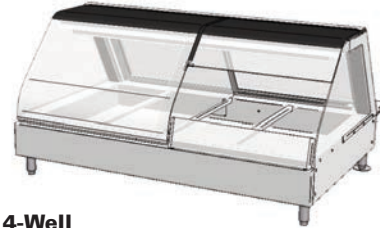


Operations & Service Manual

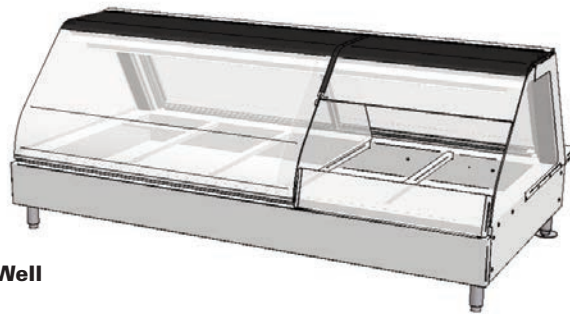
KD-FSM & KD-SSM
SERIES DISPLAY
CASES



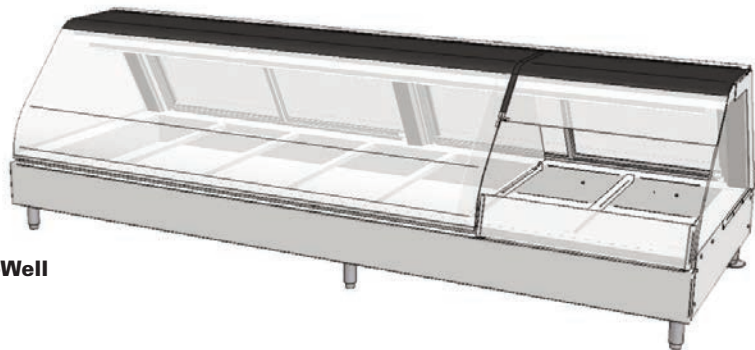
3-Well



4-Well



5-Well



7-Well

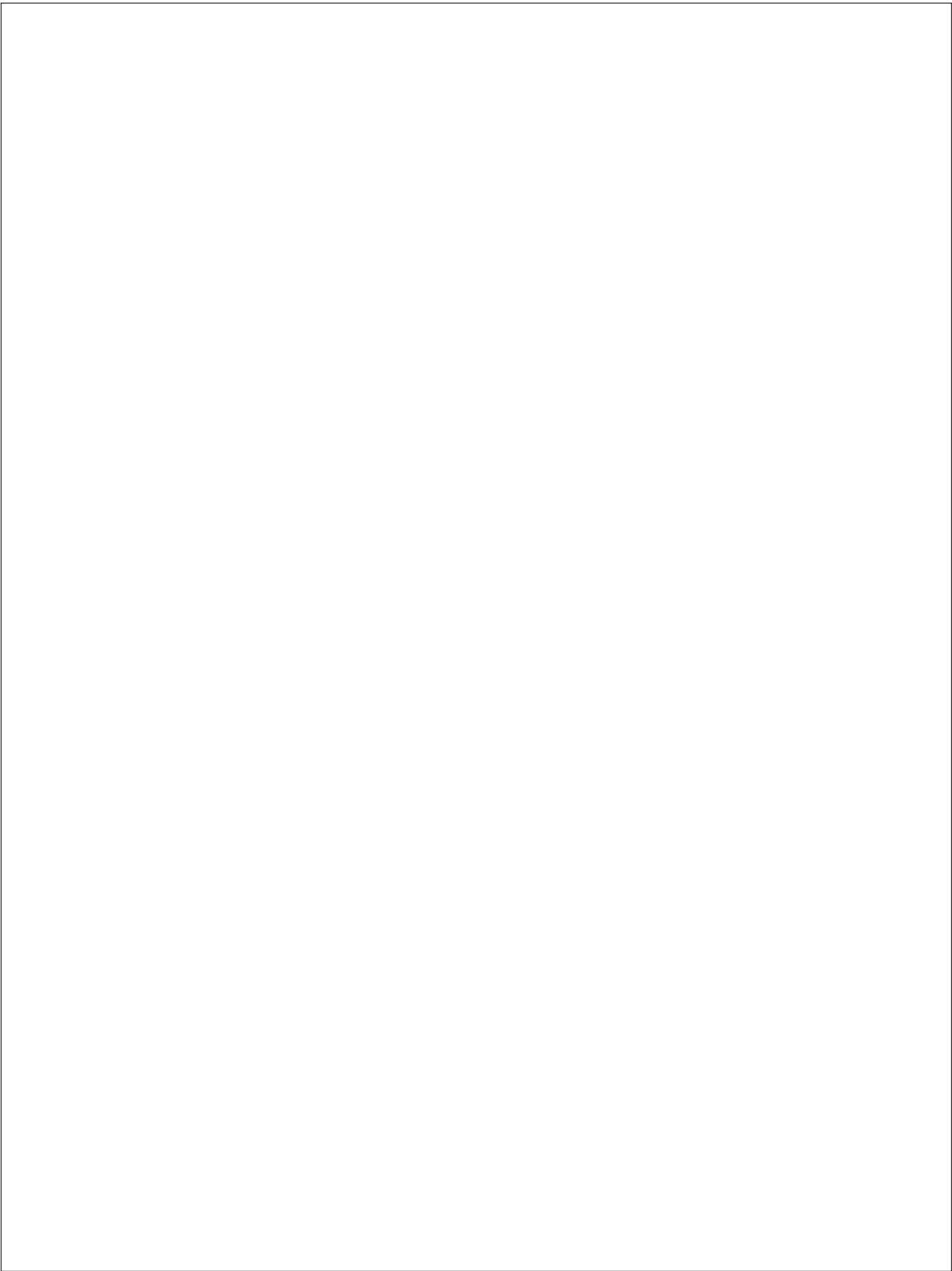


CAUTION: Read this Manual before using this appliance.



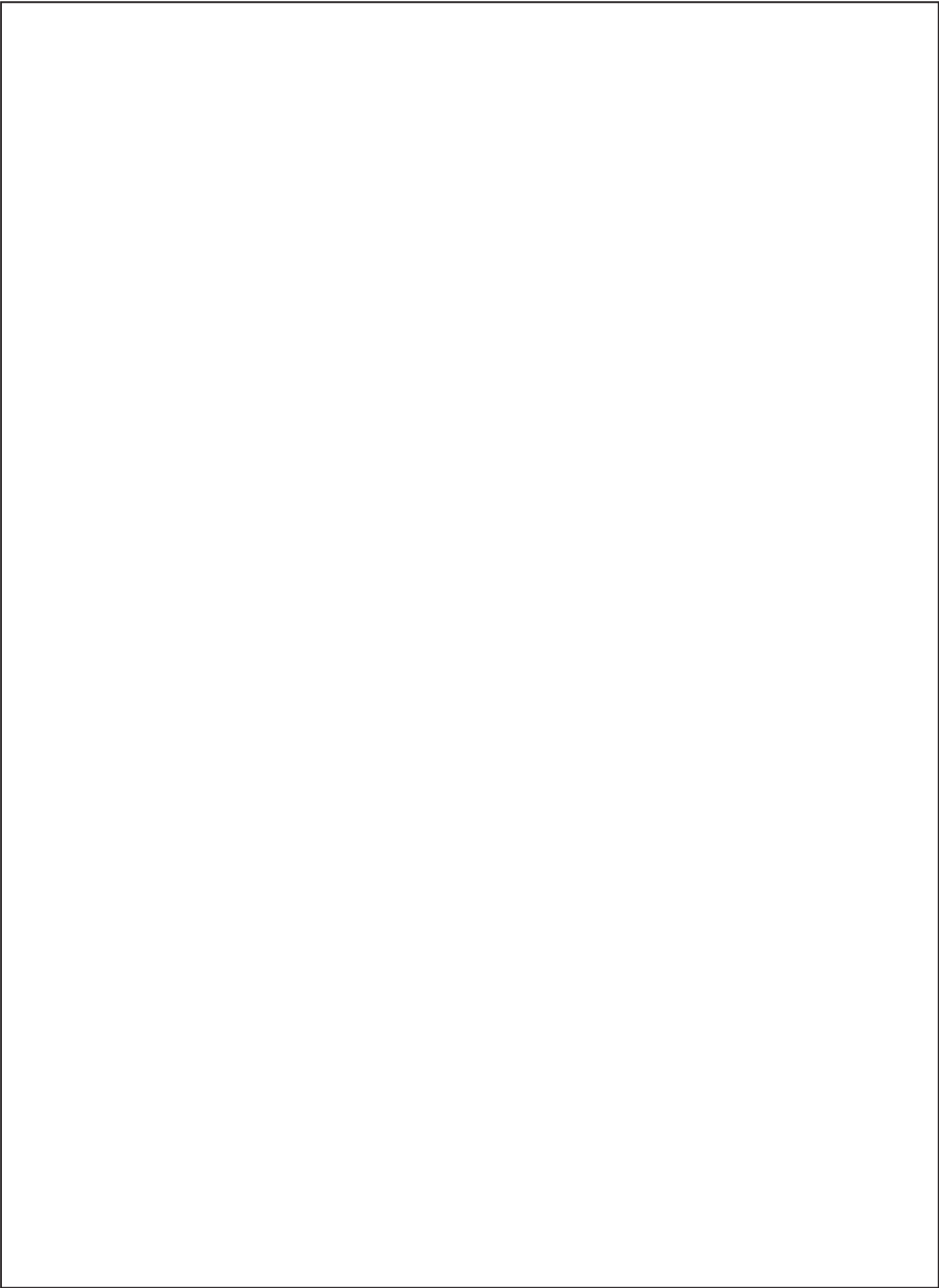
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Form 66204 (Rel. Jun 2017, Rev. A)



LIMITED WARRANTY

- Subject to the terms and conditions of this Limited Warranty as herein stated, Equipment and Parts purchased new, from an authorized representative, are warranted as to defects in material or workmanship for a period of twenty-four (24) months from the date of installation, provided, however, that with regard to labor costs in connection with this warranty, see below. All installations must be made by a qualified kitchen equipment service agent in accordance with all applicable codes and/or regulations in the jurisdiction in which installed. Limited warranty coverage is extended to the original owner only and is void if the unit is resold.
- During the Limited Warranty period, units will be replaced or reconditioned, at manufacturer's factory, any part or parts of this unit which manufacturer's inspectors judge defective, provided the unit has been properly installed, subjected to normal usage, and operated and serviced properly. This Limited Warranty does not cover cosmetic damage, and damage due to acts of God, accident, misuse, alteration, negligence, abuse of the unit or the use of unorthodox repair methods. All parts replaced under this Limited Warranty carry only the unexpired term of this Limited Warranty. Limited Warranty service may be furnished only by an authorized service agents.
- If Limited Warranty service is requested, factory-authorized service representatives will be dispatched to repair, recondition, replace or inspect subject units with such labor being rendered without cost to owner for twenty-four (24) months from the date of installation. Otherwise, service, including labor and transportation charges or other expenses, in connection with the removal or installation of any part or parts supplied under this Limited Warranty, are specified on the original sales contract between the purchaser and the authorized representative.
- **Failure to use manufacturer OEM replacement Parts and Filters may void the factory warranty.**
- The Manufacturer reserves the right to change or improve its equipment and parts in any way without obligation to alter such equipment or parts previously manufactured.
- The Manufacturer makes no further warranties, express or implied including implied warranties of merchantability or fitness for a particular purpose, and has no other obligation or liability not specifically stated herein.
- Repair or replacement as provided under this Limited Warranty is the exclusive remedy. Manufacturer shall not be liable for any incidental or consequential damages for breach of any express or implied warranty on this product, except to the extent prohibited by applicable law. Any implied warranty of merchantability or fitness for a particular purpose on this product is limited in duration to the duration of this limited warranty.
- Used equipment or parts, or equipment and parts, not purchased from an authorized representative, carry no warranties, express or implied.



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Safety

Safety Overview

The instructions contained in this manual have been prepared to aid you in learning the proper procedures for installing, operating and servicing your new **KitDelSM KD-FSM or KD-SSM Series Heated Deli Display Case**.

Throughout this manual, safety precautions are identified through the use of the safety alert symbol and three signal words: **DANGER**, **WARNING** and **CAUTION**. All safety alert information precedes the tasks to which they apply. Suggested, recommended, or other noteworthy information is identified through the use of **NOTES**, or be noted as **IMPORTANT!**. Additionally, certain words are used to indicate a specific meaning or to add emphasis as follows:

- Shall:** understood to be mandatory.
- Should:** understood to be advisory.
- May:** understood to be permissive.
- Will:** indicates a future event or condition to occur.

 **Hazard Alert Symbols** are used in conjunction with key words **DANGER**, **WARNING**, and **CAUTION** to alert user to potential personal injury hazards and/or poor operating practices. These will immediately precede precautionary measures pertaining to such hazards or practices. Adhere to all safety messages, following these symbols to avoid possible injury, or even death. Failure to do so may also void the factory warranty.

DANGER

- Indicates an imminently hazardous situation which, if not avoided, will result in serious personal injury, even death.

WARNING

- Indicates a potentially hazardous situation which, if not avoided, could result in serious injury, even death.

CAUTION

- Indicates a potentially hazardous situation which, if not avoided, may result in minor to moderate injury. This notification is also used as an alert to unsafe practices.

CAUTION

- If used without the safety alert symbol, this alert indicates a potentially hazardous situation which, if not avoided, may result in equipment and/or property damage, and may void the factory warranty.

NOTE:

- Identifies suggested, recommended, or other important information.

Specific Safety Precautions

For your safety, please observe the following precautions when operating or servicing this equipment. Read the following important safety information to avoid personal injury and/or damage to the equipment.

DANGER

- Turn off the unit and shutdown supply power at the breaker panel, or service disconnect, before cleaning or performing maintenance.
- **DO NOT ADD WATER OR OTHER LIQUIDS to the food well!** It is not liquid-tight; liquid can leak into the heating element compartment underneath, or contact other electrical components.
- The appliance is **NOT** wash-down safe ... **DO NOT** spray the interior or exterior with water from a hose.
- Failure to comply with these **DANGER** notices will result serious injury (even death), equipment or property damage and void the factory warranty.

WARNING

- Prior to installation, consult a qualified electrician to ensure that installation will comply with all electrical requirements and codes.
- **The unit must be adequately and properly grounded. Improper grounding may result in electrical shock to the user. Always refer to local electrical code to ensure proper grounding of this or any other electrical equipment.**
- **This appliance is factory wired for a specific power supply. Check the rating label on the unit to determine correct power supply required. Always consult with an electrician, or other qualified service technician, to ensure that circuit breakers and wiring are of sufficient rating and gauge to power this equipment. A Wiring Diagram has been provided with the unit as an aid for technicians. The unit must be installed and electrically grounded in accordance with local codes, or in the absence of local codes, in accordance with the National Electrical Code, NFPA 70.**
- Improper installation, adjustment, alteration, service or maintenance could result in serious injury (even death), equipment and/or property damage; and will potentially void the factory warranty.
- **DO NOT** use or store flammable liquids, or materials that produce flammable vapors, in the vicinity of this or any other appliance!
- Spillage of food products, or water, onto nearby floor areas can create a potential slipping hazard adjacent to the appliance. Clean up any spillage immediately.
- Failure to comply with **WARNING** notices could result in serious injury, even death; equipment and/or property damage; and will potentially void the factory warranty.

CAUTION

- The unit must be in a level, horizontal, position for proper operation.
- Exercise care when removing the wooden shipping crate from around the unit and the unit from shipping skid.
- **DO NOT** operate the unit unless you fully understand its components and their intended function (see **Section 3**).
- Parts of the appliance, including food pans and food products, will become **HOT!** Temperatures inside the unit can exceed 150°F (65.5°C). Surfaces of the Ceramic Heaters can reach extremely high temperatures. Exercise caution when working around the unit, handling food pans, cleaning, or servicing. It is advisable to wear personal thermal protection, such as Oven Mitts, while performing activities around the unit.
- Cooked food products, being held for sale, must be maintained at a minimum temperature of 150°F (65.5°C), or in accordance with state and local health regulations.
- Be sure the unit is positioned in a stable, safe location
- The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given instruction and supervision concerning its safe use, and understand the hazards involved.
- Children must be instructed, or otherwise restricted, not to play with the appliance.
- Cleaning and user maintenance shall not be performed by children without supervision.
- Repairs to the appliance are to be performed by service agents who are either trained by or specifically authorized by the manufacturer.
- Allow the unit to cool down a minimum of 15 minutes before cleaning or servicing.
- Failure to comply with **CAUTION** notices may result in minor to moderate injury, equipment or property damage and void the warranty.

CAUTION

- Control Panel components are somewhat impact-sensitive. To avoid damage and maintain proper operation, exercise care when working around the Control Panel area or when maneuvering carts in close proximity to the appliance.
- **DO NOT** install the unit adjacent to combustible walls and materials. Failure to maintain safe clearance may result in fire.
- When cleaning of the unit
 - **DO NOT** steam clean.
 - **DO NOT** use products containing chlorine, or other corrosive chemicals.
 - **DO NOT** use abrasive products, steel wool or scouring pads.
 - **DO NOT** use oven cleaner.
 - **DO NOT** pour water into the food well pan.
- **DO NOT** modify, add attachments, or otherwise alter this equipment!

NOTE:

- Refer to the provided wiring diagram during installation or servicing.
- Comply with all appropriate state and/or local health regulations regarding the cleaning and sanitization of foodservice equipment.

1. Introduction

Thank you for choosing the **KD-FSM or KD-SSM Series Heated Display Case** from **KitDelSM**. The unit will have either **3, 4, 5 or 7-food wells**. The unit will be either completely full-service with no customer access, partial full-service with a small length of customer self-service, or fully customer self-serve. The unit is a dry-well design and accommodates a full range of standard (Gastronorm) pan sizes to suit specific needs. Pan layout is highly configurable and easily changed or expanded.

The Case can be installed into a base counter or stand alone on a counter-top by utilizing the provided adjustable legs. The appliance has been developed with flexibility in mind, designed to maximize the number of menu items that can be displayed, while keeping products fresh, maintaining them at the proper safe serving temperature.

To help protect your investment in this equipment, we recommend taking a few moments to familiarize yourself with the installation, cleaning and maintenance procedures contained in this manual. Read these instructions before installation and use. Adherence to these recommended procedures minimizes the potential for costly downtime and equipment repairs. With proper care and maintenance this unit will provide years of dependable, trouble-free service.

Please retain this manual for future reference.

1-1. Construction

Constructed primarily of 430 Stainless Steel ... curved European-style tempered front glass cover.

1-2. Standard Features

Temperature Control: Each well has individual variable temperature controls for lower pan and upper ceramic heaters. Indicator lights verify operation. GHM4 = 3 wells, GHM5 = 4 wells, GHM6 = 5 wells, GHM8 = 7 wells.

Lighting: Provided by two (2) coated, energy-efficient fluorescent tubes.

European-Style Glass: Provides maximum visibility of products. Pneumatic struts hold glass in the open position for easy cleaning.

Fold-Down Shelf: HDPE (high-density polyethylene) work shelf along full length of operator-side; removable.

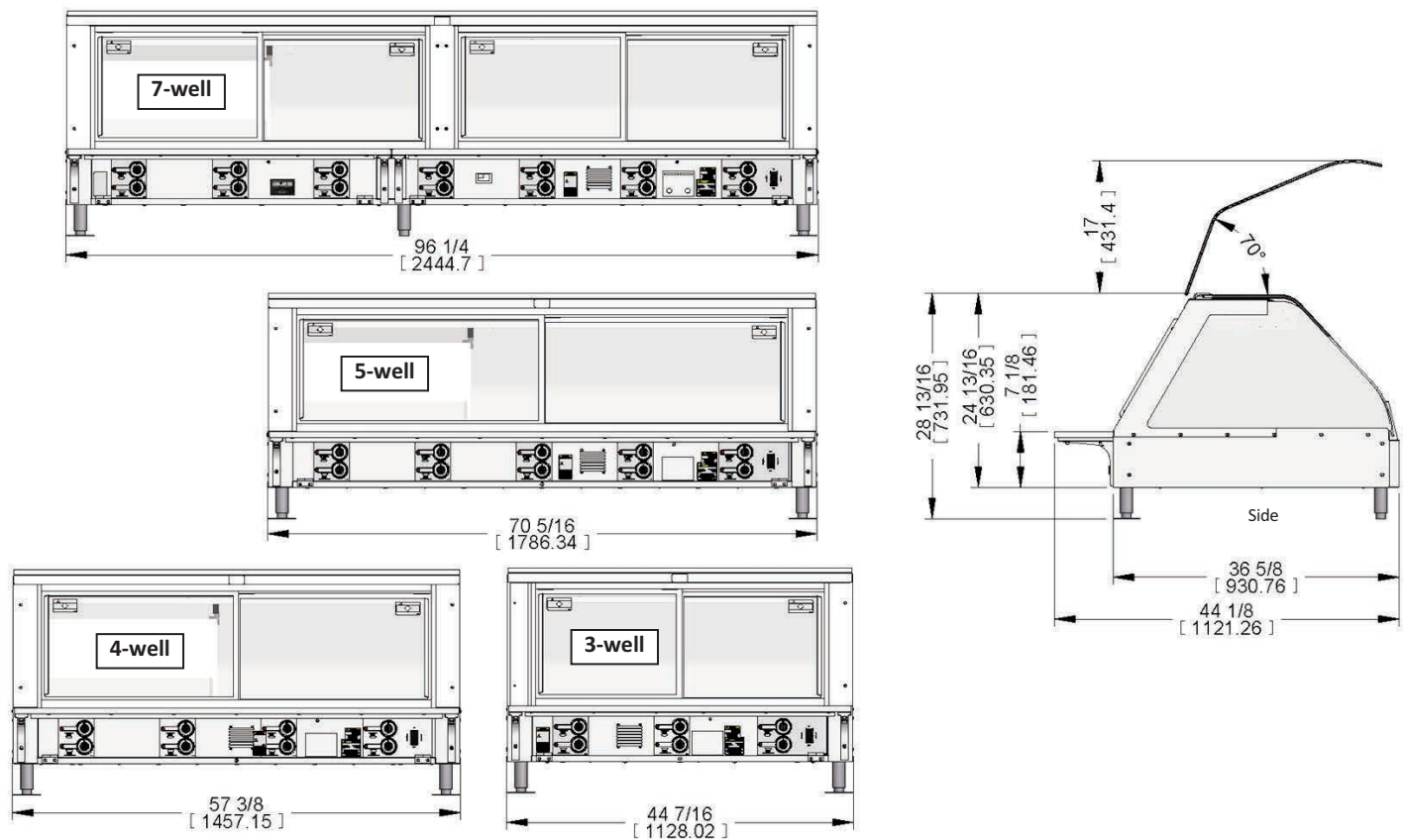
Glass Style: Mirror-tint finish.

1-3. Optional Features

Self-Serve: 4, 5 & 7-well units are available with a 24" section (either right or left) that is open to the customer-side of the unit, allowing customers to serve themselves. The 3 & 4-well units are also available with full-width customer-side self service.

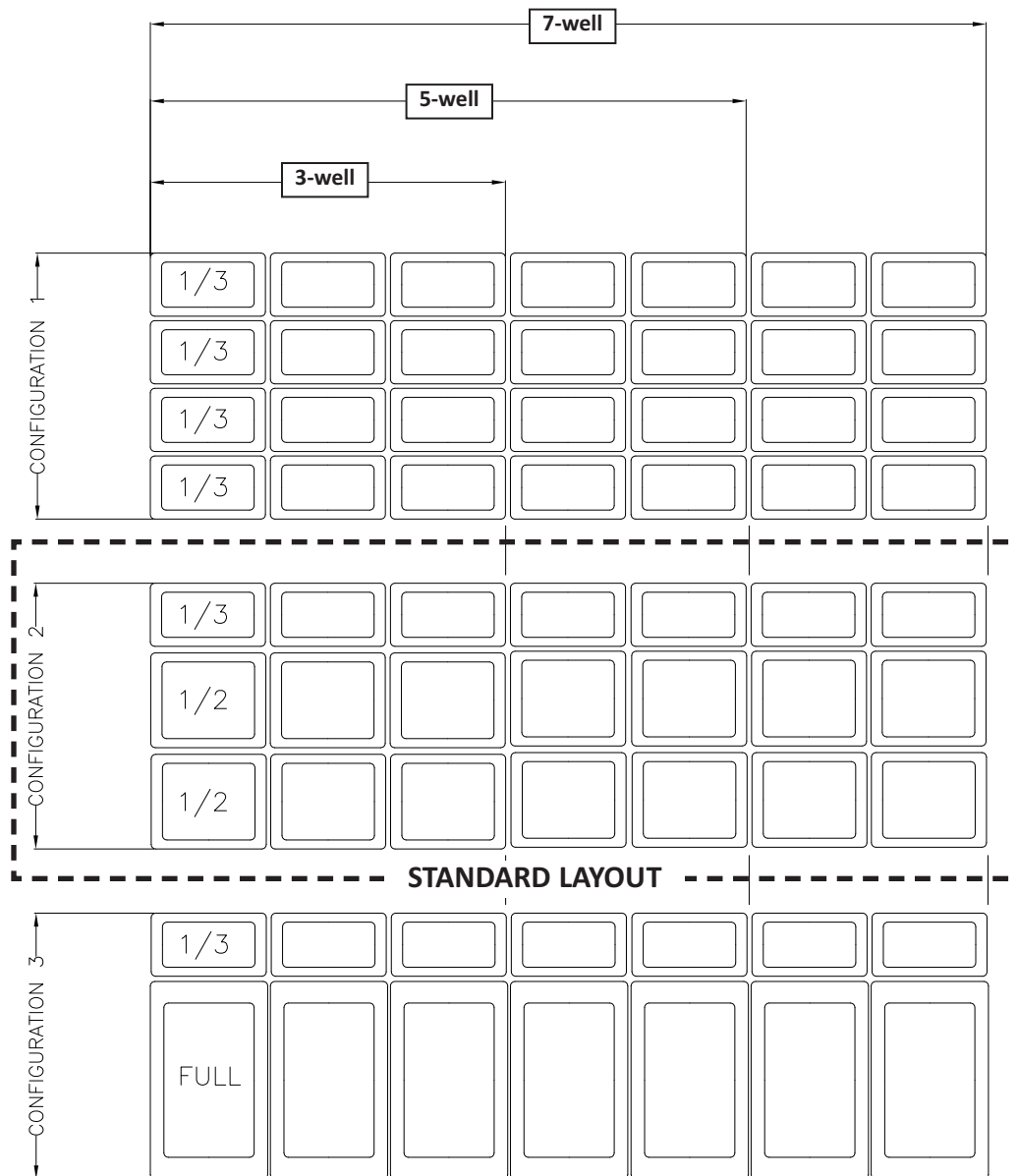
1-4. Specifications

1-4.1. Overall Dimensions



INCHES [mm]

1-4.2. Basic Steam Pan Layouts



A sufficient number of Long & Short Pan Divider/Supports are included with each Unit to provide the **Standard Layout**.

The above are shown as examples ... many variations are possible to suit specific needs ... additional Pan Dividers are available.

1-4.3. Regulatory Listings



1-4.4. Unit Weights

Model	Weights			
	Crated		Uncrated w/o product or pans	
	lb	kg	lb	kg
KD-FSM, KD-SSM-3C	489	221.8	277	125.6
KD-FSM, KD-SSM-4C	515	233.6	325	147.0
KD-FSM, KD-SSM-5C	621	281.7	390	177.0
KD-FSM, KD-SSM-7C	812	368.3	503	229.0

1-4.5. Number of Pan Wells & Heat Zones

Model	Pan Wells	Heat Zones	Lighting Zone
KD-FSM, KD-SSM-3C	3	3	1
KD-FSM, KD-SSM-4C	4	4	1
KD-FSM, KD-SSM-5C	5	5	1
KD-FSM, KD-SSM-7C	7	7	1



KD-FSM/KD-SSM Series Cases



2. *Installation*

This section explains the procedures necessary for proper installation of the Display Case. To help prevent personal injury or equipment damage, please ensure the following steps are followed.

CAUTION

DO NOT ALTER, ADD ATTACHMENTS, OR OTHERWISE MODIFY THIS EQUIPMENT.

2-1. Location

While the selection of location is typically dependent on operational needs and site-specific factors, the following should be considered before finalizing installation plans for this equipment.

- The appliance and surrounding area should be kept free and clear of combustible materials. Maintain a minimum clearance of 6" [154.2 mm] in front of the unit.
- The appliance shall be electrically grounded in accordance with local electrical code, or in the absence of local code, with the current **National Electrical Code, NFPA 70**
- Be sure that sufficient space is available for proper operation of the appliance, and that consideration is given for space required to perform future service, maintenance, or repair.
- Be sure that adequate ventilation is provided in the operating area, as necessary.
- Consult a qualified electrician, or other service technician, prior to installation to ensure that the power supply available at the intended location meets the electrical specifications stated on the appliance's rating label.
- Make certain the unit is installed on a counter, or suitable base, that is stable and substantial enough to support the appliance weight, plus weight of food it is to contain.
- Be sure that the unit is secure in its location and cannot be inadvertently moved.

The above considerations will help to ensure a safe and proper installation. If you have any questions concerning these procedures, please contact [KitDelSM](https://www.kitdel.com) at **855.632.3373**.

2-2. Unpacking

The unit is shipped on a wooden skid with a protective wooden framework; secured to the skid by means of high strength strapping. The entire skid is wrapped with machine-applied stretch wrap. Auxillary items, such as Side Glasses, Pan Dividers, Legs and Fluorescent Lights, are packed separately in the pan well. Be certain to remove and retain these items.

⚠ CAUTION

- The unit is heavy ... Exercise care when lifting or moving ... Use adequate manpower or handling equipment.
- Exercise care when removing the wooden crate material.
- Failure to comply with **CAUTION** notices may result in minor to moderate injury, equipment or property damage, and could void the factory warranty.

IMPORTANT!

If the crate shows evidence of damage, immediately inspect the entire unit and notify the freight company of any damages to the equipment or accessories. Typically, it is the purchaser's responsibility to negotiate freight damage claims with carriers.

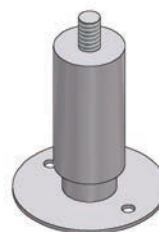
1. Carefully cut and remove plastic wrap and strapping.
2. Use appropriate tools to remove wooden crate framework from around the unit.
3. Remove items packed in the pan well, examine for damage and set aside.
4. Carefully remove the unit from the shipping skid. The appliance is extremely heavy, see **Section 1-4.4, Unit Weights**. Use appropriate lifting equipment, or adequate manpower. Great care should be taken when lifting and moving the unit to prevent personal injury or equipment damage. **KitDelSM** shall not be liable for personal injury or damage caused by improper handling, or use of poor work practices.

2-3. Countertop Installation

1. Four (4) Adjustable Legs are supplied with the unit ... two (2) Regular and two (2) Floor Plate.
2. Install and secure the Adjustable Legs at each corner. Each style Leg should be installed on the opposite diagonal corners from one another.
3. Place unit onto a suitable counter-top.
4. Level unit by rotating the lower portion of the Legs to adjust the length as needed ... turning to the right shortens leg, turn to left lengthens. Unit should be stable and level; side-to-side, front-to-back and corner-to-corner.



Regular Leg



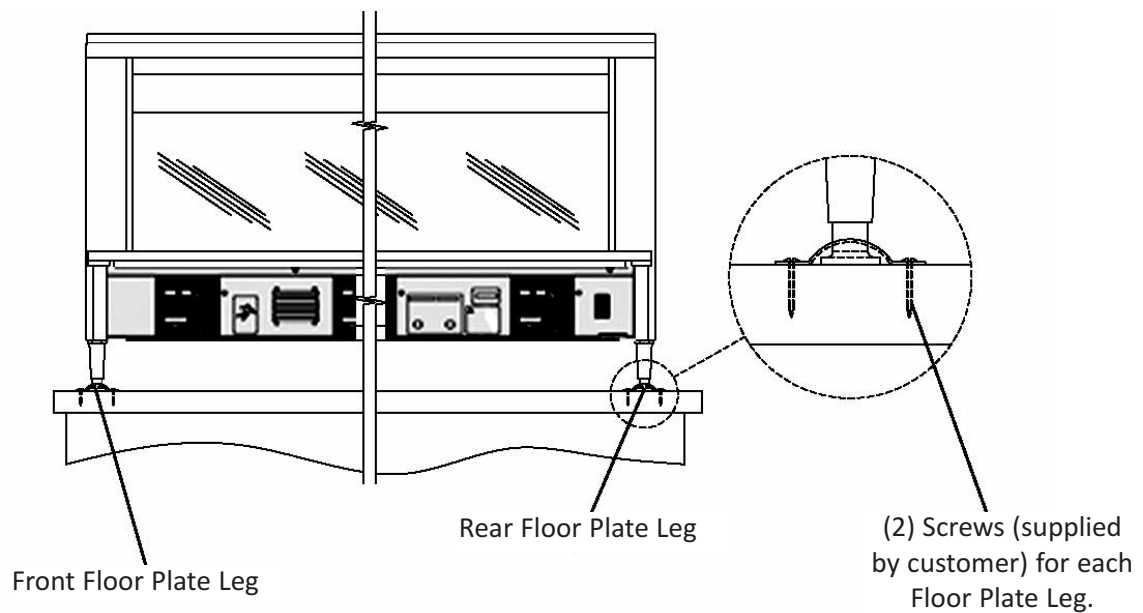
Floor Plate Leg

2-3. Countertop Installation - Continued

⚠ CAUTION

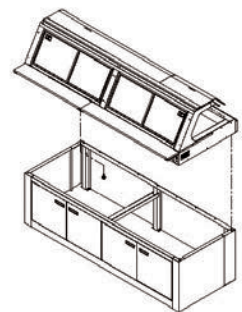
- Exercise care when lifting and moving unit onto counter.
- Ensure that the counter base and/or counter-top is capable of supporting the weight of the unit and the food products to be displayed. See Section 1-4.4, Unit Weights.

1. Secure the unit to the countertop by fastening Plate Mount Legs to the counter-top with appropriate screws (**not supplied**).

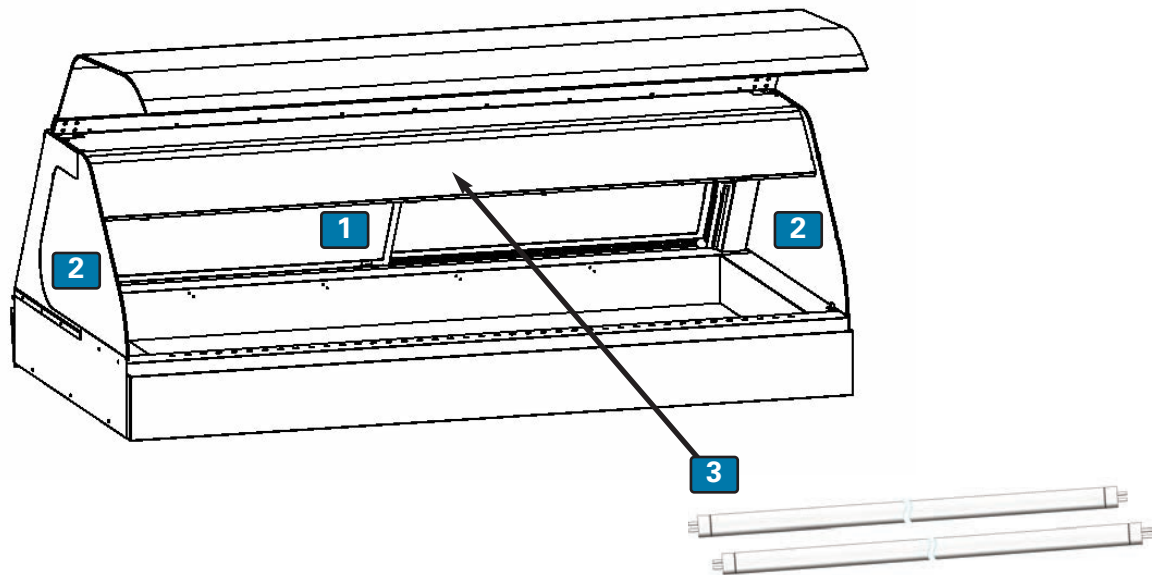


2-3.1 Base Counter Installation

1. The Display Case may be installed on an appropriately sized custom or pre-fabricated base counter (**Stainless steel Bases, specifically designed for these Cases are available**). Prior to installing the unit ensure that the base counter is level and stable.
2. The unit must be attached to the base counter in accordance with local building code and/or applicable health and sanitation codes. Some health codes require that cracks and cervices between the unit and base, and the base and floor must be sealed to eliminate potential for pest infestations. It is the responsibility of the purchaser and their contracted installer to ensure that all applicable code and regulation requirements are met.

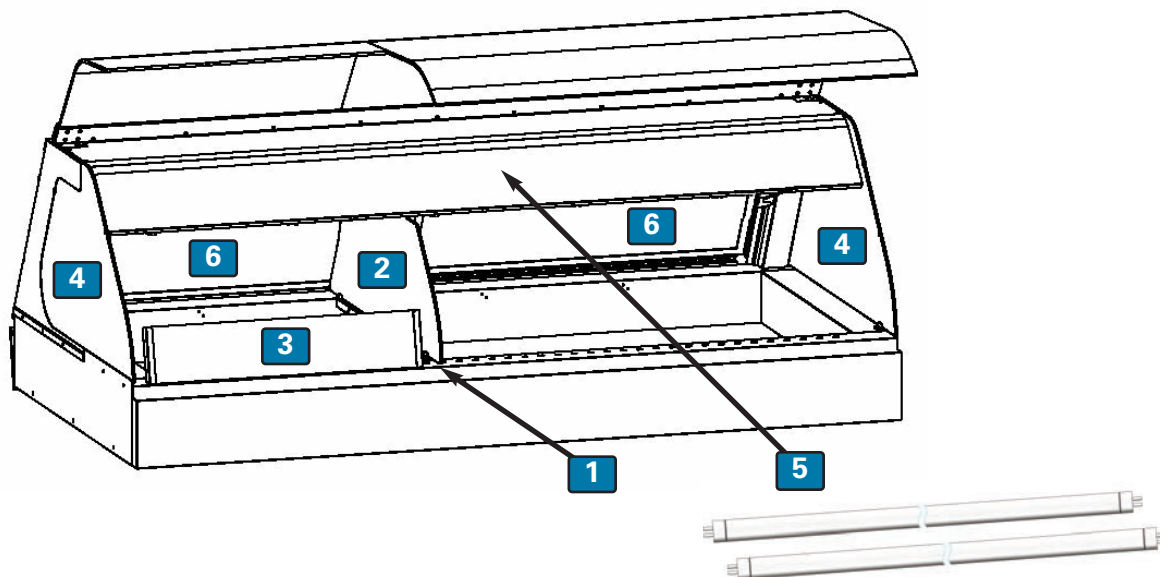


2-4. Installation of Glass and Lighting (Full Serve)



- ① Rear Sliding Doors are secured with tape for shipping ... Remove.
- ② Unpack and install Side Glass at each end; slide in track.
- ③ Install (2) Fluorescent Blubs, top under Shroud.

2-4.1. Installation of Glass and Lighting (Customer Self-Serve)



- ① Place lower Middle Glass Support track into Pan.
- ② Slide Middle Glass Partition into lower & upper track.
- ③ Unpack and install Sneeze Guard Glass.
- ④ Unpack and install Side Glass at each end; slide in track.
- ⑤ Install (2) Fluorescent Blubs, top under Shroud.
- ⑥ Rear Sliding Doors are secured with tape for shipping ... Remove.

NOTE:

- Depending on model, the 2-ft. Customer Self-Serve section can be located on either the right or left side (customer viewpoint).
- **3** and **4-well** models can have full-length Customer Self-Serve. Such units will not have a Middle Partition Glass, but feature a full-length Sneeze Guard.
- **3-well** unit is not available as a split-style unit. Only available as Full-Serve or full-length Customer Self-Serve.

2-5. Electrical Requirements

WARNING

The unit must be adequately and properly grounded. Improper grounding may result in electrical shock. Always refer to local electrical code to ensure that proper grounding is used for this or any other electrical equipment. Consult a professional electrician, or other qualified service technician to ensure that circuit breakers and wiring are of sufficient rating and gauge to power this equipment.

The GHM Merchandiser is available with the various electrical specifications listed below. Check the rating label on the rear of the unit to determine correct power supply. Note that a wiring diagram has been provided with this appliance to aid with installation. Please verify that it corresponds with the unit's electrical specifications.

Table 2.5, Electrical Requirements

Model	Voltage	Phase	Hz	kW	Amps	Breaker
KD-FSM, KD-SSM-3C	208 - 240	1	60	2.7 - 3.2	13.2 - 13.3	20
KD-FSM, KD-SSM-4C	208 - 240	1	60	3.7 - 4.3	17.7 - 17.8	25
KD-FSM, KD-SSM-5C	208 - 240	1	60	4.7 - 5.4	22.4 - 22.4	30
KD-FSM, KD-SSM-7C	208 - 240	1	60	6.6 - 7.6	31.5 - 31.6	50

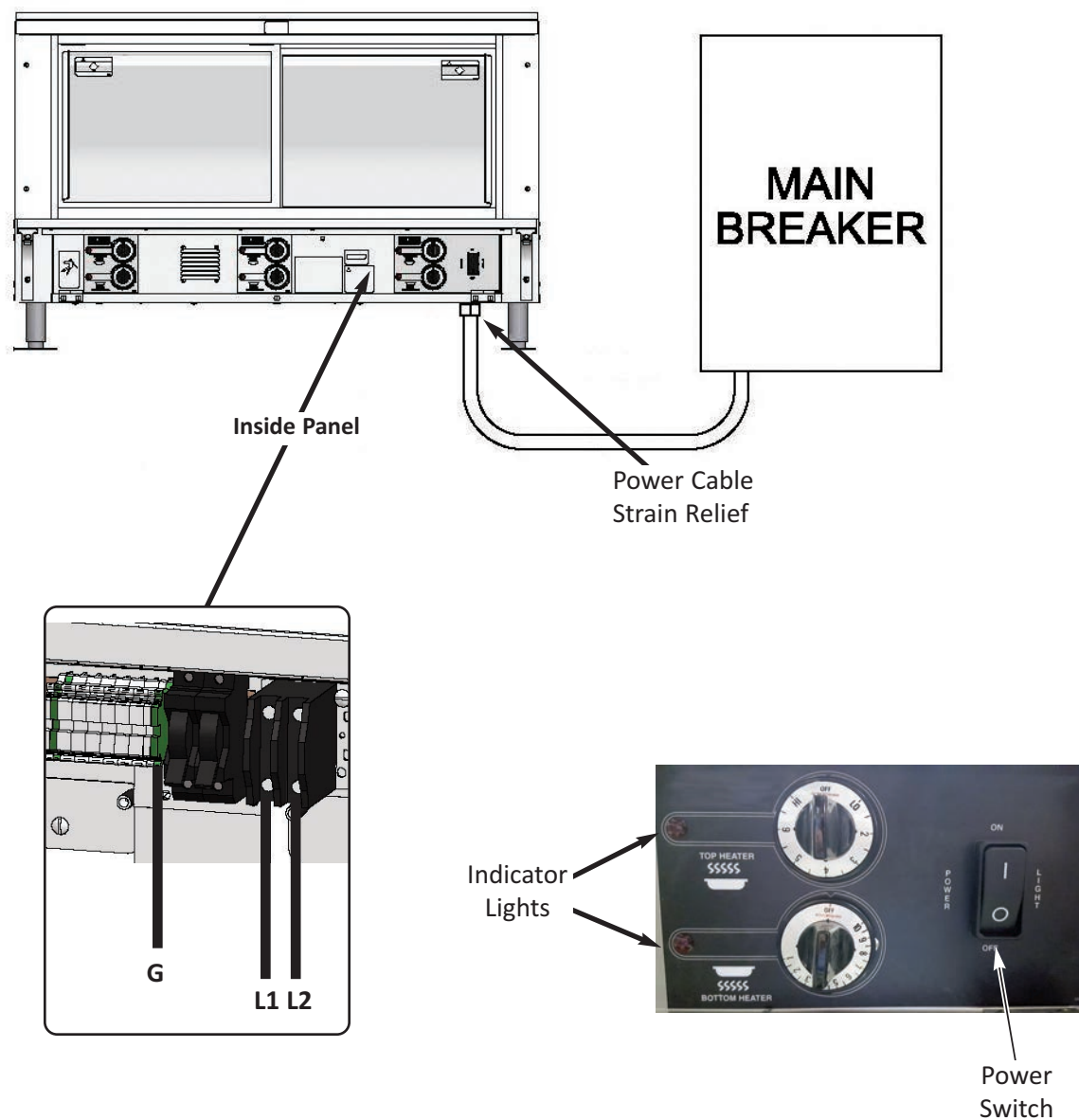
2-6. Electrical Connections

1. Install appropriate circuit breakers in the main breaker panel as needed, see **Table 2-5.** above.
2. Connect appropriately sized power supply cable to the main breaker, allowing enough cable length so that unit may be moved as needed for cleaning, or service.
3. Remove retaining screws and carefully lower the hinged Control Panel, see **Figure 2-6.1.**
4. Install the provided Cable Strain Relief connector in the hole on the unit's bottom. Route the cable through strain relief and tighten.
5. Connect power wires to the Contactor terminals ... connect ground wire to the ground terminal block. Be sure that fuses are installed in the Fuse Holders. See **Figure 2-6.1.**
6. Carefully close the Control Panel, reinstall retaining screws, and tighten securely.
7. Turn on main power circuit breaker ... Place Power Switch in the **ON** position. The fluorescent lights will illuminate and the Control Box Cooling Fan will begin running.
8. There is variable heat control for each well of the unit, see **Figure 2-6.1.** Rotate Top and Bottom Heater Control Knobs for each well clockwise to the full **ON** position. Confirm that the red indicator lights on each panel illuminate, and that the pan bottom and the upper ceramic heaters in each well begin heating ... return all Controls to **OFF**.

NOTE:

It may require several minutes for fluorescent lamps to reach full intensity brightness, particularly on 5 & 7-well models.

2-6. Electrical Connections - Continued



2-7. Ventilation

Ventilation requirements may vary from locale to locale. Always consult with local code officials in your jurisdiction to ensure compliance with all local regulations and codes.

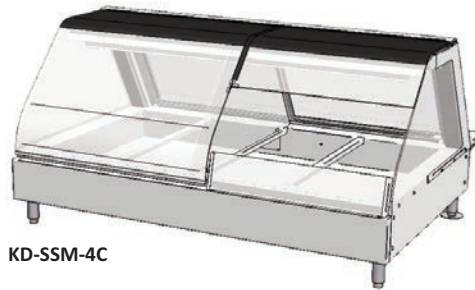


3. Overview

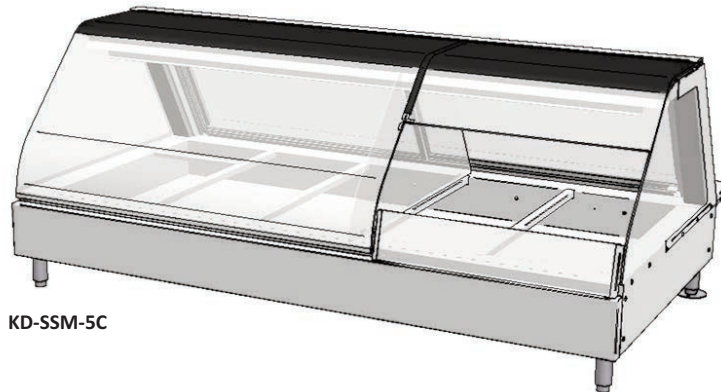
The following section provides a brief overview of the components, functions, and accessories of the Heated Display Cases. Please review this section carefully before proceeding.



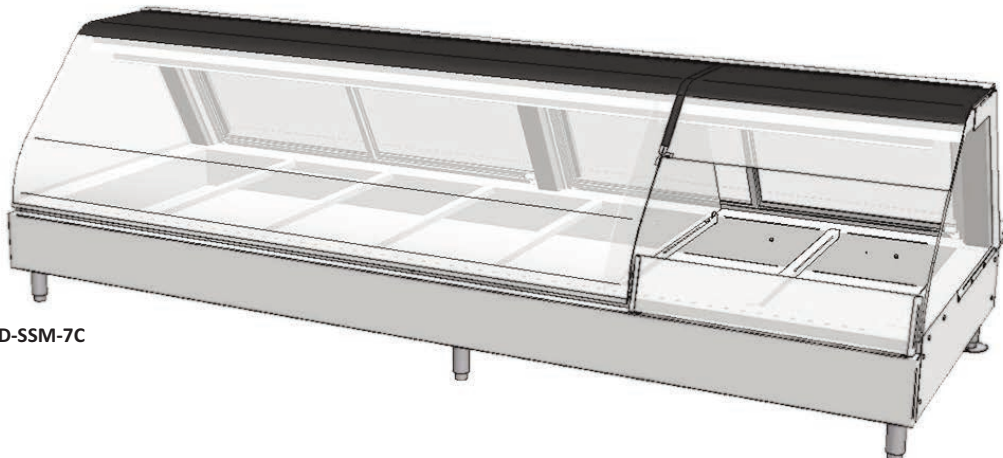
KD-FSM-3C



KD-SSM-4C

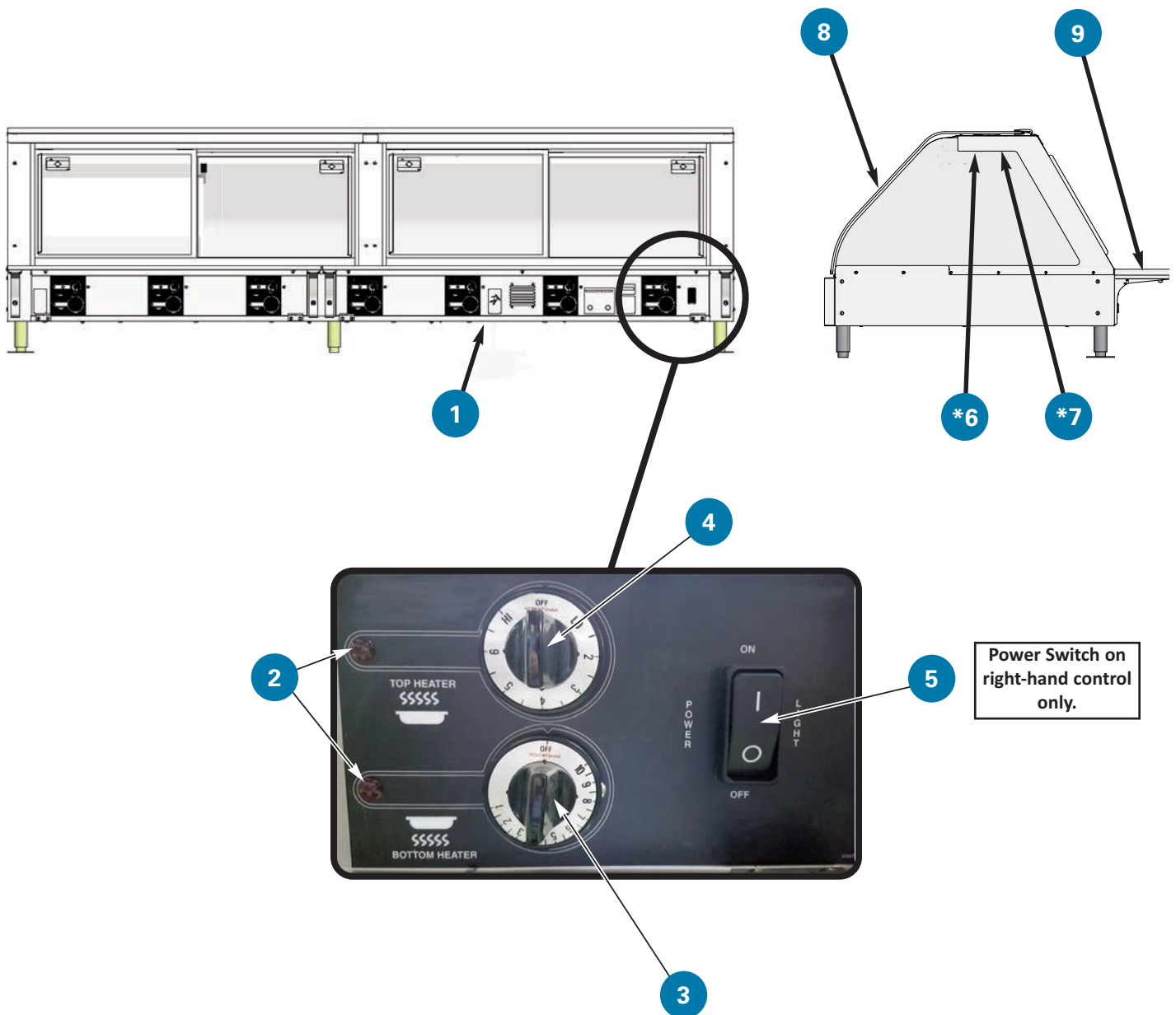


KD-SSM-5C



KD-SSM-7C

3-1. Back and Side View


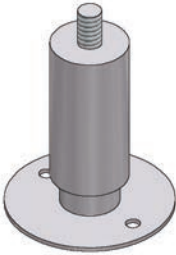



* Not Shown




3-1. Back and Side View

Item	Description	Function
1	Control Panel	Each zone of the Merchandiser has separate temperature controls for Top and Bottom heaters.
2	Indicator Lights	Illuminates when heater elements for zone are energized. The Bottom Heater light turns OFF and ON as the thermostat cycles the element. The Top Heater light remains ON when the heater is turned on; light intensity indicates the heater output (dim for LO ... brightest for HI).
3	Bottom Heater Thermostat Control	Each zone has a thermostat control to set the heat output of the bottom Pan Heater. Rotating the knob to the right turns heater ON . Temperature setpoint is incrementally increased as indicated by markings on the dial; 0 = lowest; 10 = highest, (numbers are only references and do not represent a specific temperature). Turning knob to the left until it stops turns the heater OFF .
4	Top Heater Rheostat Control	Each zone has a control to adjust heat output of the Top Ceramic Heater. This is a rheostat control, not a thermostat, and knob can rotate either direction; rotating to the right turns the heater ON to the HI heat setting, turning to the left turns heater ON to the LO heat setting. Rotating knob decreases or increases heat, represented by reference numbers on the dial. Ceramic heaters do not cycle OFF and ON . Turn knob until OFF is at the top position to turn Heater OFF .
5	Power/Light Switch	Main Power Switch ... When placed in the ON position, the fluorescent lamps turn on and heat controls are enabled. It is normal for lights to require several minutes to come to full brightness.
*6	Fluorescent Lights	Two (2) coated, shatter-proof, fluorescent lamps illuminate displayed food items.
*7	Top Ceramic Heater	Each zone contains an independently controlled, 150W, Ceramic Heater.
8	European-Style Glass	Attractive curved tempered glass provides maximum visibility of displayed items. The glass is hinged and features pneumatic struts, making it easy to open; holds glass in opened position for cleaning.
9	Fold-Down Work Shelf	Fold-down Work Shelf along entire width of Merchandiser on the operator-side; provides work surface when needed. Made of HDPE (high-density polyethylene) and easily removeable for cleaning.

3-2. Included Accessories

Part	Part Number	Description	Function
	35788 (2) - 3 Well (3) - 4 Well (4) - 5 Well (6) - 7 Well	Pan Support Channel, Long	Used for front to back support of Pans in the pan well.
	35789 (6) - 3 Well (8) - 4 Well (10) - 5 Well (14) - 7 Well	Pan Support Channel, Short	Used for left to right support of Pans in the pan well.
	41071 (2) - All Units	4" Adjustable Leg, Stud Mount, w/Floor Plate	Used when the unit is installed as a counter-top unit, floor plate utilized for securing unit to counter-top
	41070 (2) - 3,4 & 5 Well (4) - 7 Well	4" Adjustable Leg, Stud Mount, w/o Floor Plate	Used when the unit is to be installed as counter-top unit.

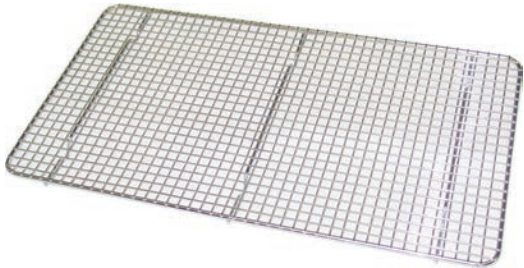
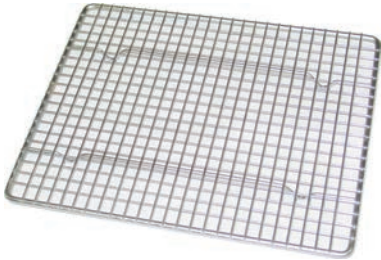
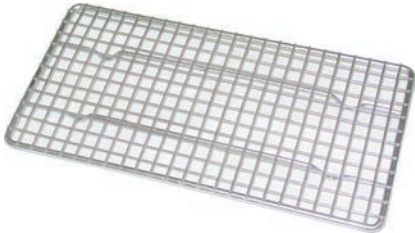
3-2. Included Accessories

Part	Part Number	Description	Function
	20350 (1) - All Units	Power Cord Strain Relief	Used for routing power supply cord into the unit; secures cord, preventing strain on electrical connections.
	20668 (34") (2) - 3 & 4 Well 20608 (58") (2) - 5 & 7 Well	Bulb, Fluorescent, T8, Teflon Coated	Illuminates displayed products.
	36006 (1) Self-Serve Unit Only	Partition Glass Support Channel	Substitutes for one of the Long Pan Supports in with a 2-ft Self-Serve Section; supports the Partition Glass.

3-3. Accessories Not Included

Part	Part Number	Description	Function
	66033 - Black & White 66196 - Red & Grey	Self-Serve Tile	Use in Self-Serve Section to display pre-packaged “grab-n-go” items. (Self-Serve Model Only)
	76183 (2-1/2" D) 76184 (4" D)	Steam Pan (Full size)	Used for cooking and holding food prior to serving.
	76185 (2-1/2" D) 76186 (4" D)	Steam Pan (1/2 size)	Used for cooking and holding food prior to serving.
	76188 (2-1/2" D) 76189 (4" D)	Steam Pan (1/3 size)	Used for cooking and holding food prior to serving.

3-3. Accessories Not Included

Part	Part Number	Description	Function
	76207	Steam Pan Grate (Full size)	May be placed in pan bottom as necessary to allow drainage.
	76208	Steam Pan Grate (1/2 size)	May be placed in pan bottom as necessary to allow drainage.
	70165	Steam Pan Grate (1/3 size)	May be placed in pan bottom as necessary to allow drainage.



4. Operation

4-1. Set-up and Installation of Pans

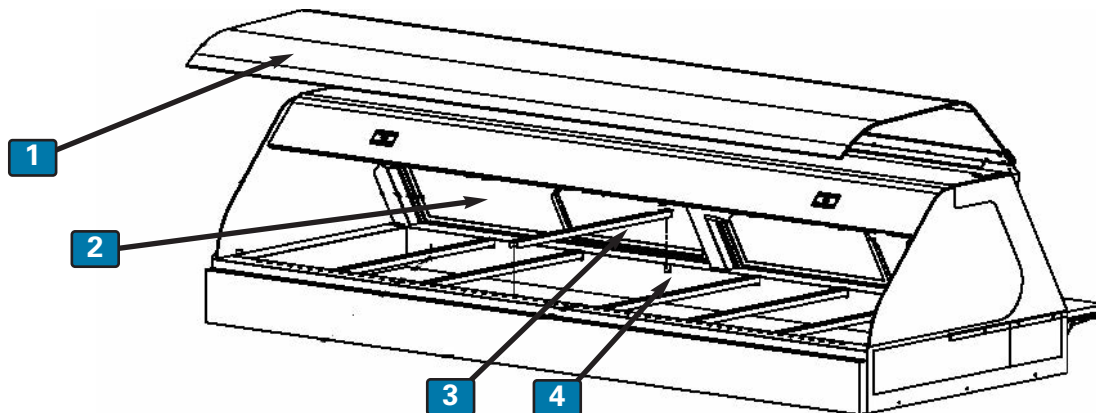
This section explains set-up and installation of pan dividers and food pans.

⚠ DANGER

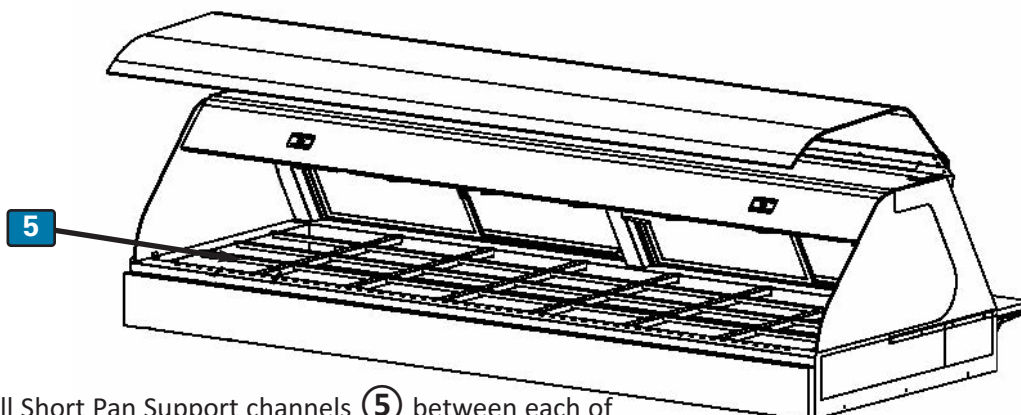
DO NOT ADD WATER OR OTHER LIQUID TO THE PAN WELL! It is not "liquid tight" and liquids will possibly leak onto the Heating Elements, and come in contact with other electrical components.

⚠ CAUTION

Before installing pan dividers and food pans, ensure that all Heat Controls are in the OFF position (see 4-6, Normal Shut-Down) and that the unit has adequately cooled.



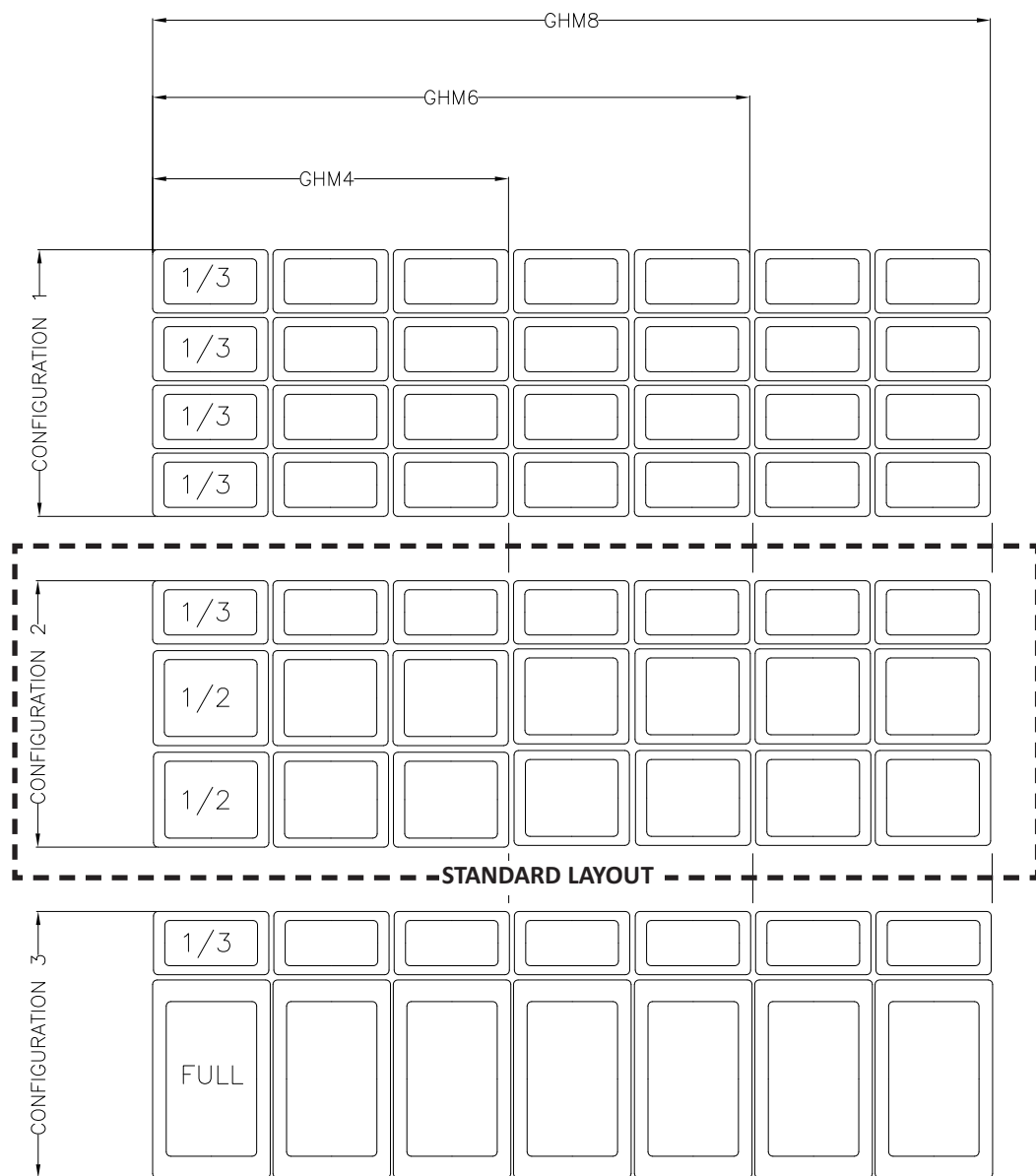
1. Lift the Front Curved Glass (1) and/or open the rear Sliding Doors (2) .
2. Install the Long Pan Support Channels (3) at each of the Channel alignment brackets (4) .



3. Install Short Pan Support channels (5) between each of the Long Pan Support Channels as desired; see diagrams on next page.

Continued next page

4-1. Set-up and Installation of Pans (continued from previous page)



Pans are sold separately; not included with the unit. Enough Pan Dividers are provided for the STANDARD LAYOUT, additional ones may be purchased separately.

Acceptable Pan Depth: 2-1/2" [63.5] to 4" [101.6]

4. Install Pans into the various spaces created by the grid of Support Channels. The above diagrams only represent some typical arrangements. There are many different layouts that can be devised for individual needs.

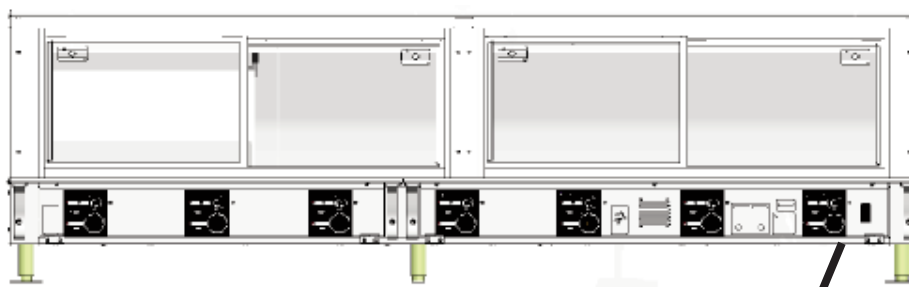
NOTE:

Ensure there are **NO** gaps between Pans. Gaps will cause a loss of heat.

5. Close the Front Curved Glass and/or Rear Sliding Doors.

4-2. Setting and Adjusting Temperature

This section explains how to adjust temperature inside the warmer.



There is a separate Temperature Control Panel for each pan well in the unit; 3, 4, 5 or 7:

The Main Power/Light Switch is located on the right-hand Panel.



1. Ensure the Front Curved Glass is lowered to the fully closed position and Sliding Doors are closed.
2. Place Main Power Switch ① in the **ON** position.
3. Turn all **TOP HEATER** control knobs ② counter-clockwise to **HI** and set all **BOTTOM HEATER** controls ③ to the **10** setting; the Indicator Lights ④ come on. Allow the unit to preheat for 15 to 20 minutes.
4. When the Bottom Heater Indicator Lights ② turn **OFF**, proceed to the next step. **NOTE: Top Heater Indicators will remain ON.**

CAUTION

The Merchandiser and its parts become very **HOT**! Temperatures inside the unit may exceed 150°F (65.6°C). Exercise caution when attending, loading/unloading food, cleaning or servicing. Use of personal thermal protection, such as oven mitts, is recommended.

WARNING

DO NOT touch the ceramic Top Heaters. They are extremely **HOT** and skin contact may result in a serious burn.

4-2. Setting and Adjusting Temperature - Continued

CAUTION

Food products must have a minimum internal temperature of 150°F (66°C) before being placed into the unit.

5. Wear appropriate personal thermal protection, such as oven mitts. Place prepared hot foods into the food pans, or place full pans directly from cooking line into the Display Case pan grid.
6. After placing items into the unit, set the Bottom Heater control **③** to the **6** setting, and adjust the Top Heater controls, as needed. Suggest starting with setting of **3** or **4**.
7. Periodically monitor the temperature of food items inside the warmer with a digital probe thermometer to ensure they are being maintained at a proper holding temperature; adjust the Heater Controls (Top and/or Bottom), as necessary for each pan well.
8. Bottom Heater temperature is manually adjusted using thermostat knob **③** ... **[10]** setting is hottest; **[1]** is lowest. Dial is numbered as an index only. Bottom Heaters cycle **ON** and **OFF** to maintain temperature. Turn Heater **OFF** by turning knob to the left until it stops; **[OFF]** is at the 12 o'clock position.
9. Top Heater temperature is manually adjusted using the rheostat knob **②**. Turning knob in either direction, until it clicks, turns Heater **ON**; to the right turns it **ON** at the **[HI]** heat setting; to the left turns it **ON** at the **[LO]** heat setting. Continue turning to increase or decrease heat output as desired; dial is numbered as an index only. Turn Heater **OFF** by turning knob until **[OFF]** is at the 12 o'clock position.
10. Always comply with local health regulations concerning holding temperatures for cook foods prior to sale.

IMPORTANT!

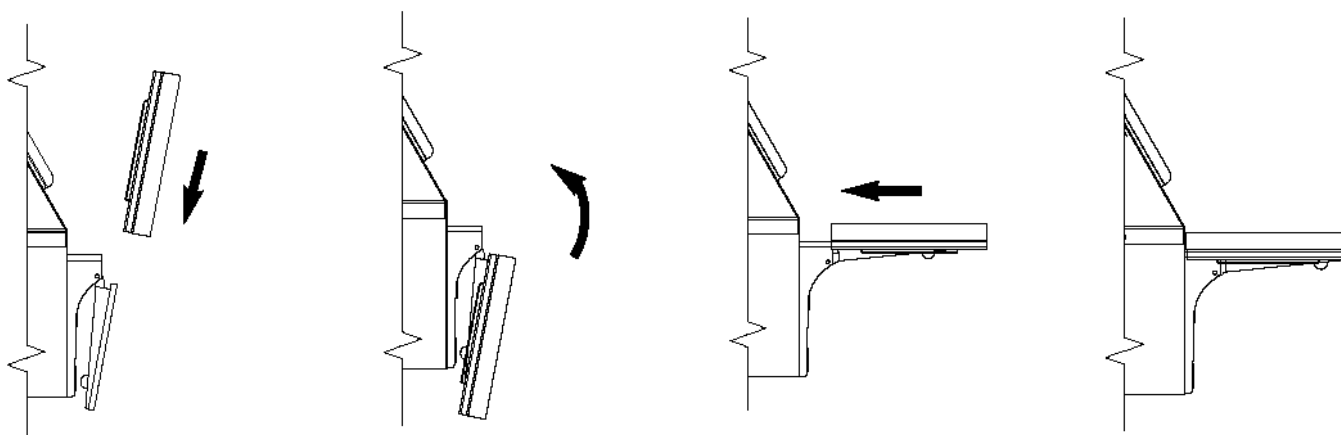
- Proper temperature range for holding cooked foods depends upon the amount and type of food.
- Top Heaters DO NOT cycle; they are either ON or OFF. Amount of heat output determined by the rheostat control setting. Monitor foods regularly, and closely, to ensure that the top portion is not becoming excessively dry, or being further cooked, because of too much top heat.

4-3. Work Shelf Installation & Removal

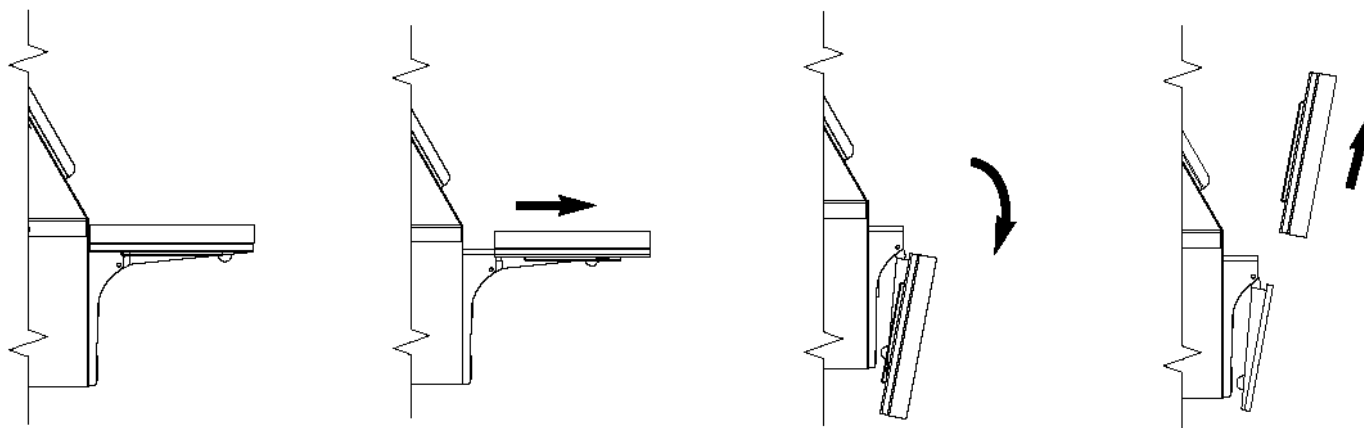
This section illustrates how to install and remove the Folding Work Shelf. This shelf is intended as a work support for temporarily holding items when attending the Display Case. Shelves are removable for easy cleaning.

NOTE: 7-well unit has a two section shelf.

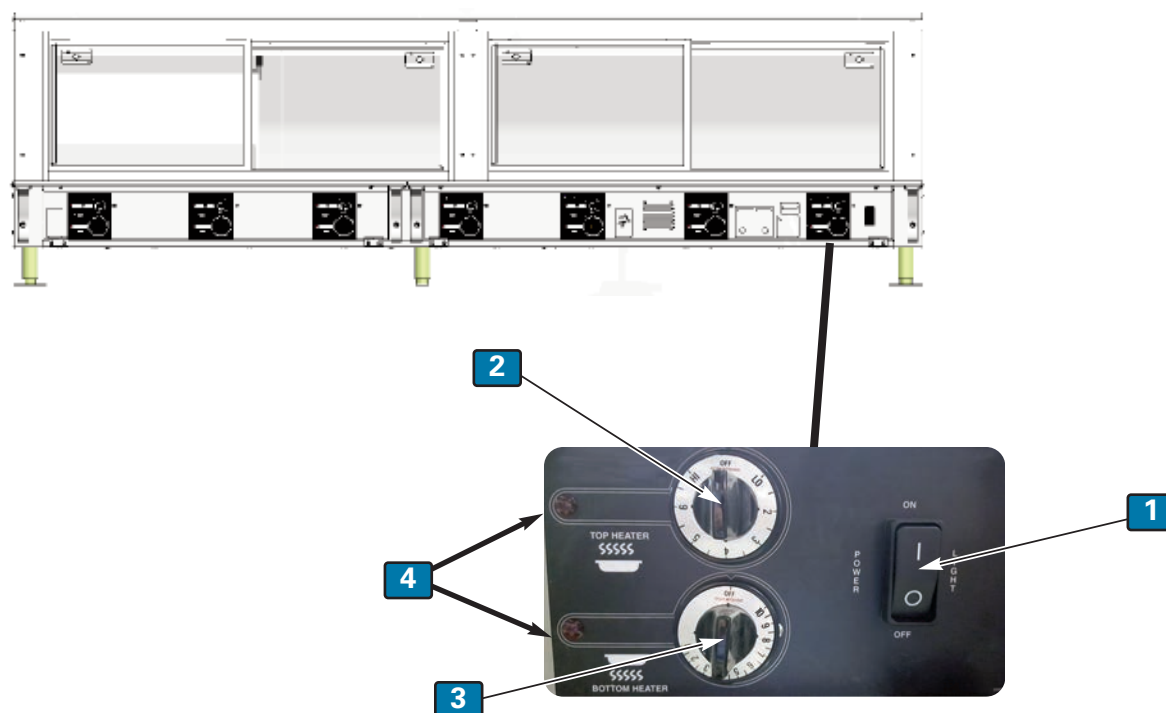
4-3.1 Shelf Installation



4-3.2 Shelf Removal



4-4. Normal Shut-Down



1. Turn all Bottom Heat Heater Control knobs ③ to the **[OFF]** position (turn left to stop). Indicator Light ④ will turn off.
2. Turn all Top Heater Control knobs ② to the **OFF** position; **[OFF]** is at the 12 o'clock position. Indicator Light ④ will turn off.
3. Place Main Power Switch ① in the **OFF** position, fluorescent lighting will turn off.
3. If required, disconnect power supply to the unit by turning off the appropriate circuit breaker in the supply electrical panel. This will remove all power from unit.

4-5. Emergency Shut-Down

In case of an emergency, disconnect power to the unit by turning off the main circuit breaker in the facility electrical panel.

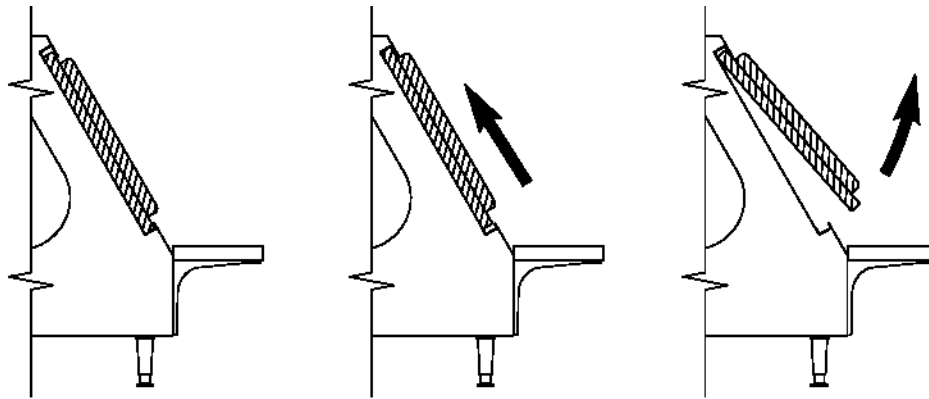
5. Cleaning

Not only is it important that food items appeal to the customer, but the cleanliness and sanitation of the unit in which they are displayed is also vital. This appliance is the showcase for your prepared menu items and it should be cleaned daily.

⚠ DANGER

- **DO NOT** wash down the unit interior, or exterior, with water from a spray hose.
- Failure to comply with **DANGER** notices will result serious injury, or even death, equipment or property damage, and void the warranty.

1. Perform a Normal Shut-Down as described in **Section 4-4** and allow the unit to adequately cool.
2. Raise the Front Curved Glass to the fully open position.
3. Wear appropriate personal thermal protection, if needed. Remove all Serving Pans and Pan Support Channels from the unit. Place items into sink or dishwasher for cleaning.
4. If needed, remove the Sliding Glass Doors by lifting upward until clear of the lower track. Swing the bottom of the door outward, pull downward to remove. Set aside in a place suitable for cleaning.



5. Clean the interior and exterior of the Merchandiser with hot soapy water. Wipe down with clean towels, or sponge, dampened with clean water. For difficult areas, use a mild biodegradable non-toxic degreaser (such as Simple Green). Thoroughly dry all surfaces.
6. Clean the glass parts, including Side Glasses, Partition Glass, Sneeze Guard, etc. with an ordinary window cleaner. These can be removed for easier cleaning. **HANDLE WITH CARE!** Be sure to clean the inside of Front Glass with glass cleaner.
7. Polish all exterior stainless surfaces with a good quality stainless steel cleaner/polish.
8. Clean Pans, Pan Grates and Pan Support Channels with hot soapy water (may be placed in dishwasher). Rinse and dry.
9. Clean any crumbs and debris from lower sliding door tracks. Tracks are notched at the ends to allow for easier removal of crumbs.
9. After drying thoroughly, reinstall all glass pieces removed for cleaning. Reinstall Sliding Doors using reverse sequence of removal.

5. *Cleaning - Continued*

10. Reinstall Pan Support Channels and Serving Pans as desired.
11. Lower Front Glass, and if desired, preheat the Merchandiser as described in **Section 4.2, Setting and Adjusting Temperature**.

6. Troubleshooting

This information is presented as basic general troubleshooting procedures to aid qualified kitchen equipment service technicians with diagnosis and repair. A wiring diagram for the appliance is also provided for more detailed analysis.

DANGER

Electrical troubleshooting should be performed **ONLY** by qualified service providers. Serious injury, even death, will result from contact with energized electrical circuits, or components. Users should limit troubleshooting activities to very simple operational issues only.

Table 6-1. Troubleshooting Procedures

Problem	Possible Cause	Repair Procedure
Fluorescent lighting not turning ON	A. Fluorescent bulb burned out	Replace bulb
	B. Fuse blown	Replace fuse
	C. Faulty light ballast	Call for service
	D. Faulty relay	Call for service
Unit not heating properly	A. Pan (bottom) heating element(s) faulty	Call for service
	B. Ceramic (top) heating element(s) faulty.	Call for service
	C. Heat control(s) faulty.	Call for service
Unit will not power-up	A. No power supplied to unit	Check circuit breaker at electrical panel, or plug in power cord.
	B. Faulty relay	Call for service
	C. Blown fuse	Replace fuse
Unit not maintaining food at proper holding temperature	A. No power supplied to unit	Check circuit breaker at electrical panel, or plug in power cord.
	B. Heater settings too low	Adjust bottom and/or top heater controls as needed.
	C. Food not at proper temperature when placed into the unit.	Ensure food is at required temperature before placing into unit.
	D. Heating elements and/or ceramic heaters faulty.	Call for service.

6. Troubleshooting

Table 6-1. Troubleshooting Procedures		
Problem	Possible Cause	Repair Procedure
Front Glass difficult to raise, or does not remain open when raised	A. Pneumatic strut in one,or more, of the hinge mechanisms has failed	Call for service

7. Parts List

The parts shown in the section are generally field replaceable.

7-1. Parts Ordering and Service Information

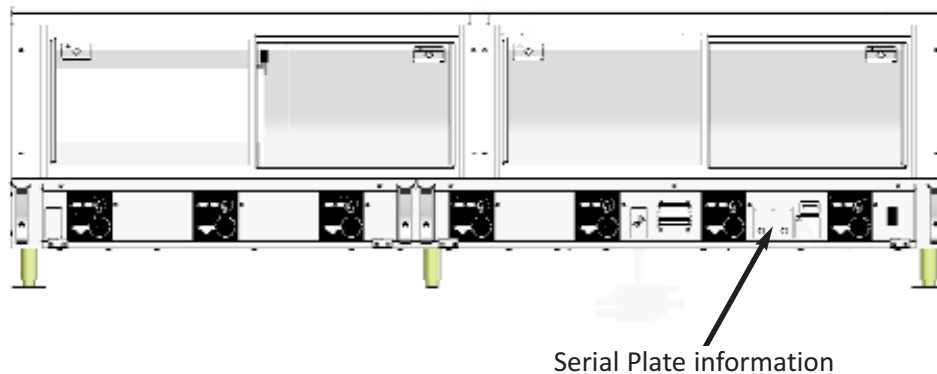
If technical assistance or repairs are needed, please contact **KitDelSM** for assistance

Toll Free: **855.632.3373** ... Fax: **573.896.9583**

E-mail: **KitDel@PFSbrands.com**

Website: **www.KitDel.com**

To help us address your needs as quickly as possible please have the following information readily available when calling. The information is recorded on the Serial Plate Label attached to the rear panel of the unit.



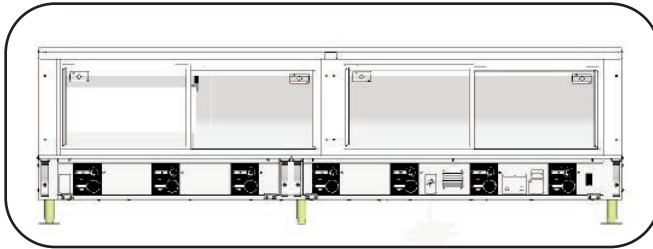
Please record this information here for quick reference in the future.

Model: _____

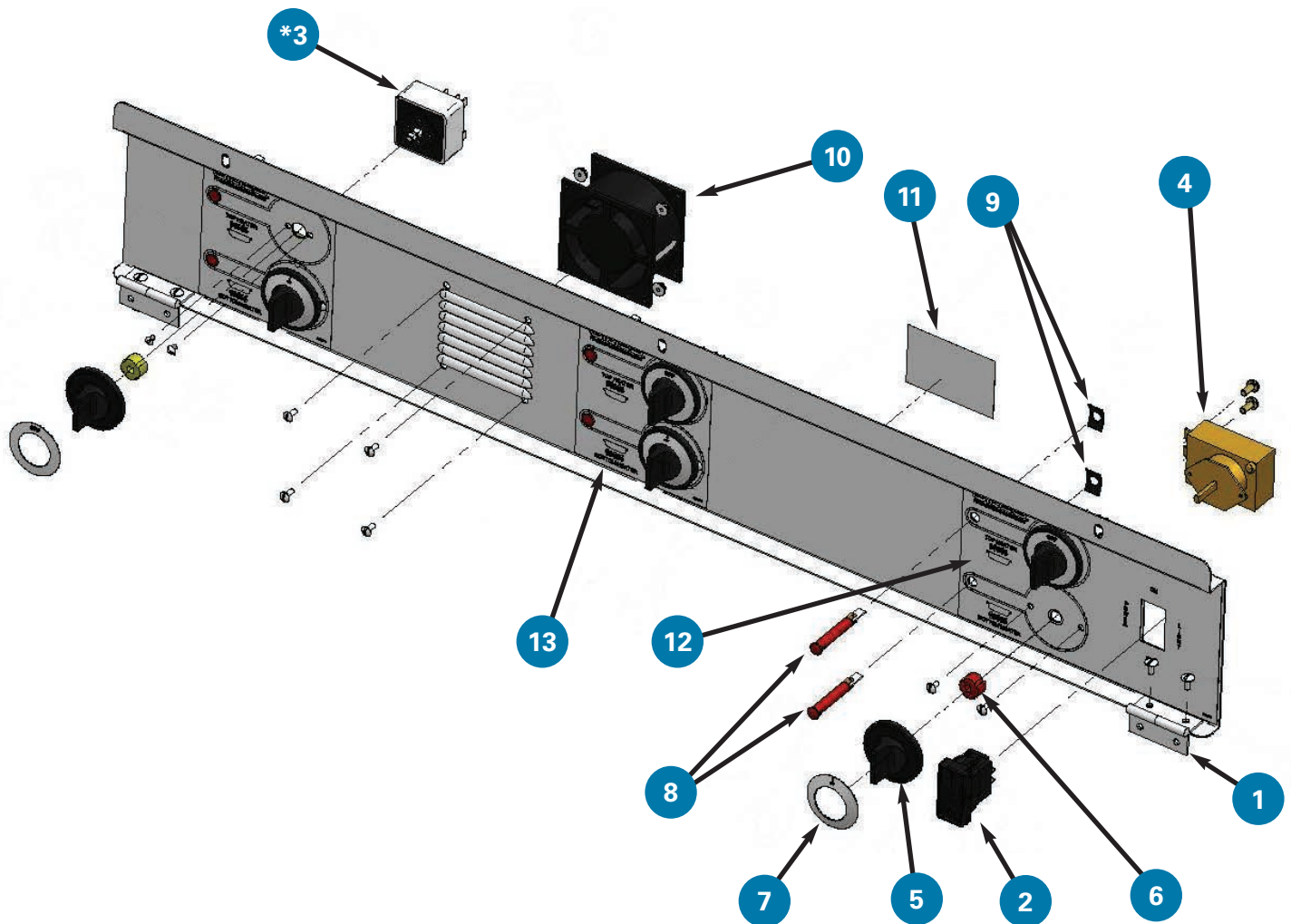
Serial Number: _____

Voltage: _____ **Phase:** _____

7-2. Control Panel Assembly



- 3 Well - 3 Controls
- 4 Well - 4 Controls
- 5 Well - 5 Controls
- 7 Well - 7 Controls (2 Panel Sections)



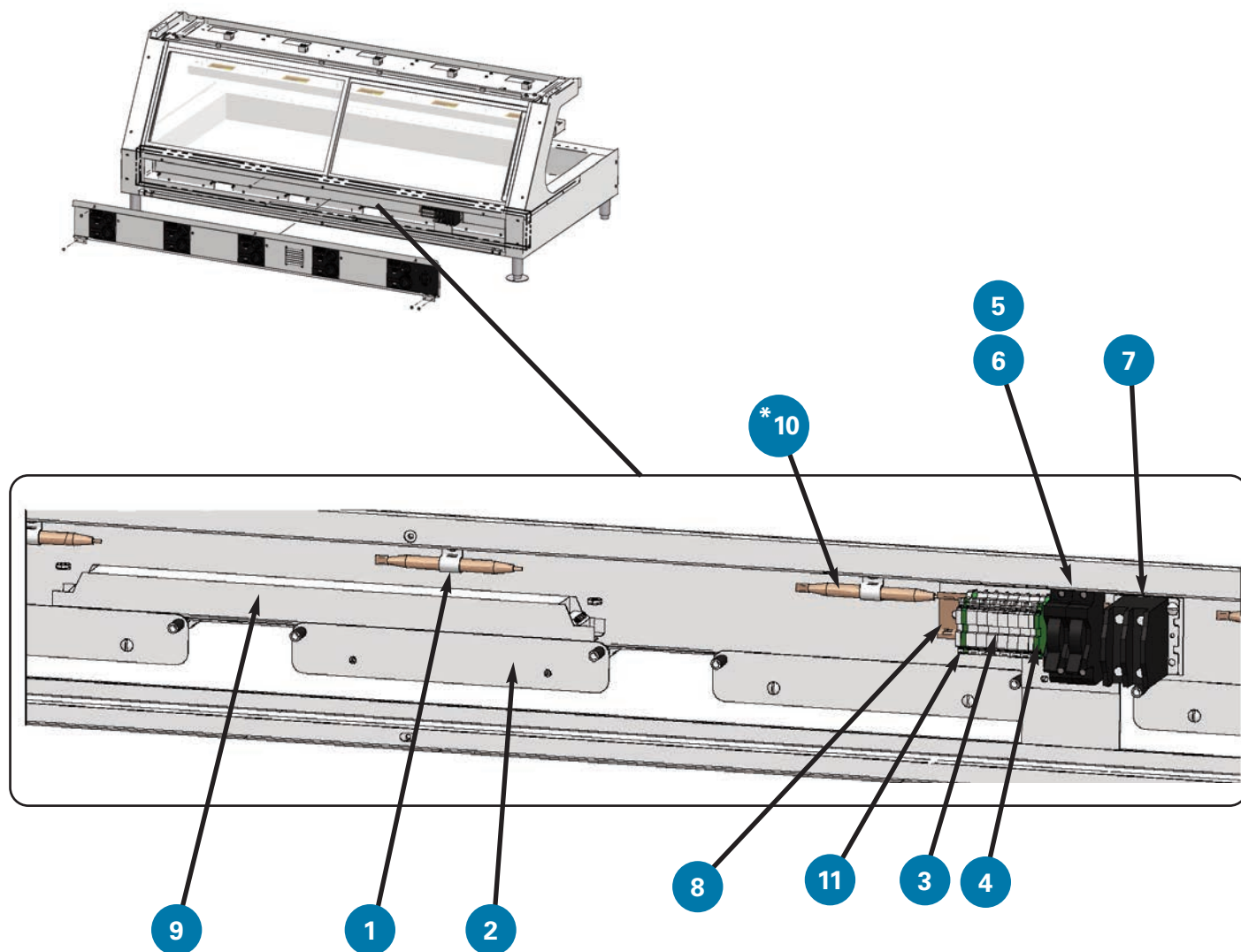
* Includes Knob, Adapter & Faceplate

7-2. Control Panel Assembly

ITEM NO.	PART NO.	QTY (var. by model)	DESCRIPTION
1	41172	2 (3,4,5 Well) 4 (7 Well)	HINGE, LIFT-OFF, W/HOLES, 0.125 PIN
2	21190	1	SWITCH, ROCKER, D.P.S.T. 250V, 10A
*3	21215	3, 4, 5 or 7	ROTARY SWITCH, CERAMIC HEATER (includes KNOB)
4	23701	3, 4, 5 or 7	THERMOSTAT, 60-250 DEG, 208-240V
5	23701-1	3, 4, 5 or 7	KNOB, THERMOSTAT, BLACK
6	23701-2	3, 4, 5 or 7	ADAPTER, D-STEM, THERMOSTAT
7	20025	3, 4, 5 or 7	FACEPLATE, KNOB DIAL 1-10, THERMOSTAT
8	20402	6, 8, 10 or 14	INDICATOR LIGHT, RED, 250V, 0.5W
9	20307	6, 8, 10 or 14	RETAINING CLIP, INDICATOR LIGHT
10	21829	1	FAN, COMPONENT COOLING, 220/230V
11	65896	1	LABEL, SUPPLY POWER CONNECTION
12	65897	1	LABEL, CONTROL PANEL, W/POWER SWITCH
13	65672	2, 3, 4 or 6	LABEL, CONTROL PANEL, W/O POWER SWITCH

* Includes Knob, Adapter & Faceplate

7-3. Element Assembly - Lower Heater



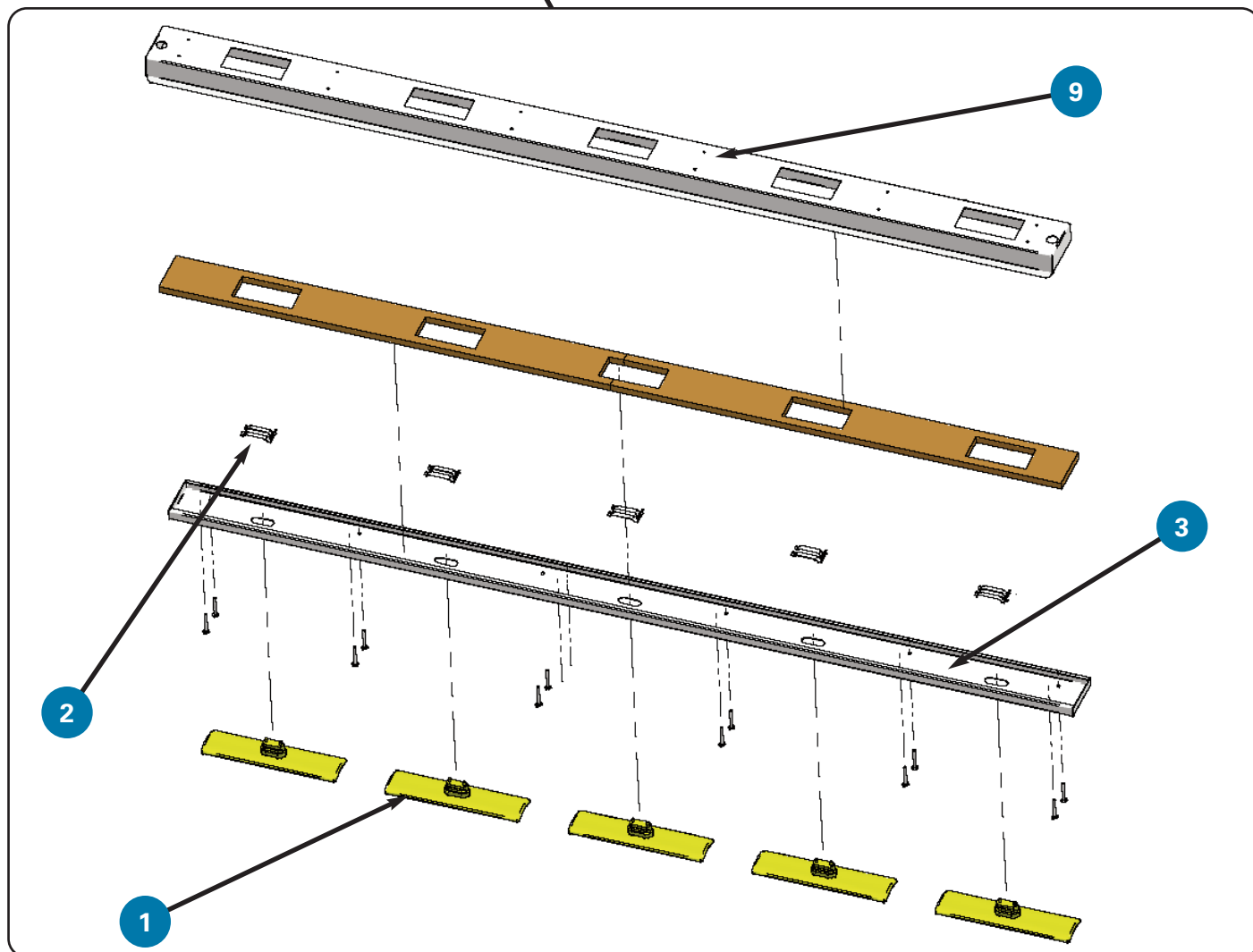
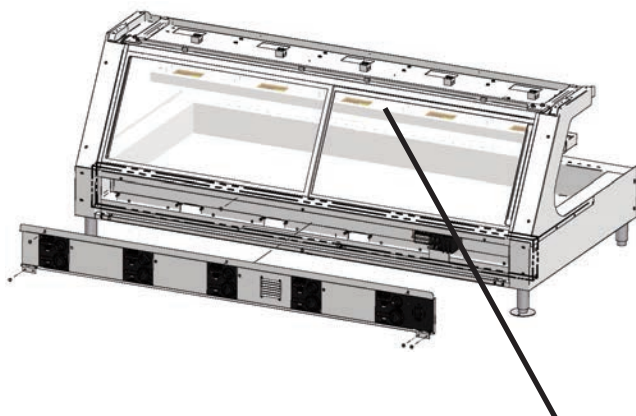
* Cannot be purchased separately

7-3. Element Assembly - Lower Heater

ITEM NO.	PART NO.	QTY (var. by model)	DESCRIPTION
1	20039	3, 4, 5 or 7	STRAP, 3/8" TUBE
2	25352	3, 4, 5 or 7	ELEMENT, HFG, 208-240V
3	20319	6	TERMINAL BLOCK, 50 AMP, AWG 8-24
4	20304	1	TERMINAL BLOCK, GROUND, AWG 4-12
5	20411	2	FUSE HOLDER, DIN RAIL, 600V, 35A
6	21900	2	FUSE, 15-AMP, SC-15
7	21175	1	CONTACTOR, 50AMP, 1PH, 208/240V
8	36666	1	DIN RAIL, TERMINAL BLOCK MOUNT, 5-9/32"
9	20607	1	BALLAST, T5, 1-2 BULB, 35W, 120/277V
*10	--	3, 4, 5 or 7	THERMOSTAT BULB, *PART OF P/N 23701
11	20424	1	TERMINAL BLOCK, GROUND, AWG 8-24
12	65897	1	LABEL, CONTROL PANEL, W/POWER SWITCH

* Cannot be purchased separately

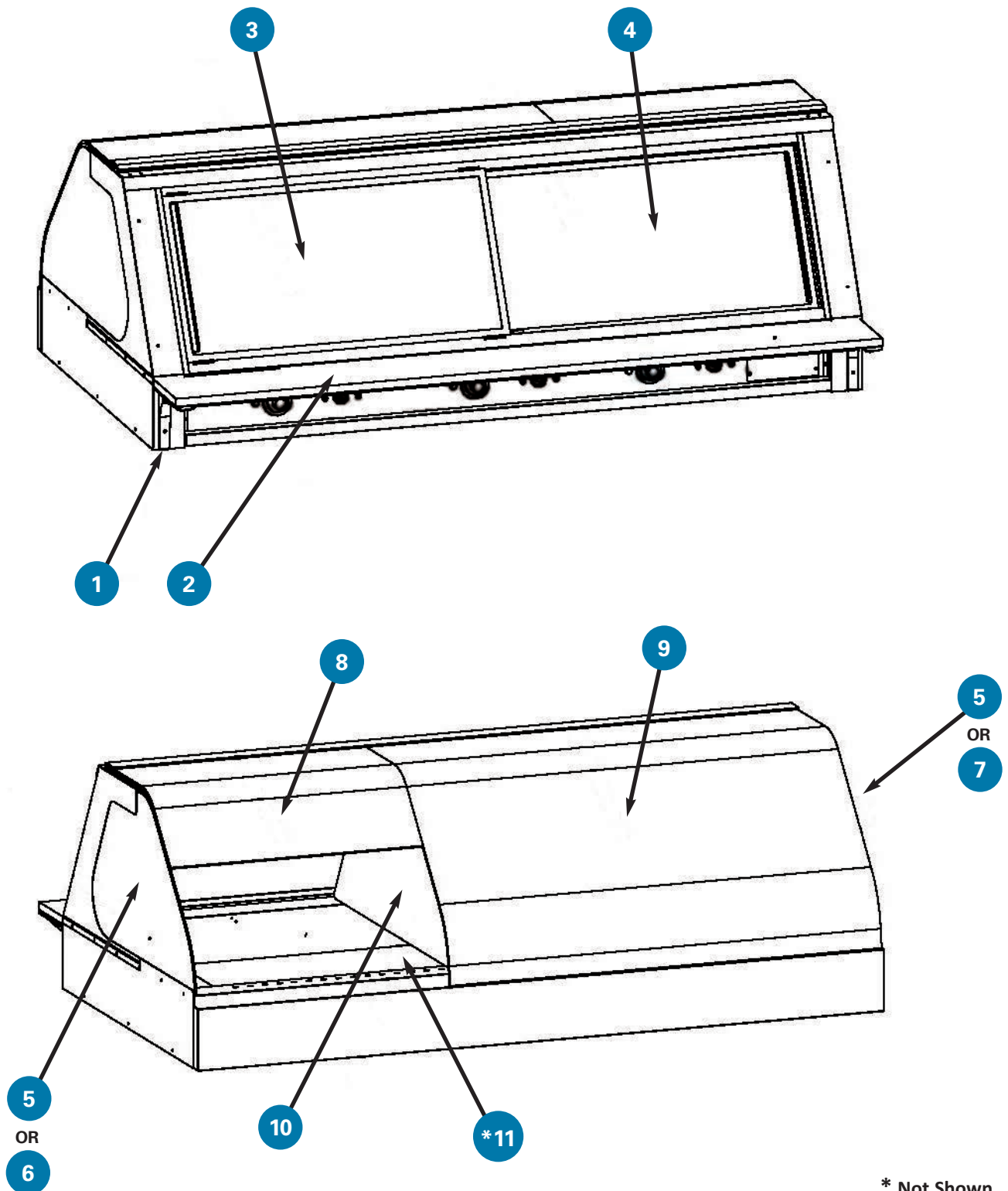
7-4. Top Heater Assembly



7-4. Top Heater Assembly

ITEM NO.	PART NO.	QTY (var. by model)	DESCRIPTION
1	20376	3, 4, 5 or 7	HEATER, CERAMIC, 150W, 230V
2	--	--	RETAINER CLIP (SUPPLIED w/HEATER)
3	93703	1	CHANNEL, HEATER MOUNT, 3 Well
3	94663	1	CHANNEL, HEATER MOUNT, 4 Well
3	93686	1	CHANNEL, HEATER MOUNT, 5 Well
3	92639	1	CHANNEL, HEATER MOUNT, 7 Well
4	93702	1	COVER, TOP HEATER, 3 Well
4	94662	1	COVER, TOP HEATER, 4 Well
4	93685	1	COVER, TOP HEATER, 5 Well
4	93636	1	COVER, TOP HEATER, 7 Well

7-5. Glass and Work Shelf Assemblies



* Not Shown

7-5. Glass and Work Shelf Assemblies

ITEM NO.	PART NO.	QTY	MODEL	DESCRIPTION
1	40184	2 (4,5,6 well) 4 (7 well)		WORK SHELF DROP BRACKET
2	36142	1	3 Well	WORK SHELF, ASSY, 3-WELL
2	94696	1	4 Well	WORK SHELF, ASSY, 4-WELL
2	36131	1	5 Well	WORK SHELF, ASSY, 5-WELL
2	36123	1	7 Well	WORK SHELF, ASSY, 4-WELL
2	36122	1	7 Well	WORK SHELF, ASSY, 3-WELL
3	40287 / 40369	1	3 Well	LEFT DOOR (CLEAR / MIRROR TINT)
3	41231 / 41238	1	4 Well	LEFT DOOR (CLEAR / MIRROR TINT)
3	70432 / 70449	1	5 Well	LEFT DOOR (CLEAR / MIRROR TINT)
3	40207 / 70446	2	7 Well	LEFT DOOR (CLEAR / MIRROR TINT)
4	40286 / 40371	1	3 Well	RIGHT DOOR (CLEAR / MIRROR TINT)
4	41232 / 41240	1	4 Well	RIGHT DOOR (CLEAR / MIRROR TINT)
4	70149 / 70448	1	5 Well	RIGHT DOOR (CLEAR / MIRROR TINT)
4	40208 / 70447	2	7 Well	RIGHT DOOR (CLEAR / MIRROR TINT)
5	40182	2	ALL	SIDE GLASS, CLEAR
6	40442	1	ALL	LEFT SIDE GLASS, MIRROR TINT
7	40374	1	ALL	RIGHT SIDE GLASS, MIRROR TINT
8	40178	1	4,5,7 SSM	BENT GLASS, 2-FT SELF-SERVE
9	40479	1	3 SSM	BENT GLASS, 4-FT SELF-SERVE
9	45156	1	3 FSM	BENT GLASS, 4-FT FULL-SERVE
9	41235	1	4 SSM	BENT GLASS, 5-FT SELF-SERVE
9	41236	1	4 FSM	BENT GLASS, 5-FT FULL-SERVE
9	45156	1	5 SSM	BENT GLASS, 6-FT SELF-SERVE
9	40179	1	5 FSM	BENT GLASS, 6-FT FULL-SERVE
9	40179	1	7 SSM	BENT GLASS, 8-FT SELF-SERVE
9	41307	2	7 FSM	BENT GLASS, 8-FT FULL-SERVE
10	40183	1	ALL SSM	GLASS, MIDDLE PARTITION, CLEAR
*11	40457	1	4,5,7 SSM	GLASS, SNEEZE GUARD, 2-FT SELF-SERVE SECTION
*11	40501	1	3 SSM	GLASS, SNEEZE GUARD, 4-FT SELF-SERVE
*11	41243	1	4 SSM	GLASS, SNEEZE GUARD, 5-FT SELF-SERVE

* Not Shown



Notes:





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