

Service & Installation Instructions

Keep this booklet for Future Reference



For Additional Copies Please Contact:

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Table of Contents

General Information

Case Descriptions	
Shipping Information	
Case Sections	
PTD Series5	
SD Series 6	
PTD/SD Mechanical View6	

Installation Instructions

Location7
Crate Removal7
Case Exterior Loading7
Leveling7
Joining Lineups
Drain, Electrical and Refrigeration
Connections8
Lift Glass Adjustment
Humidification System8
Doors8
Optional Shelving9
Installation Checklist9
Cart Bumper Installation9

Refrigeration Information

Load Limits16
Product Display16
Common Settings16
Case Air Temp16
Unit Shutdown16

Electrical Information

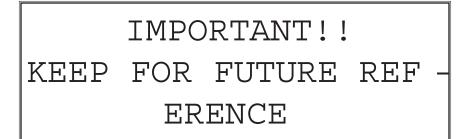
Amperage Information1	7
Wiring Color Code	8
Timers18	8
Ballast Information18	8
Wiring Diagram19	9

Maintenance Information

Cleaning	21
Light Bulb Replacement	22

Service

Evaporator Coil Layout	-23
Hot Dome Service	-23
Load Limits	-23
Troubleshooting	-24
Service Department	·25
Parts	·25



This booklet contains information on:

PT Series

BDPT Series

PT Merchandiser to Match Service Deli Lineup

PT Series

Low Profile Pizza Table

PT Dome Series

PTD-SC	Self-Contained Low Profile Self Service Refrigerated Merchandiser with Refrigerated Service Dome
PTD-R	Remote Low Profile Self Service Refrigerated Merchandiser with Refrigerated Service Dome
PTD-G	Remote, Profile Self Service Refrigerated Merchandiser with Refrigerated Gravity Coil Service Dome
BDPTD-SC	Self-Contained Low Profile Self Service Refrigerated Merchandiser with Refrigerated Service Dome
BDPTD-R	Remote Low Profile Self Service Refrigerated Merchandiser with Refrigerated Service Dome
BPTD-G	Remote, Low Profile Self Service Refrigerated Merchandiser with Refrigerated Gravity Coil Service Dome

PT Dome Hot Series

- PTDH-R Remote Low Profile Self Service Refrigerated Merchandiser with Hot Service Dome
- BDPTDH-SC Self Contained Low Profile Self Service Refrigerated Merchandiser with Hot Service Dome
- BDPTDH-R Remote Low Profile Self Service Refrigerated Merchandiser with Hot Service Dome

Super Dome Series

- **SD-SC** Self contained large service dome merchandiser with self-service display
- **SD-R** Remote large service dome merchandiser with self-service display

Super Dome Hot Series

- **SDH-SC** Self contained large service dome merchandiser with self-service display
- **SDH-R** Remote large service dome merchandiser with self-service display

The PT DOME Series conform to the following standards









The SUPER DOME Series conform to the following standards







Shipping Information

IMPORTANT!

FOR YOUR PROTECTION PLEASE READ AND OBSERVE THE FOLLOWING INSTRUCTIONS:

Transportation companies assume all liability from the time a shipment is received by them until the time it is delivered to the consumer. Our liability ceases at the time of shipment.

All shipments leaving our plant have been carefully inspected. If a shipment arrives with the crating or packaging damaged, have the carrier note the condition on the receipt. Check as soon as possible for concealed damage.

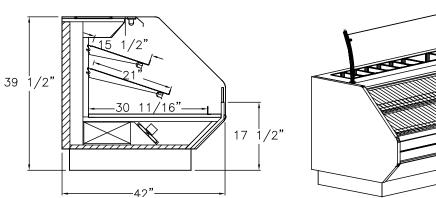
If it is found that the shipment has been damaged in transit, please DO NOT return it to us, but notify and file a claim with the carrier at once. FAILURE TO FOLLOW THIS PROCEDURE WILL RESULT IN REFUSAL BY THE CARRIER TO HONOR ANY CLAIMS WITH A CONSEQUENT LOSS TO THE CONSUMER.

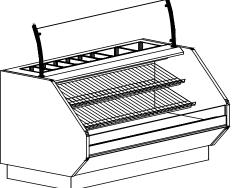
If a UPS shipment has been damaged, retain the damaged material and the carton and notify us at once. WE will file a claim.

GOODS SHOULD NOT BE RETURNED FOR CREDIT UNLESS AUTHORIZED BY OUR SALES DEPART-MENT.

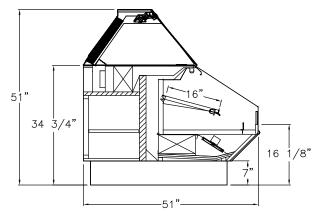
Case Drawings

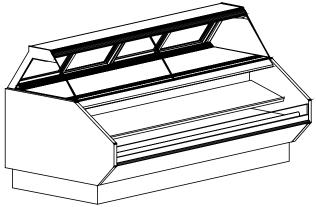
PT Series



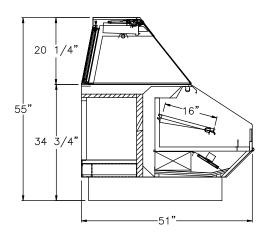


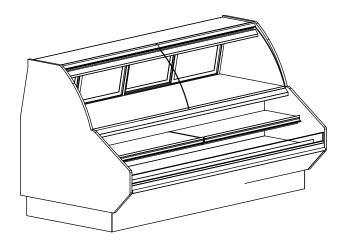
PTD Series



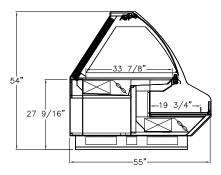


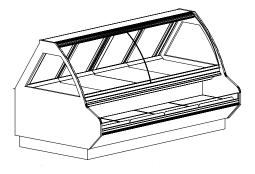
PTD-G Series

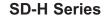


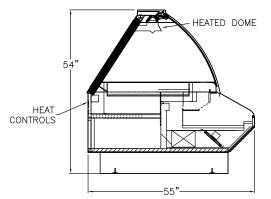


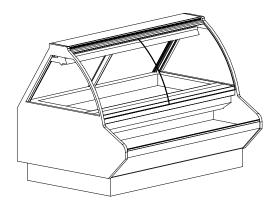
SD Series





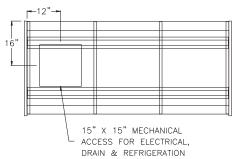




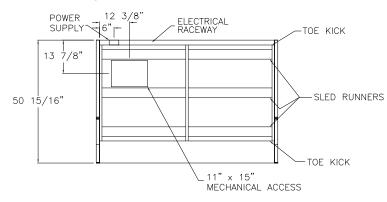


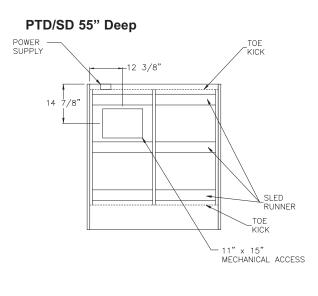
PTD/SD Mechanical

PT Series



PTD 51" Deep





Location

This refrigerated display case has been designed for displaying and the storage of perishable food product. It is engineered for air-conditioned stores with a maximum ambient of 75° F and 55% relative humidity.When selecting the location for placement of this case, avoid the following conditions:

Excessive air movement

- Doors
- Air-conditioned vents
- Other air sources

Excessive heat

- Windows
- Sun
- Flood lamps 8 feet or less from the product
- Other heat sources

NOTE: A 12" clearance is necessary for condenser coil to run correctly. Do not block.

Crate Removal

Move case as close as possible to its permanent location. Remove all crating and shipping braces above the shipping pallet. Loosen the plastic dust cover from the pallet, but leave cover over the case to protect it while removing the case from the pallet. Carefully lift the case up and off the pallet so leveling pads clear the pallet. When the case is in location, remove the dust cover. INSTALLATION HARDWARE SHIPS LOOSE INSIDE THE CASE. Note: Locate the horizontal supports underneath of unit before removing from pallet, damage to the finished metal will occur if correct lift points are not identified prior to removal.



Compressor

The 6', 8', 10 and 12' Self-Contained cases are equipped with a shipping block under the compressor. This block must be removed upon installation. Loosen all four nuts on the compressor hold down screws. Lift or pry the compressor up and remove the shipping block. DO NOT retighten screws, as the compressor should be left free to float on the spring mounts.

FAILURE TO REMOVE THE SHIPPING BLOCK WILL RESULT IN EXCESSIVE NOISE, REFRIG-ERANT LEAKS AND WILL VOID WARRANTY PROTECTION.

Case Exterior Loading

These cases are not designed for excessive external weight. DO NOT WALK ON THE TOP OF THE CASE. Walking on top of cases could cause personal injury and damage to the case.

Leveling

To ensure proper operation of the refrigeration system and drainage of condensate, this case MUST BE LEVEL. Use a carpenter level to level front to back and left to right. Some cases may be fitted with 4 or more leveling pads. Adjust leveling pads or shim as necessary.

Joining Lineups

- 1. BEGIN ALL LINEUPS BY LEVELING FROM THE HIGHEST POINT OF THE STORE FLOOR.
- 2. Remove front and rear toe kicks by removing screws on all sides. Set and level first case.
- 3. Level second case to first case and seal with a good grade silicone on all edges of each case, taking care not to get silicone on Plexiglas.
- 4. Slide cases together over bottom bolts. Apply nuts over bolts and tighten slightly.
- Level case so that the screw holes in the joining plate located at the top of the case align over the screw holes of the adjoining case. Adjust leveling pads or shim as necessary. (See Illustration.) THE FRONT OF THE CASES MUST BE FLUSH.
- 6. Tighten bottom studs tightly and screw in top joining plate.
- Seal all seams. Use metal U-channel located inside case to seal and cover where interior case beds join.
- 8. Use trim kit to cover seam between cases. Peel backing off trim and press firmly over seam.

Drain, Electrical and Refrigeration Connections

Note: Barker remote units are shipped with a dry nitrogen charge of approximately 10 lbs. pressure in the evaporator coil. During installation if nitrogen charge is not present, leak check accordingly.

- 4', 6', 8' and 10' cases contain one condensate drain. 12' cases contain two condensate drains. Connect drains to existing floor drains. Provide as much downhill slope as possible and avoid long runs of drain lines. Do not install condensate drains in contact with non-insulated suction lines in order to prevent condensate from freezing. (See mechanical plans and table for drain locations.) NOTE: P Traps must be installed prior to floor drain.
- 2. Electrical connections are made through the power supply box in the electrical raceway of each case, which can be accessed from the front toe kick. Voltage requirements and component amperes can be found in the electrical section of this manual, but always check the data tag located on the exterior of the case.
- 3. Refrigeration connections will be made through the refrigeration stub up *(see mechanical plans for each case)*. See refrigeration information section for case loads and recommended settings. Refrigeration lines may be headed together for all cases in a line up, if desired, by running lines through the refrigeration access hole in each end or through access in the bottom (toe kick area) of the case. Seal all access holes to prevent recirculation.

For proper refrigeration performance, PRODUCT MUST NOT BE PLACED IN A POSITION WHERE IT MAY AFFECT THE AIR CURTAIN. Air discharge and return air vents must remain unobstructed.

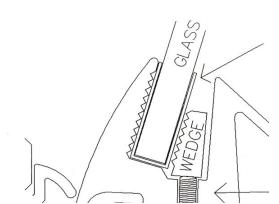
Lift Glass Adjustment

Lift Glass is installed at the factory with the case perfectly level, if adjustments need to be made to align the glass first check to insure the case was properly leveled during installation.

- 1. Lift the glass to its up most position.
- Loosen allen screws. NOTE: This is a 2 person operation. One person must hold the glass at all times.
- 3. Starting at the right side, tap the wedge with a #2 standard screwdriver until the wedge recesses into the aluminum extrusion, working from the right to the left side Slide the glass right or left as needed. NOTE: extreme care must be taken not to tap the wedge too hard.

- 4. Tighten the right allen screw while holding the left side of the glass firmly. Be careful to keep glass level.
- 5. Lower glass into position. Repeat as necessary until glass is completely level. NOTE: the entire glass clamp can be moved by loosening the allen screws that are located in the glass clamp hinges.

PROFILE OF GLASS CLAMP



Doors

Rear load doors are shipped inside the case. Push top of doors all the way into top door tracks. Push bottom of door over bottom door tracks and lower over tracks. Doors are labeled inside and outside for easy installation.

Optional Shelving

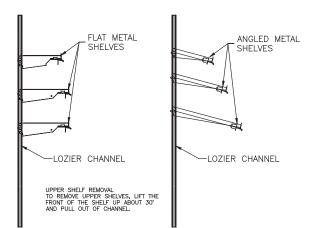
All shelves are adjustable in 1" increments and may be positioned flat or angled. Shelves are to be installed with the smallest depth on top and larger on the bottom for proper air flow. Shelf brackets can be removed by lifting shelf up about 30° and pulling straight out. Reposition brackets as desired. All cases with shelf lights are equipped with an interlocking plug system. FOR SHELF LIGHTS TO WORK, PLUGS MUST BE FULLY ENGAGED.

Wire Shelving

- 1. Wire shelving is shipped in the case and secured for shipping with plastic ties.
- 2. Remove plastic shipping straps before repositioning.
- 3. Wire shelves may be used in an angled or flat position. (See Illustration on next page.)

Metal Shelving

- 1. Metal shelving over 12" in depth is shipped separately. Remove from crate and install as shown below. If metal shelving is 12" in depth or less shelving is shipped inside case.
- 2. Remove plastic shipping straps on shelves shipped inside case before repositioning.
- 3. Metal shelves may be flat or angled.



Installation Checklist

Before supplying electrical power and starting case check the following:

- 1. Compressor Area: (For Self-contained cases). Remove shipping block on units with semi-hermetic compressors. Check location of controls.
- Evaporator Area: Check to ensure evaporator fan pressure plates are secure and in proper position NOTE: hinged portion of pressure plates are secured for shipping with mounting screws. Screws do not have to be removed for case operation but must be removed to use hinge.
- 3. Lighting System: Check to ensure male plugs are completely inserted in female sockets and that all lamps are securely seated in light fixture.
- 4. Case Leveling: Visually check case. If lift glass is out of adjustment or case looks out of square, use a carpenter's level and shim as needed.

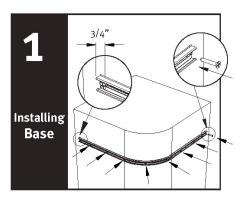
After supplying power to the case and starting unit:

- 1. Check to ensure all fans are operational.
- 2. Check all lights.
- 3. Check case temperature and adjust thermostat as needed.

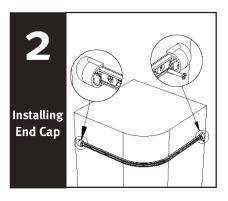
Cart Bumper Installation

Note: If equipment is ordered with cart bumper, steps 1 & 2 are completed at the factory and installer should skip to steps 3 & 4.

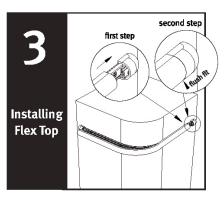
Tools required: Tape measure, pencil, drill with phillips driver bit, rubber mallet, straight edge, chalk line, PVC cutters, cotton rags, non-abrasive cleaner



Cut plastic base to desired length of fixture. When using end caps be sure to cut base 3/4" short of fixture edge. When using corners, be sure to cut base so that it is flush with fixture edge. secure base to fixture with screws every 4" on center. Make sure to put a screw 3/8" away from the cut end of base.



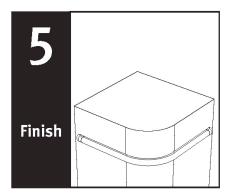
SNAP end caps or corners onto the base extrusion. Secure with #8 flat head phillips screws.



When installing flexible bumper top, the cut ends need to be as straight as possible. To mount on a curved or flat surface, start at one end and attach bumper to base by hooking bumper top onto track, then snap bottom portion into place and slide bumper against the end cap for a flush fit. Continue to hook bumper onto base track with your hand or using a rubber mallet until you reach other end cap. NOTE: Cover mallet with a cloth to prevent marring the bumper finish.



Mark and cut tail end of flexible bumper at least 1/8" longer then beyond the end cap position. NOTE: Make sure the end cut is straight and square for proper fit. Slightly retract the bumper in order to feed cut end into the end cap as you finish hooking the top and bottom edges of the bumper onto the base track. You should feel and hear the bumper snap into place for a snug fit.



Finally, check for proper fit and attachment along the entire length of bumper which is either on the wall or a fixture. Make sure you have a smooth and flush fit against the end caps. NOTE: Clean any dust or debris with a cloth and non abrasive cleaner.

Helpful Hints:

- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Over cut the flexible vinyl and compression fit. Adding the additional material will compensate for stretching which occurs during installation.
- Use a clean, dry cloth and any mild household cleaner or soap solution; spray and wipe clean

Blower Coil Dome Operation Refrigeration

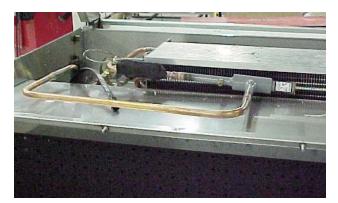
The upper coil is pressure controlled with an EPR Valve. This valve is located under the dome bottom shelf at the customer left. Larger cases have two valves.

To adjust the EPR valve use an allen wrench. NOTE: Some cases may be ordered with EPR valves to control both refrigerated compartments.

Defrost

The branch circuit should be set for 6 defrost/day @ 20" each or 4 defrosts/day @ 30" each. The factory installed supplemental time clock should be set for one 60" defrost per day, at night.

NOTE: The supplemental defrost should be sequenced to coincide with the last 20" defrost of the day of the upper coil cycle. This stops the refrigerated airflow from cooling the upper coil drain pan and will prevent ice build up. The evaporator fan runs continuously.



Gravity Coil Dome Operation Refrigeration

The gravity coil dome utilizes a top-mounted gravity coil. Instead of a bottom serpentine coil traditionally used as a heat sink in the drain pan under the bottom deck, the PTD Gravity Series has the bottom drain pan refrigerated by the discharge air from the lower self-service coil. The drain pan for the gravity dome is a non-insulated divider between the lower case discharge air plenum and the upper gravity coil case.

NOTE: The drain pan is refrigerated to approximately 28° when the lower self-service display is refrigerating. A factory installed EPR valve controls the lower blower coil temperature, which is located in the base section of the case. Remove the screws holding the cover to access. To adjust the EPR valve use an allen wrench.

The upper gravity coil has a factory installed supplementary defrost clock to allow for a longer supplemental defrost cycle during the night (see defrost settings). The timer is located in the electrical raceway located in the rear of the case and is preset at the factory. Refrigeration lines for the upper and lower coils are tied together at the factory for installation ease.

Control Settings in Conjunction with a Rack Refrigeration System

Case Installed Controls and Function Upper coil:

- Expansion valve and Schrader valve
- Electronic temperature sensor
- Suction Stop Solenoid to control defrost

Lower coil

- Expansion Valve and Schrader Valve
- Electronic temperature sensor EPR Valve

Rack Control and Function

- Control wire to electronic temperature sensor to monitor temperature performance.
- Control wire set to Suction stop Solenoid to achieve required supplemental defrost.
 SORT Valve to control temperature
- Lower Coil:
 - Control wire to electronic temperature sensor to monitor temperature performance.
 - EPR Valve to control cast temperature
 - · SORT valve to control circuit defrost.

Rack Saturated Suction Temperature

Meat	+15°
Seafood	+15°
Deli/Bakery	+18°
Seafood on ice	+18°

Temperature Settings

Lower Coil - Case EPR Valve

Adjust the EPR valve or set the rack controller to achieve the3 following discharge air temperatures for the lower self-service section

Lower Coil Discharge air temperature requirements:

Meat	+26° to +28°F
Seafood	+28° to +30°F
Deli/Bakery	+28° to +30°F

Upper Coil - SORT Valve

Adjust the SORT Valve for the following upper coil temperatures:

Meat	+15°F
Seafood	+18°F
Deli/Bakery	+18°F

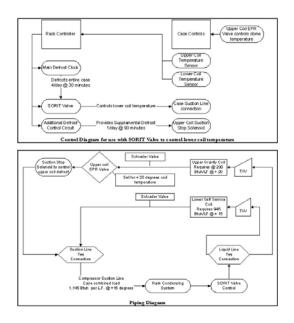
Defrost Settings

Upper coil Defrost

Set the rack control to provide on 90 minute off-time defrost/day - at night, upper coil only.

Rack control for lower coil

Set the rack controller to control the SORT valve for four off-time defrosts/day @ 30 minutes. Sequence one of the lower coil defrosts to coincide with the upper coil defrost such that both coils are in defrost during the final 30 minutes of the upper coil defrost. IE: Initiate the last lower coil defrost 60 minutes after the start of the upper coil defrost.



For Ice Displays

Gravity Dome ice displays need to be manually flushed out of the case. If the operator sets a 4-5 hour defrost for the upper coil at night allowing the ice to melt, there will be ice build-up in the upper coil drain pan. The lower section's coil discharge air will continue to refrigerate the drain pan causing ice to form.

Typical Component Settings for Dome System

Suction Temperature Settings

This is used for the self-service coil (the colder of the two). The factory-installed EPR valve is used to raise the suction temperature for the top gravity coil. (see below)

Meat	15°	F
Seafood	18°	F
Deli/Bakery	20°	F

Evaporator Temperature

Blower Coil	20°	F
Gravity Coil	15°	F
Gravity with ice	22°	F

EPR Valve

The EPR Valve is used to raise the suction temp for the top gravity coil.

Meat	18°	F
Seafood	22°	F (on ice)
Deli/Bakery	20°	F

TXV 10° Superheat

Pressure switch

404A	Low - 20 lb/ 55 lb	High - 350 lb
134A	Low - 7lb/ 20 lb	High - 225 lb

NOTE: The above settings are approximate and will vary slightly with product load, lighting, store ambient conditions etc. Evaporator fans run constantly.

Lower Case Operation Refrigeration

The refrigeration in the lower part of this case is thermostatically controlled. The case refrigerates until the cut out point on the thermostat is reached. The thermostat opens, cutting power to the liquid line solenoid. The compressor continues to run, the system pumps down causing the pressure switch to open, cutting power to the compressor. If the case is equipped with a refrigerated rear storage area, a separate but identical refrigeration system is present. NOTE: Some cases may be ordered with EPR valves to control both upper and lower refrigerated compartments.

Defrost

This case is equipped with an off cycle defrost system. The timer cuts the power to the liquid solenoid. The unit stays in off cycle defrost until the defrost timer re-energizes the liquid solenoid.

NOTE: The evaporator fan runs continuously.

Typical Component Setting For Lower and Rear Storage Systems

Thermostat	cut out
26-28°	6° differential

Defrost termination thermostat: 40-42°

TXV: 10° Superheat

Pressure switch

404ALow - 20lb/ 55lbHigh - 350 lb134ALow - 7lb/ 20lbHigh - 225lbNote: The above settings are approximate and will
vary slightly with product load, lighting, store ambi-
ent conditions etc. Evaporator fans run constantly.

Electronic Thermostat

The electronic thermostat is located at the rear of the case in the electronic raceway. The thermostat is equipped with a liquid crystal display providing a constant readout of the sensed temperature. NOTE: The LCD display will be blank during defrost. A touch keypad that allows the users to select the set point temperature, differential and the heating /cooling modes.



Programming Steps for the ETC, Electronic Temperature Control

- STEP 1. Press the set key once to access the Fahrenheit/Celsius mode. The display will display either F degrees Fahrenheit or C for degrees Celsius. Press the up arrow or the down arrow so the display indicates F.
- STEP 2. Press the set key again to gain access to the set point. The LCD will display the current Set point and the S1 will be blinking. Press the up arrow to increase or the down arrow to decrease the temperature setting.
- STEP 3. Press the set key again to gain access to the differential. The LCD will display the current differential and the DIF 1 will be blinking. This should be set at 6 degrees.
- STEP 4. Press the set key again to gain access to the cooling or heating mode. The LCD will display the current mode. Press either the up arrow or the down arrow to set the display in the C1, cooling mode
- STEP 5. Press the set key once more and the programming is complete.
- STEP 6. DISPLAY
INDICATIONDESCRIPTION1. F or CFahrenheit or Celsius Scale2. S1 (blinking)Set point Temperature
 - 3. DIF (blinking) Differential Temperature
 - 4. C1/H1 Cooling or Heating Mode

WARNING!

USE ONLY DOWFROST, PREMIXED 35% INHIBITED PROPY-LENE GLYCOL. USE OF ANY OTHER GLYCOL WILL VOID THE MANUFACTURER WARRANTY.

Refrigeration Loads

Remote Case Data - Electrical 120 Volt			
Model	BTU Lin/Ft	Evap Temp	Defrost
PT Series			
PT-4	945	+20°	20"/4hr.
PT-6	945	+20°	20"/4hr.
PT-8	945	+20°	20"/4hr.
PT-10	945	+20°	20"/4hr.
PT-12	945	+20°	20"/4hr.

PT Refrigerated Rear Storage Series

PT-4	200	+22°	20"/4hr.
PT-6	200	+22°	20"/4hr.
PT-8	200	+22°	20"/4hr.
PT-10	200	+22°	20"/4hr.
PT-12	200	+22°	20"/4hr.

PTD REFRIGERATED DOME

PTD-4	150	+25°	20"/4hr.
PTD-5	150	+25°	20"/4hr.
PTD-6	150	+25°	20"/4hr.
PTD-8	150	+25°	20"/4hr.
PTD-10	150	+25°	20"/4hr.
PTD-12	150	+25°	20"/4hr.

PTD REFRIGERATED GRAVITY DOME *

PTD-4	200	+15°	90"/24hr.
PTD-5	200	+15°	90"/24hr.
PTD-6	200	+15°	90"/24hr.
PTD-8	200	+15°	90"/24hr.
PTD-10	200	+15 [°]	90"/24hr.
PTD-12	200	+15°	90"/24hr.

PTD REFRIGERATED BASE

PTD-4	800	+20°	20"/4hr.
PTD-5	800	+20°	20"/4hr.
PTD-6	800	+20°	20"/4hr.
PTD-8	800	+20°	20"/4hr.
PTD-10	800	+20°	20"/4hr.
PTD-12	800	+20°	20"/4hr.

SD DOME

SD-4	450	+20°	20"/4hr.
SD-6	450	+20°	20"/4hr.
SD-8	450	+20°	20"/4hr.
SD-10	450	+20°	20"/4hr.
SD-12	450	+20°	20"/4hr.

SD BASE

SD-4	450	+20°	20"/4hr.
SD-6	450	+20°	20"/4hr.
SD-8	450	+20°	20"/4hr.
SD-10	450	+20°	20"/4hr.
SD-12	450	+20 [°]	20"/4hr.

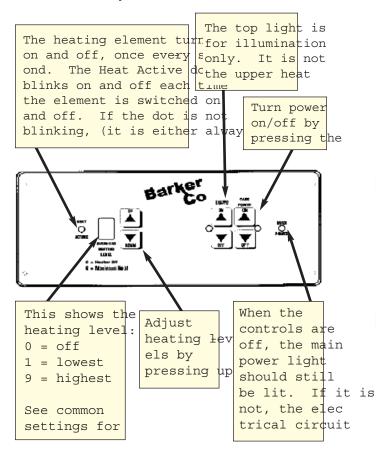
* The factory installed supplemental time clock should be set for one 90" defrost per day, at night to coincide with the last defrost of the day.

Description

The controls and elements of this case are unique to Barker Company and are designed to be operated in a specific way. Using this case for any purpose other than for holding heated product for display will result in improper temperatures and/or poor quality product. This merchandiser is designed to produce long wave radiant heat that will penetrate the food and keep it warm from the inside out. If the correct level of heat is used, the product will remain at the correct temperature and will also maintain the highest quality possible.

Controls

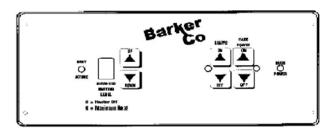
The controls on this case are digital. To adjust, press the appropriate arrow firmly for about 5 seconds until the number begins to flash then repress the arrow until adjusted.



The controls are normally grouped in clusters. Each case will have Control #1 and one or more of Control #2. Combination service/self-service cases will also have Control #3. *(See control diagrams next page).*

Control #1

This is the largest control. Once settings are determined, use this control to turn power on and off for the case. Controls will return to their previous setting, eliminating the need to set daily. Reset when ambient conditions change or product changes.



FUNCTIONS:	Case power on/off Lights on/off Overhead heat
RANGE: 0-9	
	0 = off 1 = lowest setting

9 = highest setting

Control #2

At least one and possibly several of these controls will be on each case depending on the number of heaters (One control per heater).



FUNCTIONS: RANGE: 0-9

Well control

JL. 0-0

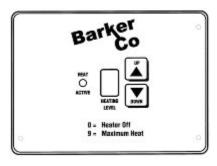
0 = off

1 = lowest setting

9 = highest setting

Control #3

The control is only present in a combination service/self-service case.



FUNCTIONS: Overhead heat RANGE: 0-9

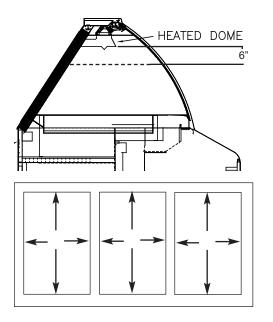
- 0 = off 1 = lowest setting
- 1 IOwest setting
- 9 = highest setting

Preheating

Turn on power switch and set controls to level 9 for preheating. Let unit operate empty for 90 minutes before loading with product. Adjust controls to desired levels before loading case with product *(See common settings below).* Putting hot food in a case that has not reached full temperature will cause product temperature to drop quickly. All products must be preheated to 175° F. It is essential that product be fully cooked and heated prior to stocking the case. Check product temperature of larger pieces when cooking different size items. It takes longer for larger pieces to reach the desired temperature.

Load Limits

Product must be 6" below the top heater. Product must be contained to the tile or well area. Product must be placed in the center of the well.



Product Display

Product should be arranged by product type. For best results group like product together. If product is stacked, lower top heater setting for best results. This merchandiser is designed to operate without water in the well. Adding water will cause the case to expend many BTU's heating the water and not the product. Water may also cause condensation on front lift glass.



Common Settings

Product that is immersed in liquid is easier to keep hot. Fried foods are the hardest to maintain temperature.

To adjust temperatures, change the setting, one number at a time. Allow 1-2 hours for the case temperature to even out before continuing.

THE SETTINGS WILL NEED TO BE ADJUSTED TO YOUR PRODUCT FORMAT AND STORE CONDITIONS. USE THESE SETTING AS A STARTING POINT.

Once the correct setting is found, the controls may be left at that setting and turned off and on using the power switch on the main control. The case must be turned on 1 $\frac{1}{2}$ hours before setting product.

Recommended settings are	e:
Overhead controls:	5-6
Fried foods:	5-6
Immersed foods:	2-5

Case Air Temperature

The case air temperature may not be as high as the desired product temperature. This case is designed to produce long wave radiant heat. It penetrates the food and keeps it warm from the inside out. The air temperature, therefore, may not be the same as the product temperature. Measure product interior temperature to determine the correct settings, not the air temperature.

Unit Shutdown

Turn case power to off on Control #1. It is not necessary to adjust well or overhead heat controls. Remove product. Turn off case lights. Allow case to cool completely before cleaning.

Electrical Information

D	Data Elast					المام ۵	Sevel Leede	for Self-Co	مغماسم ما الس	140
	Data - Electr			Anti-Sweat		1			Pan	
Model	Evap Fans	Cornice Lts	Shelf Lts	Heater	HP	Voltage	RLA/LRA	Cond Fan	Heater	Notes
PT Series		1 Shlf Row	2 Shlf Row				1	n	-	Heat tape
PT-4	0.43	0.49	0.75	0.3	1/2	120-1-60	9.4/51	1.4	8.3	0.17
PT-6	0.86	0.74	1.22	0.3	1	120-1-60	11.4/93	1.7	8.3	0.31
PT-8	1.29	0.95	1.5	0.6	1 1/2	120-208 1-60	6.9/55	0.85	7.2	0.42
PT-10	1.72	1.5	1.9	0.6	1 1/2	120-208 1-60	6.9/55	0.85	7.2	0.52
PT-12	1.72	1.44	2.25	0.7	2	120-208 1-60	9/55	1.7	7.2	0.63
PT Refrigera	ted Rear Stor	age Series								
PT-4	0.8	NA	NA	NA	NA	120-1-60	NA	NA	NA	
PT-6	0.8	NA	NA	NA	NA	120-1-60	NA	NA	NA	
PT-8	1.6	NA	NA	NA	NA	120-208 1-60	NA	NA	NA	
PT-10	1.6	NA	NA	NA	NA	120-208 1-60	NA	NA	NA	
PT-12	1.6	NA	NA	NA	NA	120-208 1-60	NA	NA	NA	
TD REFRIG	ERATED DOM	ΛE								
PTD-4	0.13	0.49	NA	0.17	NA	120-1-60	NA	NA	NA	
PTD-5	0.15	0.49	NA	0.26	NA	120-1-60	NA	NA	NA	
PTD-6	0.26	0.49	NA	0.31	NA	120-1-60	NA	NA	NA	
PTD-8	0.20	0.49	NA	0.42	NA	120-1-60	NA	NA	NA	
PTD-10	0.52	0.45	NA	0.52	NA	120-1-60	NA	NA	NA	
PTD-12	0.52	0.75	NA	0.62	NA	120-1-60	NA	NA	NA	
					L	•		•		
	ERATED GRA		NIA	NIA	N I A	100 4 00	NIA	NIA		
PTD-4	NA	0.65	NA	NA	NA	120-1-60	NA	NA	NA	
PTD-5	NA	0.65	NA	NA	NA	120-1-60	NA	NA	NA	
PTD-6	NA	1.25	NA	NA	NA	120-1-60	NA	NA	NA	
PTD-8	NA	1.25	NA	NA	NA	120-1-60	NA	NA	NA	
PTD-10	NA	1.25	NA	NA	NA	120-1-60	NA	NA	NA	
PTD-12	NA	1.9	NA	NA	NA	120-1-60	NA	NA	NA	
PTD REFRIG	ERATED BAS	E								
PTD-4	0.43	0.49	0.49	NA	1/2	120-1-60	9.4/51	1.4	8.3	
PTD-5	0.43	0.49	0.49	NA	3/4	120-1-60	9.8/65	1.7	8.3	
PTD-6	0.86	0.49	0.49	NA	1	120-1-60	11.8/66	1.8	8.3	
PTD-8	1.29	0.45	0.49	NA	1 1/2	120-208 1-60	6.9/55	0.85	7.2	
PTD-10	1.72	0.75	0.75	NA	1 1/2	120-208 1-60	9/55	1.7	7.2	
PTD-12	1.72	0.75	0.75	NA	2	120-208 1-60	9/55	1.7	7.2	
				se unit require	(Service/Self-Ser
PTD-4	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	5.16/9.72
PTD-5	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	6.9/11.52
PTD-6	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	7.8/11.64
PTD-8	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	11.5/15.1
PTD-10 PTD-12	NA NA	NA NA	NA NA	NA NA	NA	120-208-3-60	NA NA	NA NA	NA	12.5/17.85
-10-12	NA	NA	NA	INA	NA	120-208-3-60	NA	NA	NA	15.8/23.28
D DOME										
SD-4	0.43	0.75	NA	0.17	NA	120-1-60	NA	NA	NA	
SD-6	0.86	0.95	NA	0.31	NA	120-1-60	NA	NA	NA	
SD-8	0.86	1.5	NA	0.34	NA	120-1-60	NA	NA	NA	
SD-10	1.29	1.9	NA	0.52	NA	120-1-60	NA	NA	NA	
SD-12	1.29	2.25	NA	0.5	NA	120-1-60	NA	NA	NA	
SD-4	0.43	0.49	0.49	NA	3/4	120-1-60	11.8/66	1.7	6.6	
SD-4 SD-6	0.45	0.49	0.49	NA	1	120-208-1-60	5.7/40	0.85	4.8	
SD-8	0.86	0.49	0.49	NA	1 1/2	120-208-1-60	6.9/55	0.85	4.8	
SD-0 SD-10	1.29	0.49	0.49	NA	2	120-208-1-60	9/55	1.7	7.2	
SD-10 SD-12	1.29	0.75	0.75	NA	2	120-208-1-60	9/55	1.7	7.2	
-					<u> </u>					•
	<u>``</u>	-	1	e unit requiren		-				Service/Self-Ser
SD-4	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	5.3/6.95
SD-6	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	8.5/10.96
SD-8	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	12.0/15.29
SD-10	NA	NA	NA	NA	NA	120-208-3-60	NA	NA	NA	14.1/18.23
SD-12		NA	NA	NA		120-208-3-60	NA	NA	NA	17.3/22.18

Wiring Color Code

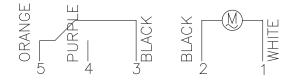
Green Black White Red Brown	Hot Neutral 208/220 Only
Orange Orange Purple Purple Gray Black/White	Liquid Solenoid Hot Gas Defrost Defrost Terminator Light Switch

FANS AND LIGHTS MAY BE WIRED SEPARATE-LY. CHECK STORE FOR SPECIFIC WIRING CODES

Hot Gas Timer

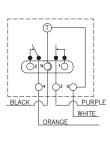
Grasslin

- 1. White Neutral
- 2. Black Hot
- 3. Black -
- 4. Purple Hot Gas Defrost
- 5. Orange Liquid Solenoid



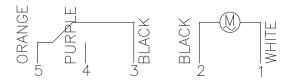
Parragon

- 1.
- 2.
- 3. Purple Hot Gas Defrost
- 4. Orange Liquid Solenoid
- X White Neutral
- N Black Hot



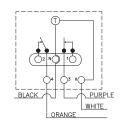
Off Cycle Timer

- 1. White Neutral
- 2. Black Hot
- 3. Black -
- 4. Unused
- 5. Orange Liquid Solenoid



Parragon

- 1. White Neutral
- 2. Black Hot
- 3. Unused
- 4. Orange Liquid Solenoid

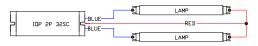


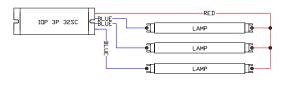
Secondary Wiring Color Code

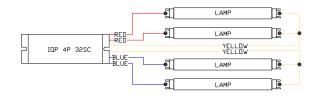
Ballast Wiring
RedLights
Yellow Lights
BlueLights

SEE BALLAST DIAGRAM FOR EACH CASE. CASE MUST BE GROUNDED

Ballasts can be accessed from the front toe kick. Ballast sizing may vary depending on number of case shelves. Locate Ballast Wiring below. Some cases may have several ballasts.

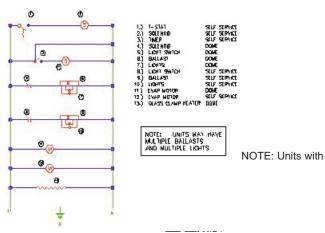




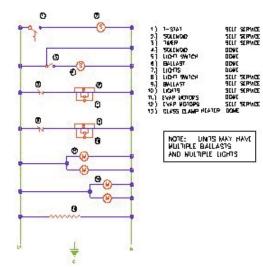


PTD-Remote

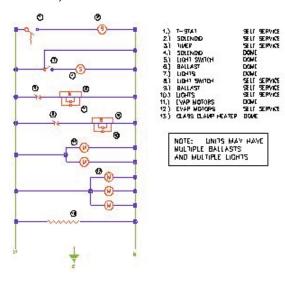
PTD-4R, BDPTD-4R



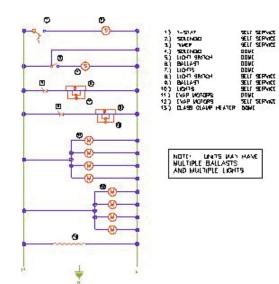
PTD-6R, BDPTD-6R



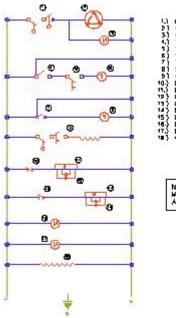
PTD-8R, BDPTD-8R



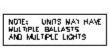
PTD-10R, PTD-12R, BDPTD-10R, BDPTD-12R



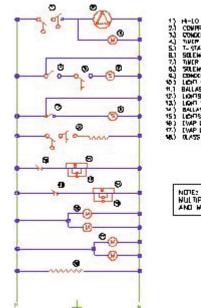
PTD Self Contained PTD-4SC, BDPTD-4SC



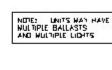




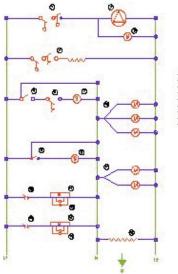
PTD-6SC, BDPTD-6R



COVIET SSOP	
CONDENSER NOTOR	
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CONCENSATE REATER	
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Lion 9	
LON THICH	ZUI SUPART
BALLAST	
	ELL BLAKE
Lickins	ELL SLEWKE
EWAP MOTOPS	DOWE
EWAP MOTOPS	THE SEPORT
OLATS CLANP (CATCH	DOVE



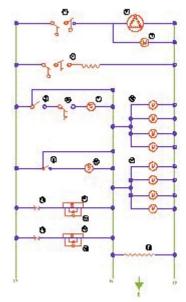
PTD-8SC, BDPTD-8SC



1]	H-LO PPESSEE SN1	CH4
51	CONCLIMET LINITOP	
칭		
	CONDENSATE HEATER	지 않는 것이 같아?
	TACP	TIL TRACE
41	1-9141	TIME TIP
τ)	732100	THE TRACE
6.)	THEP	1460
2)	712100	DOVE
10.5	LIDHT SMITCH	DOWE
πũ.	BALLAST.	DOWL
12.5	P.Dett 9	1920
135		TIN TRACE
14.5	BALLAST	TINGE 112
493.	LIDITS	TINGE 112
185		THE TRACE
	EWAP WOTOPS	DONC
185		



PTD-10SC, PTD-12SC, BDPTD-10SC, BDPTD-12SC



11	H-LO PRESSUR SHIT	N
23	COMPANYOP	
51	SCHOCKEP HOTOP	
-A1	CONCENSATE HEATER	
4	THEP	THERE UP
B.)	1-9741 501000	TIVER 112
2.1	20.000	TIL TPAR
41	THEP	DOVE
21	SOLCHOND	DOVE
10.5		19291
111		DOVE
425	LOUIS	DOME
135	1000 \$51251	THE TRUE
16.5	BAIL AND	THAT 11P
12.5	LIDHTE	TILL TEAL
183	EWH POTOTS	ZUT TEVE
473	CWAP NOUDS	DOME
18.5	GARS CLAR MEATER	DOWL

NOTE.	UNITS	NAT	HAVE
MULTIPLE	BALL.	ASIS	
AND HUL	IPLE	LIGHT	5

Cleaning Lower Self-Service Case & Refrigerated Dome.

Case Exterior

Clean surfaces frequently with warm water and mild detergent.

DO NOT use strong alkali solutions, steel wool, or abrasive cleanser. Be careful of any electrical outlets located on the exterior of the case.

Case Interior

All shelving, lower deck and dome deck can be removed for cleaning (See installation instructions for removing and setting shelving). Check to make sure the case drain(s) are not clogged. Clean interior with warm water and a mild detergent. A sanitizer should be used after washing to eliminate bacteria. Rinse thoroughly being careful not to flood drain system. Avoid spraying water directly into electrical connections. DO NOT USE A HIGH PRESSURE WATER HOSE. MAKE SURE FANS AND LIGHTS ARE SHUT OFF WHEN CLEANING THE INTERIOR OF THE CASE

Non-Glare Glass

Non-glare glass surfaces are coated to reduce the glare from lighting. Care must be taken not to scratch the coating. Use the following products only. **Cleaning Cloths**

Scotch-Brite® High Performance Cloth - manufactured by 3M® and available in most grocery stores under the name Scotch-Brite® Microfiber Cleaning Cloth in a 12" x14" size. This cloth is washable and may be reused as long as it remains clean.

Spontex® Microfibre Cleaning Cloth - distributed by Spontex® and available in most grocery stores under the same name in a 15.75" x 12" size. This cloth is washable and may be reused as long as it remains clean.

The cleaning cloths named above will normally remove dust, grease, oil and fingerprints without the need for cleaning fluids. A light spray of the cleaning fluids listed below will reduce the time required for cleaning.

Cleaning Fluid - for more difficult cleaning jobs, these products are recommended:

Windex® - standard product only (extra-strength or specialty products may not be suitable)

Glass-Plus® - standard product only (extrastrength or specialty products may not be suitable)

Warm Water

DO NOT USE the following types of materials for cleaning glass with anti-reflective coatings.

Coarse Paper Towels Scouring Pads or Powders Steel wool or Steel Fiber Materials Blades Acidic or highly Alkaline detergents Fluorine based detergents

Plexiglas Cleaning

Use Novus® 1 and Novus® 2 to clean. Use Brillianize® to polish. Contact factory to order. Do not use strong alkali solutions, steel wool, or abrasive cleanser.

Evaporator Coil

Clean as needed.

Condenser Coil

Failure to clean coils will void warranty. Clean condenser coil every three months or as needed with a whisk broom or vacuum. Disconnect power when servicing. Fins on condenser coil are sharp!

Condensate Heater

Add one teaspoon of scale remover or white vinegar to condensate heater pan once every three months or as needed. Heater is designed for 75° and 50% relative humidity. The condensate pan may overflow if design limits are exceeded.

Bottom Shelf Removal

To remove bottom deck raise front and lift out towards you.

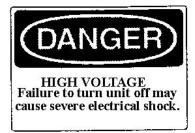


Hot Dome Cleaning

Unit should be thoroughly cleaned at the end of each day.

1. The unit must be cool and all power turned off.

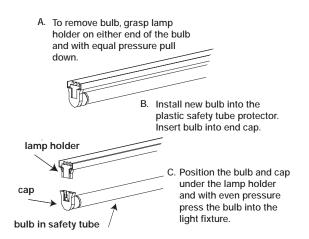
- NOTE: Unit may have more than one power supply.
- 2. Remove any food or residue.
- 3. Use mild soap and/or sanitizer to clean interior and exterior.
- 4. Wipe dry with soft cloth.
- 5. Keep doors open until completely dry.
- 6. Never use alkali or abrasive cleaners.
- 7. Never steam clean.
- 8. Avoid excessive amounts of water.



Light Replacement

The fluorescent lights in this case are furnished with plastic safety shields and end caps. When replacing fluorescent lamps, be certain to reinstall safety shield and caps. *(See illustration)*. If the bulb is not fully seated the lights will not operate. BE SURE BULBS ARE FULLY SEATED.

The light switch is mounted to the right side of the ceiling. See mechanical drawing for ballast box location.



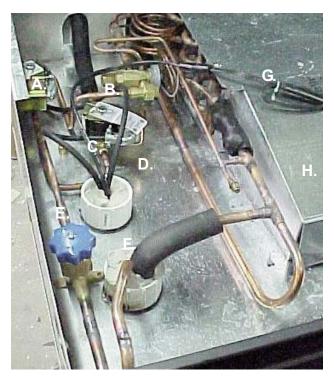
Caution: Failure to install bulb fully into light socket will cause premature bulb life and may cause damage to light fixture

WARNING!

DISCONNECT THE ELECTRICAL POWER WHEN SERVICING OR REPLAC

Evaporator Coil Layout

Remove bottom deck shelf in lower section of case to reveal solenoid, fans and coil. *(See Below)*



- A. solenoid for self-service, lower section
- B. expansion valve for self-service, lower section
- C. solenoid for top service dome
- D. electrical chase
- E. optional liquid line hand valve (not on all cases)
- F. copper chase
- G. cover for evaporator coil
- H. pressure plate cover for evaporator

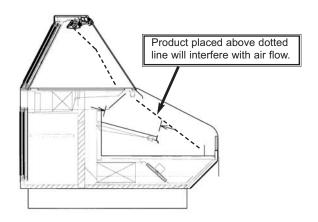
Hot Dome Service Preventative Maintenance

- 1. Read the Installation and Service manual.
- 2. Clean the case daily.
- 3. See the trouble shooting guide in the event of problems.
- 4. Contact Barker Company for an authorized service person in your area.

Load Limits

DO NOT place product in merchandiser until all refrigeration controls have been adjusted and are at the proper operating temperature.

DO NOT over load shelving or place product where it may affect the air curtain. *See drawing.* ------indicates Load Limit.



Trouble Shooting Guide

Problem:	Action:
Unit fails to operate Main power light on Control #1 is off.	Connect case to power supply. Reset circuit breaker. Unit may have two separate power sources. Check both sources.
No Heat Circuit breaker is off.	Check all power supply breaker. Reset circuit breaker.
Defective heating element.	Contact Barker Service Department.
Loose wire or bad connection.	Repair.
Flashing indicator on control panel is blank or not flashing.	Contact Barker Service Department.
Control has malfunctioned.	Contact Barker Service Department.
Inadequate Temperature Door is open.	Close rear load doors when not in use.
Temperature is too low.	Adjust controls (see recommended settings). Case must be preheated for 1 ½ hours prior to stocking. Product is not 175° before being placed in the case. Food that is below 175° internal temperature will cool quickly.
Temperature is too high.	Product is not placed in the center of the well or tile. Adjust controls (see recommended settings). Product is stacked too high (within 6" of the overhead heat- ing element).
Glass clamp is hot.	Overhead heating is set too high <i>(see recommended set-tings).</i>
Heating elements are not working	Contact Barker Service Department.

Hillphoenix Barker Specialty Products Service Department

IMPORTANT INFORMATION!

FOR PROMPT SERVICE WHEN CONTACTING THE FACTORY FOR SUPPORT, BE SURE TO HAVE CASE MODEL AND SERIAL NUMBER HANDY. (THIS INFORMATION IS LOCATED ON THE DATA TAG ATTACHED TO THE CASE. SEE BELOW FOR DATA TAG LOCATIONS)

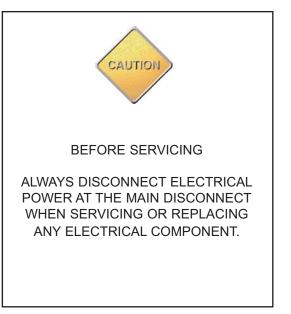
For any warranty or service issues not covered by this manual, for tech support, or for warranty service calls, please contact the Barker Specialty Products Service Department at:

(319) 293-3777

Parts

Ordering Procedure

- 1. Contact the Service Parts Department Melissa Marshall 703 Franklin Street PO Box 478 Keosauqua, IA 52565 Tel: 319-293-8323 Fax: 319-293-8377 melissa.marshall@hillphoenix.com
- 2. Provide the serial number of the case containing the part. To locate the serial number look on the data tag located on the customer left, outside back of the case, the customer left, inside top of the case, or contact the factory for location.
- 3. If parts are to be returned for credit, contact the Parts Department. Do not send parts without authorization.





WARRANTY HEREINAFTER REFERRED TO AS MANUFACTURER

FOURTEEN MONTH WARRANTY. MANUFACTURER'S PRODUCT IS WARRANTED TO FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE AND MAINTENANCE FOR A PERIOD OF FOURTEEN MONTHS FROM THE DATE OF ORIGINAL SHIPMENT. A NEW OR REBUILT PART TO REPLACE ANY DEFECTIVE PART WILL BE PROVIDED WITHOUT CHARGE. PROVIDED THE DEFECTIVE PART IS RETURNED TO MANUFACTURER. THE REPLACEMENT PART ASSUMES THE UNUSED PORTION OF THE WARRANTY.

WARRANTY CLAIMS: All claims should include: the serial number of the cabinet, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect. Any action for breach of these warranty provisions must be commenced within one (1) year after that cause of action has accrued.

All warranty service work must be pre-authorized by Barker Specialty Products (800-814-0446). Barker Specialty Products reserves the rights to designate the service provider, time in which labor is to be performed and specify amount of time per warranty problem.

This warranty does not include labor or other costs incurred for repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts.

The fourteen month warranty shall not apply:

- 1. To any unit or any part thereof which has been subject to accident, alteration, negligence, misuse or abuse, operation on improper voltage, or which has not been operated in accordance with the manufacturer's recommendation, or if the serial number of the unit has been altered, defaced, or removed.
- 2. When the unit, or any part thereof, is damaged by fire, flood, or other act of God.
- 3. Outside the continental United States.
- 4. To labor cost for replacement parts, or for freight, shipping expenses, sales tax or upgrading.
- 5. When the operation is impaired due to improper installation
- 6. When installation and startup forms are not properly complete or returned within two weeks after startup.

THIS PLAN DOES NOT COVER CONSEQUENTIAL DAMAGES. Manufacturer shall not be liable under any circumstances for any consequential damages, including loss of profit, additional labor cost, loss of any delay in its performance hereunder due to causes beyond its control. The foregoing shall constitute the sole and exclusive remedy of any purchases and the sole and exclusive liability of Manufacturer in connection with this product.

The Warranties are Expressly in Lieu of All Other Warranties, Express of Implied and All Other Obligations or Liabilities on Our Part. The Obligation to Repair or Replace Parts or Components Judged to be Defective in Material or Workmanship States Our Entire Liability Whether Based on Tort, Contract or Warranty. We Neither Assume Nor Authorize any Other Person to Assume for Us Any Other Liability in connection with Our Product.

Mail approved warranty claims to the address listed below:

Hillphoenix Barker Specialty Products 703 Franklin Street, PO Box 478 Keosauqua, IA 52565 Tel: 319-293-3777/Fax: 319-293-3776