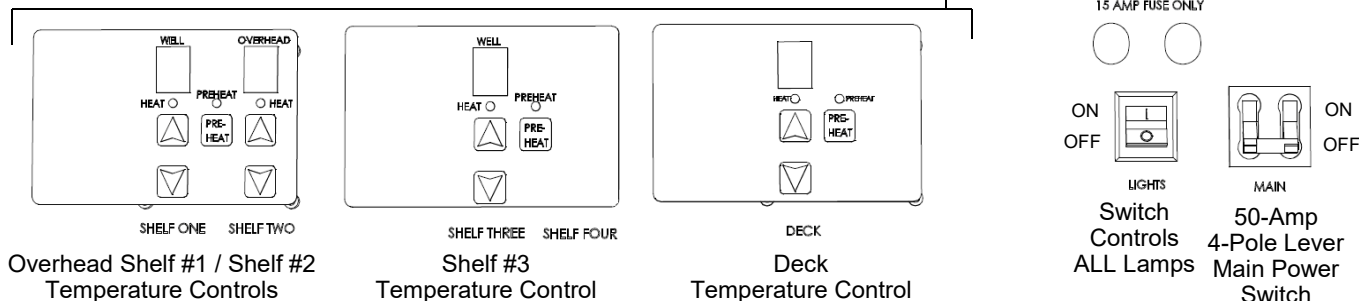
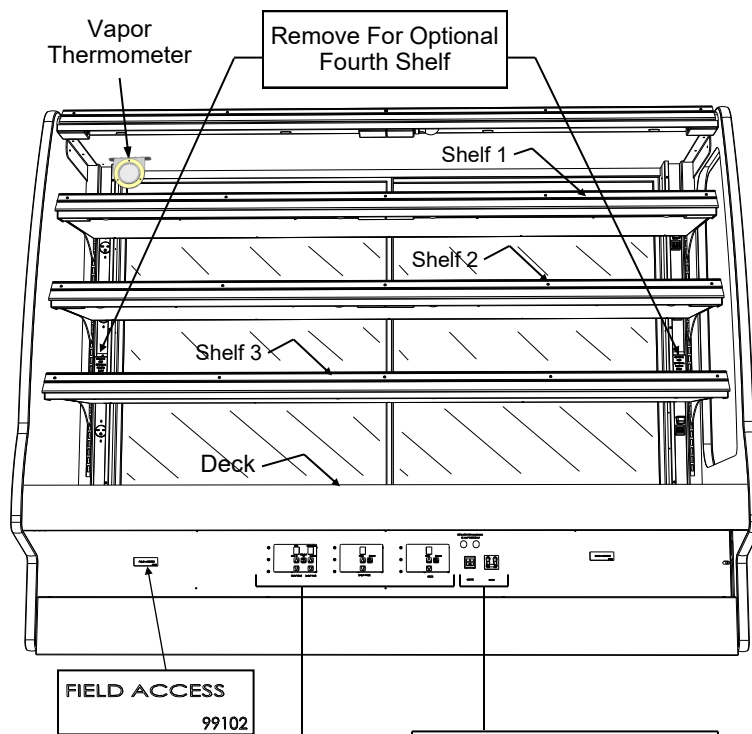
- When restocking, place new product at back and rotate older product to front of case.
- Display product expected to sell within 4-hours.
- **Clean up residue immediately.** Case will cause spills and debris to harden to the surface!

## 4. Shutting Down Case

- Remove all product from the case.
- Turn Main Power Switch “OFF”.
- Allow case to cool for 45 min. before cleaning.
- See Cleaning Schedule for instructions.

## 5. Optional 4-Shelf Unit

- Case is wired for 4th shelf.
- Both receptacle and plug protective covers may be removed by accessing two (2) screws.
- See page 12 for faceplate layout of 4-shelf unit.



# START-UP & OPERATION - MODEL GHSS660H - **AUTHORIZED PERSONNEL ONLY!**

## 1. Merchandiser Daily Start-Up

- Lift up hinged door at case front. All switches should be turned off.
- Temperature controls are pre-set at factory to recommended settings.
- **Caution! Deck, shelving and overhead incandescent lights are extremely hot! Do not touch unless dials have been turned off and case is cool!**
- Turn main power switch & lamp switch on. Pre-heat lights will illuminate (and stays on for approx. 30 minutes).
- After pre-heat light has turned off, place product on shelves. **Caution! Product must be placed ONLY on shelf surfaces. Do NOT place product on racks or steps; proper heat disbursement will NOT be attained!**
- **Caution!** Food MUST BE cooked PRIOR to being placed in the case. Food should be heated to a temperature of between 150 °F to 160 °F (65.6 °C - 71 °C) prior to placing it in case. **Food temperature must NOT be allowed to be below the FDA guideline of 140 °F (60 °C).**
- Use probe to check food temperature before placing in the case.
- After product is placed in the case, check product temperature with probe **AFTER ONE HOUR** to verify that proper food temperatures are being maintained.
- Heat settings have a maximum setting of “9” and a minimum setting of “1.” A setting of “0” turns heat OFF.
- **Note: User default settings are at “5”.**
- Adjust controller until desired product temperatures are reached. Should product temperatures be outside of range, adjust temperature controls for that particular area (shelf, deck or overhead) up or down by one number.
- Check food temperature again after one hour.
- Contact Structural Concepts if unable to attain proper settings. See last page in manual for contact information.

## 2. Temperature Control Settings

- Temperatures of all food products are to be at 140 °F to 165 °F (60 °C to 74 °C), for decks and shelves (including optional shelf #4).

## 3. Operating Tips

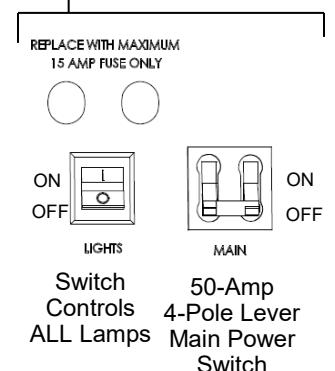
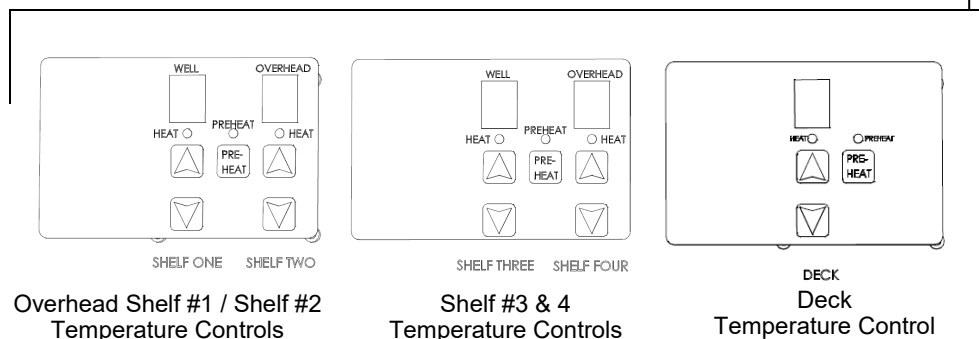
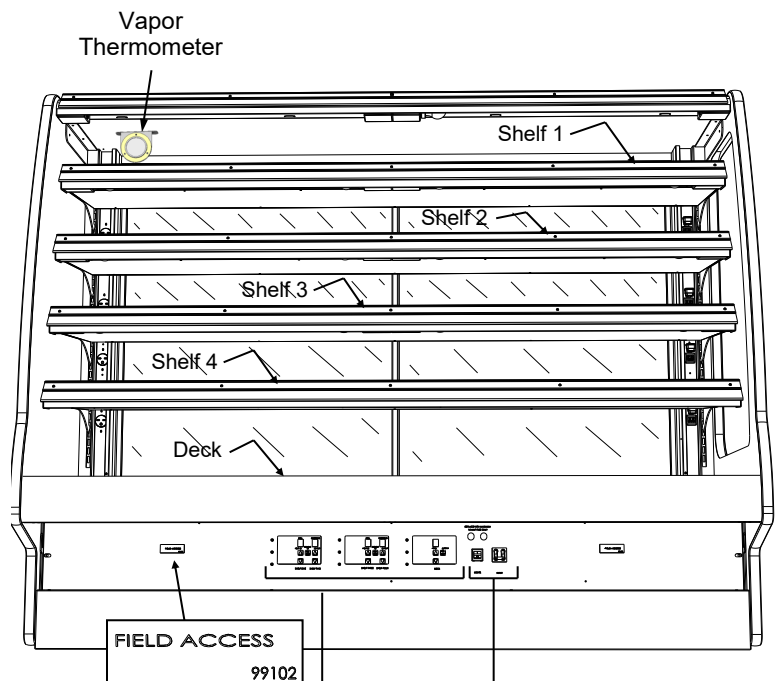
- When restocking, place new product at back and rotate older product to front of case.
- Display product expected to sell within 4-hours.
- **Clean up residue immediately.** Case will cause spills and debris to harden to the surface!

## 4. Shutting Down Case

- Remove all product from the case.
- Turn Main Power Switch “OFF”.
- Allow case to cool for 45 min. before cleaning.
- See Cleaning Schedule for instructions.

## 5. 4-Shelf Unit (This Model) vs. 3-Shelf Unit

- See previous pages for 3-shelf units.
- 3-shelf units are pre-wired for a 4th shelf.



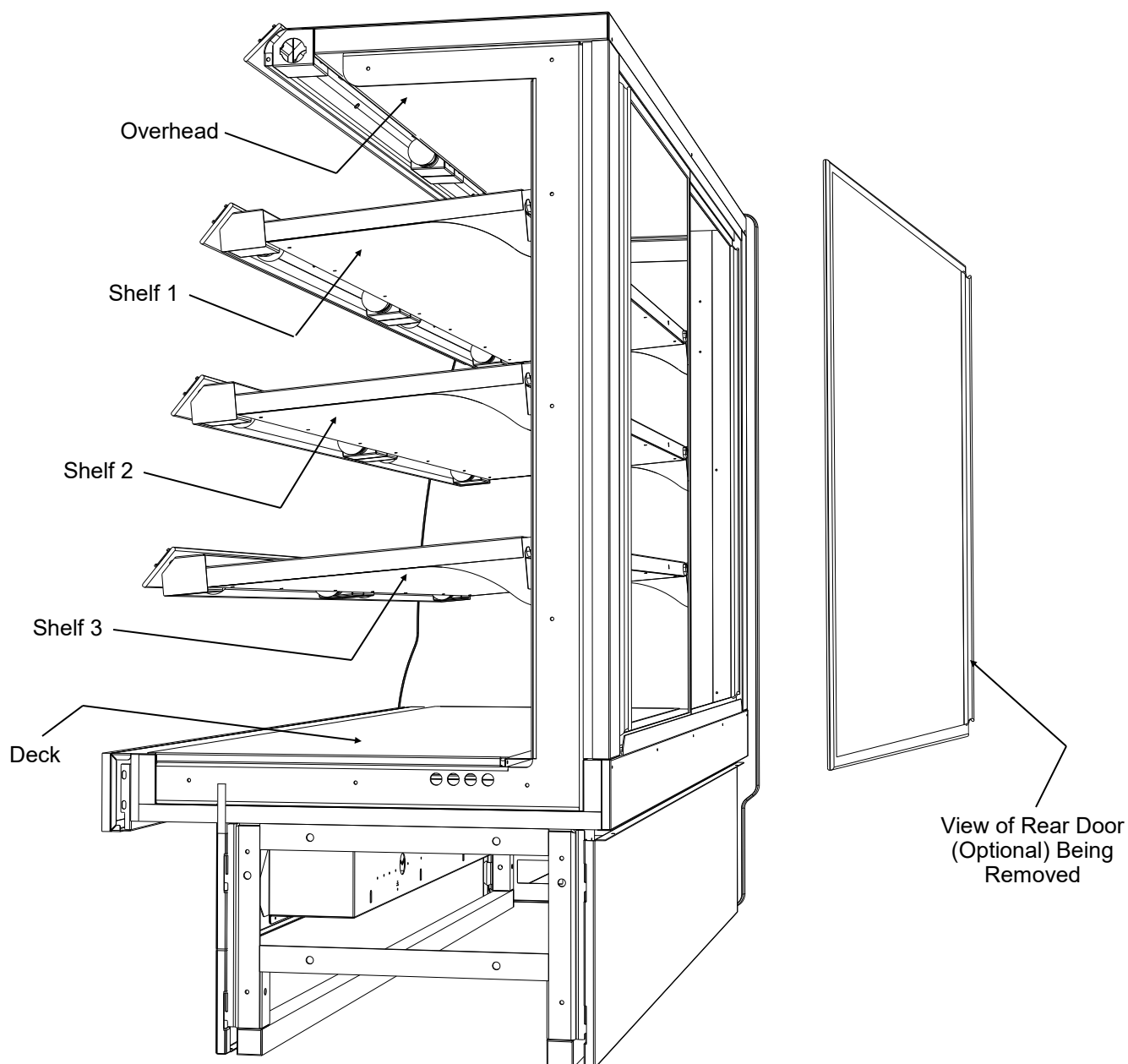
## DOOR REMOVAL (OPTIONAL) / DECK, SHELVING, OVERHEAD DIFFERENTIATION

### 1. Removing The (Optional) Rear Doors

- See illustration below.
- Move rear doors toward the center of case.
- Individually lift each door up toward the top of case and pivot bottom of the door out.
- **Caution!** Gently set doors down to avoid marring, scraping, scratching or breakage.

### 2. Overhead, Shelving & Deck

- See illustration below for location of each.
- Temperature settings may vary between overhead, shelving and deck.
- **Caution!** Surfaces are very hot! Before servicing or cleaning make certain temperature control settings are turned completely off and case is allowed to cool for 45 minutes.
- **Note:** Illustration below reflects 3-shelf unit. Depending upon options chosen, unit may have four (4) shelves.



## INCANDESCENT LAMP FIXTURES / REPLACEMENT GUIDELINES

### 1. Lamp Fixtures

Removal of lamps:

- Caution! Lamps are extremely hot! Turn off lamp switch and allow to cool before removing lamps.
- Grasp lamp firmly; carefully unscrew from socket.
- See illustration below.

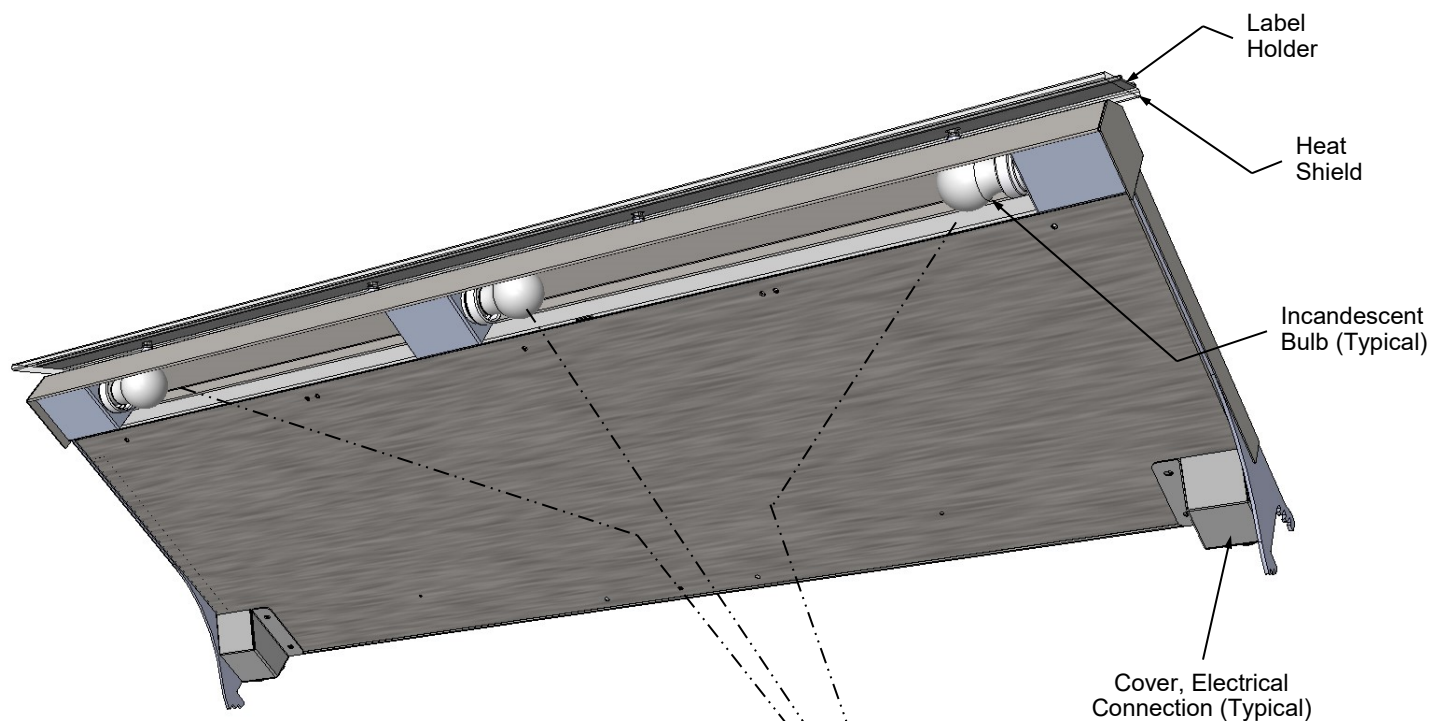
Installation of lamp:

- Grasp lamp firmly and carefully screw into socket.
- Turn on Lamp Switch.
- See illustration below

### 2. Replacement Guidelines

- Incandescent lamps reflect specific size, shape and overall design.
- Any replacements must meet factory specifications.
- Note: Labels are placed near each lamp. Replace lamps ONLY with those specified.
- See illustration below-left for ACTUAL LABEL that specifies allowable lamp replacements.

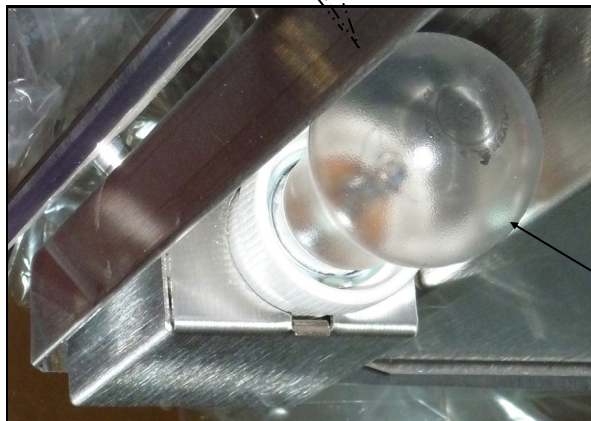
>> See next page for LED light fixture information.



LAMPS ARE TREATED TO  
RESIST SHATTERING  
REPLACE WITH SIMILARLY  
TREATED LAMP  
60 WATT MAX

20-16489

Note: Labels Are Placed Near  
Each Lamp. Replace Lamps  
ONLY With Those Specified.



Note 1: Depending  
Upon Style and  
Option Chosen,  
Incandescent Bulb  
Size and Shape  
May Vary.

**1. Optional LED Light Fixtures and Switch**

- Light switch (that controls incandescent and LED lights in same front panel as thermostats).
- Turning on incandescent lights will also turn on LED lights.
- See **STARTUP & OPERATION** section for general layout and light switch location.

**2. LED Style Light Fixtures**

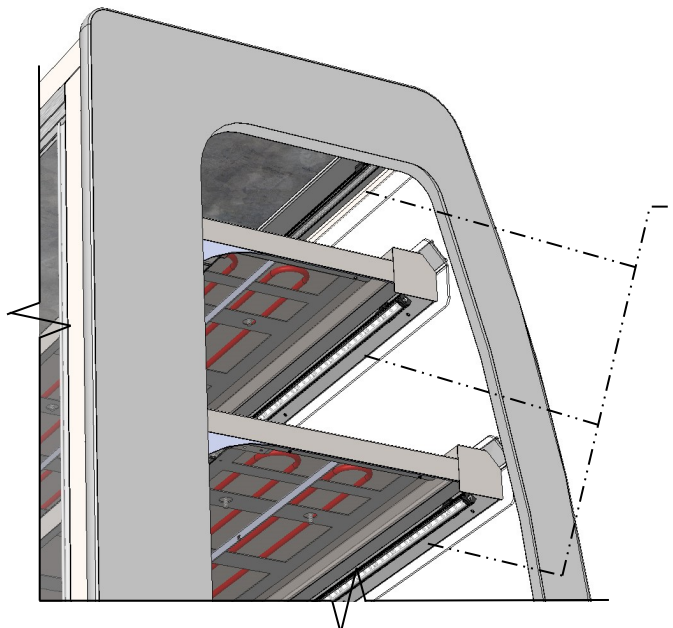
*Removal of Faulty LED Lights:*

- 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.

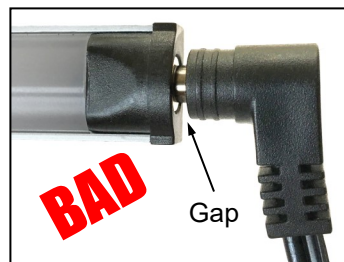
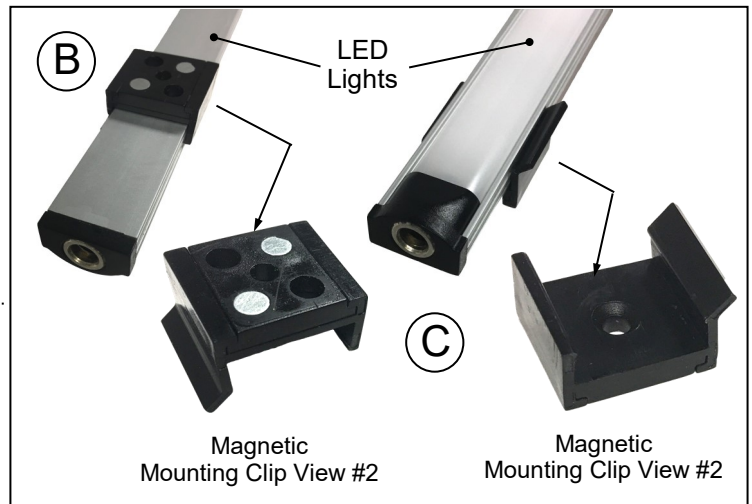
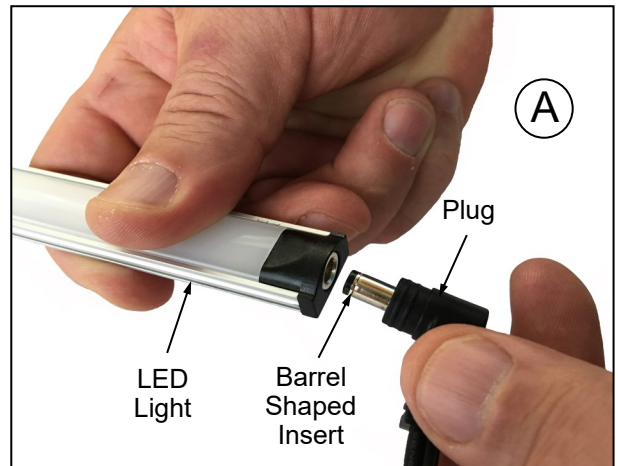


View of LED Lights At Underside of Header and Shelving (On Certain Models)

- 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.

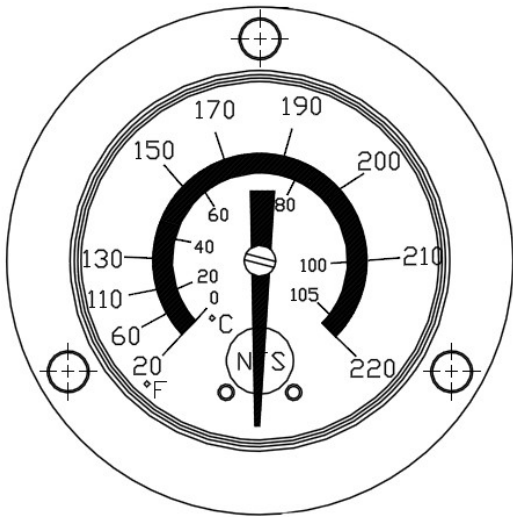
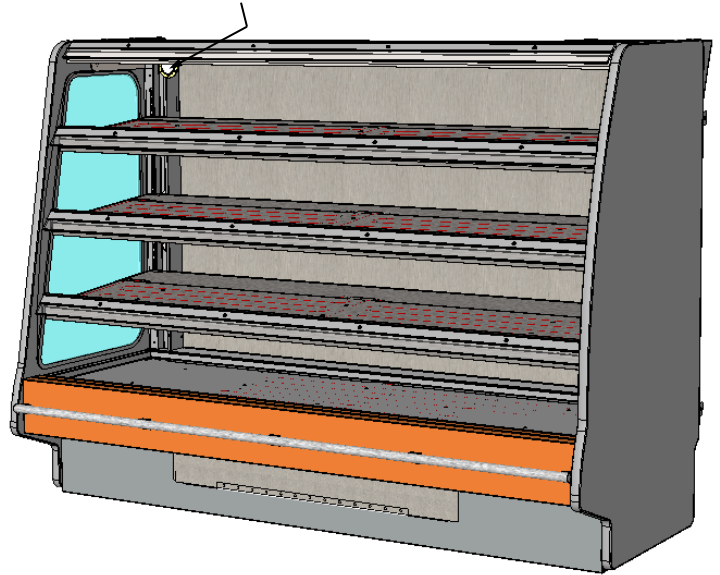


# VAPOR THERMOMETER

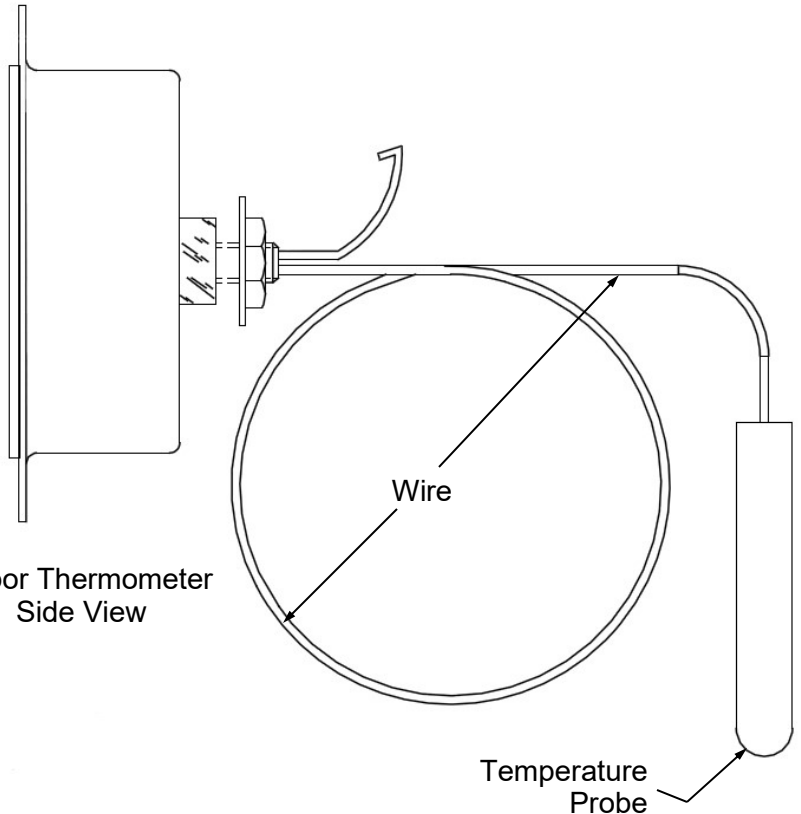
## Vapor Thermometers

- Vapor thermometers in merchandisers reflect internal air temperature only (not actual food temperature).
- Temperature range is from 20 °F to 220 °F (-6 °C to 105 °C)
- Use probe thermometers to determine actual product temperatures.
- See view of random case at right for general location of vapor thermometer.
- Illustrations below show dial design and temperature range.

General Location of Vapor Thermometer



Vapor Thermometer Front View



Vapor Thermometer Side View


Temperature Probe

RANGE	MOUNTING	PART #
20° TO 220 °F ; TO -6° TO 105 °C	FRONT FLANGE	76947



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

- Serial labels are located near the electrical access on your case.
- Serial labels contain electrical, temperature & refrigeration 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 images below for samples of both refrigerated and non-refrigerated serial labels.





888 E. Porter Rd · Muskegon, MI 49441

**ENCORE<sup>®</sup>** MODEL HV74RSS SCROLL  
SERIES SERIAL NO.

**FOR PARTS AND SERVICE**  
CALL 1-800-433-9489

**SAMPLE ONLY**


  3048256 CONFORMS TO UL STD 471 CONFORMS TO NSF STD 7 CERTIFIED TO CAN/CSA STD C22.2 NO 120	ELECTRICAL RATING REFRIGERANT DESIGN PRESSURE MINIMUM CIRCUIT MAXIMUM OVERCURRENT	120/1/60 24A R404A AMOUNT ?? OZ HIGH 450 LOW 200 30A 30A
---	---	--

**SAMPLE ONLY**

Super Heat Temp	8-10°F
BTUH Requirements	9,738 BTUH @ 20° F SST
Defrost	6 defrosts per day, 45° F termination, 45 min. failsafe

**SAMPLE ONLY**

----- Sample Serial Label For Refrigerated Case -----




888 E. Porter Rd · Muskegon, MI 49441

**Addenda<sup>®</sup>** PC5682 txtRemote  
txtSerialNumber

120 VOLTS 60 HZ SINGLE PHASE 1.84AMP

**FOR PARTS OR SERVICE CALL**  
**STRUCTURAL CONCEPTS**  
AT  
1-800-433-9489

**SAMPLE ONLY**

 3048256 CONFORMS TO UL STD 65 CERTIFIED TO CAN/CSA STD C22.2 NO 120	N/A
---	-----

----- Sample Serial Label For Non-Refrigerated Case -----

**CLEANING SCHEDULE (DAILY / WEEKLY) - CASE EXTERIOR**

Cleaning	Daily	Weekly	Task
Case Exterior	X		<p><b><u>Rear Sliding Glass Doors:</u></b></p> <ul style="list-style-type: none"> <li>• Clean with a household or commercial glass cleaner.</li> </ul>
	X		<p><b><u>Stainless Steel (Case Top, Sides, Front, Rear, Etc.):</u></b></p> <ul style="list-style-type: none"> <li>• See <b>CLEANING SCHEDULE (DAILY/WEEKLY) - CASE EXTERIOR &amp; INTERIOR: STAINLESS STEEL</b> section in this operating manual.</li> </ul>
		X	<p><b><u>Under Case Cleaning:</u></b></p> <ul style="list-style-type: none"> <li>• Remove rear panel (8 screws) or front panel (2 screws).</li> <li>• Clean under case with vacuum.</li> </ul>

**Caution! TURN MAIN POWER SWITCH TO “OFF” and allow case to cool at least 45 minutes before cleaning case interior!**

Cleaning	Daily	Weekly	Task
Case Interior	X		<b><u>Glass:</u></b> Clean inside surfaces of rear door and sides of case with a household or commercial glass cleaner. Wipe dry with clean cloth or paper towel.
	X		<b><u>Polycarbonate Heat Shields (Above Each Shelf):</u></b> <ul style="list-style-type: none"> <li>• Use a liquid detergent and clean with a clean cloth.</li> <li>• Caution! Do not use glass cleaner on polycarbonate heat shields. Such cleaning solution will cause heat shield to become cloudy and crackled.</li> </ul>
	X		<b><u>Stainless Steel (Case Top, Sides, Front, Rear, Etc.):</u></b> See <b>CLEANING SCHEDULE (DAILY/WEEKLY) - CASE EXTERIOR &amp; INTERIOR: STAINLESS STEEL</b> section in this operating manual.
	X		<b><u>Shelves and Decks:</u></b> <b><u>Spills (Unhardened):</u></b> Clean immediately to prevent hardening or “baking” of spills. Use a dry cloth, folded over several times to clean up spills; this will prevent being burned due to steam from wet cloth on the hot surfaces. <b><u>Spills (Hardened):</u></b> Clean hardened spills with a damp cloth dipped in household cleaner. For stubborn stains, use firm-bristled nylon brush or scouring pad dipped in warm, soapy water. Use spray bottle with water and clean paper towel to wipe up residue.

## CLEANING SCHEDULE (DAILY/WEEKLY) - CASE EXTERIOR & INTERIOR: STAINLESS STEEL

### General Stainless Steel Surface Cleaning (To Be Performed As Often As Needed):

- Certain grades of stainless steel, and some are more prone to corrosion than others.
- Stainless steel can become exposed to a wide variety of contaminants, which if left untreated can cause stains and rust.
- Stainless steel requires a specific cleaning procedure to maintain its sheen and remain rust-free.
- Wash with a solution of liquid dishwashing detergent and hot water.
- Rinse with pure hot water from spray bottle. Wipe with clean sponge. This will remove soap residue that can lodge in stainless steel's microscopic grooves, causing rust.
- Dry with clean, soft cloth or paper towel.
- ***Caution!*** To prevent rust, you ***MUST*** rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.
- ***Caution!*** Never clean with scouring powder or steel wool as they can mar, scratch and/or erode the surface of stainless steel. When the surface properties of stainless steel have been compromised, rust can form.

### Brightening:

- **Method 1:** Brighten by polishing with a soft cloth or sponge with a solution of one part vinegar to 2 parts water in a spray bottle.
- **Method 2:** Sprinkle baking soda on sponge and rub gently with soft cloth or sponge.
- ***Caution!*** To prevent rust, you ***MUST*** rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.
- Dry with clean, soft cloth or paper towel.

### Removing Streaks or Stains:

- **Method 1:** Place two teaspoons of rubbing alcohol on a microfiber cloth or pad. Rub the cloth along the grain of the appliance until the entire area has been wiped. The rubbing alcohol will air dry itself.
- **Method 2:** Dip soft cloth or sponge in club soda and rub gently over area of concern.
- ***Caution!*** To prevent rust, you ***MUST*** rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.
- Dry with clean, soft cloth or paper towel.

### Polishing:

- Place a dab of olive oil onto clean soft cloth. Spread over area until a light sheen is observed. Use pressure to "work the oil" into the small grooves in the surface. Apply firm, steady pressure using small circular motions.
  - > **Dry buff:** Remove excess oil with clean cloth or paper towel using small circular motions.
  - > **Wet buff:** Use an ounce or white vinegar with clean cloth or paper towel using small circular motions.
  - > Continue wiping until oily finish has been removed.
- ***Caution!*** To prevent rust, you ***MUST*** rinse with pure hot water from a spray bottle while wiping with clean sponge after EACH cleaning.
- Dry with clean, soft cloth or paper towel.

### Removing Rust:

- If rust has begun to form, there are a variety of products that can treat it.
- Among these are CLR® (calcium, lime and rust remover) and Chemetall Oakite 33 (rust, oxides and scale remover).
- ***Caution!*** To prevent food contamination, personal injury or further corrosion, carefully observe and follow the rust removing product's precautions and instructions.

## TROUBLESHOOTING

CASE ISSUES	TROUBLESHOOTING METHOD
Product is drying out	<p>Make certain that product has not exceeded allotted display time.</p> <p><b><i>Authorized Personnel Only:</i></b></p> <ul style="list-style-type: none"> <li>Adjust temperature control settings. See <b>START-UP, OPERATION AND SHUTDOWN</b> section for your model in this manual for instructions.</li> </ul>
Product temperature deviates outside of acceptable range (product either overheating or too cool)	<ul style="list-style-type: none"> <li>If deck or shelving contains few or no products, a temperature reading that is outside of range may be experienced.</li> <li>When case is properly stocked, air is trapped between product; temperatures should maintain proper range.</li> <li>Probe thermometer may be faulty. Use a stainless steel stem-type thermometer with dial of at least a 1-inch internal diameter and test product. Accuracy to within 1.8 °F / 1 °C is acceptable.</li> </ul> <p><b><i>Authorized Personnel Only:</i></b></p> <ul style="list-style-type: none"> <li>Adjust temperature control settings: See <b>START-UP, OPERATION AND SHUTDOWN</b> section for your model in this manual for instructions.</li> </ul>
System is not operating at all	<p>Check that unit is properly plugged in.</p> <hr/> <p>Confirm that the MAIN power switch is on.</p> <hr/> <p>If power cord is used, confirm that it is plugged into outlet.</p> <hr/> <p><b><i>Authorized Personnel Only:</i></b> Confirm that the utility power is on.</p> <hr/> <p><b><i>Authorized Personnel Only:</i></b> Check the circuit breaker box for tripped circuits.</p> <hr/> <p><b><i>Authorized Personnel Only:</i></b> GFCI may be required. If N.E.C. (National Electric Code) or your local code requires GFCI (Ground Fault Circuit Interrupter) protection, you <b>MUST</b> use a GFCI breaker in lieu of a GFCI receptacle.</p>
Product is not heating at all	<p>Heating elements may be malfunctioning.</p> <ul style="list-style-type: none"> <li>Call Structural Concepts Technical Service (at last page of this manual).</li> <li>Move product to separate location until unit is repaired.</li> </ul>
Case lights are not working	<p><b><i>Caution! Case is extremely hot hot! Turn off main power switch and allow case to cool for 45 minutes before touching light bulbs.</i></b></p> <ul style="list-style-type: none"> <li>Be sure <b>ALL</b> lights are screwed in properly.</li> <li>Check that bulbs are not burned out.</li> </ul>

## 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 of Goods. Notwithstanding the foregoing, any warranty with respect to such parts of 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.