



Henny Penny Humidified Counter Warmer

陈列保温柜

Model HCW-2型

Model HCW-3型

Model HCW-5型

Model HCS-5 型

Model HCW-8 型

OPERATOR'S MANUAL

操作手册

TABLE OF CONTENTS 内容

Section 部分	Page 页码
Section 1. INTRODUCTION介绍.....	1-1
1-1. Heated Display Cabinet陈列保温柜.....	1-1
1-2. Features特点.....	1-1
1-3. Proper Care正确保养.....	1-1
1-4. Assistance帮助.....	1-1
1-5. Safety安全.....	1-2
Section 2. INSTALLATION安装.....	2-1
2-1. Introduction介绍.....	2-1
2-2. Unpacking拆箱.....	2-1
2-3. Location定位.....	2-3
2-4. Remove Control End Panel拆除控制箱后盖.....	2-3
2-5. Drain Connection排水管接头连接.....	2-4
2-6. Electric Connection电气连接.....	2-4
2-7. Electric Data Table电气数据表.....	2-5
2-8. Water Supply Connection供水连接.....	2-5
2-9. Light Bulbs and Glass Panels灯泡和玻璃嵌板.....	2-6
2-10. Cabinet Dimensions陈列保温柜尺寸.....	2-7
Section 3. OPERATION操作.....	3-1
3-1. Introduction介绍.....	3-1
3-2. Operating Controls操作控制.....	3-1
3-3. Start-Up开机.....	3-7
3-4. Operation with Product存放食品.....	3-8
3-5. Shut-Down and Cleanup关机 and 清洗.....	3-8
Section 4. TROUBLESHOOTING故障排除.....	4-1
4-1. Troubleshooting Guide故障排除指引.....	4-1
GLOSSARY术语表.....	G-1

SECTION 1. INTRODUCTION 第一部分 介绍

1-1. HEATED DISPLAY CABINET 陈列保温柜

The Henny Penny Heated Display Cabinet is a basic unit of food processing equipment used to display the food product and maintain the temperature of hot foods in the commercial food service operation. This highly efficient, quality-built cabinet will keep hot foods at proper holding temperatures with controlled humidity. The Henny Penny Heated Display Cabinets have see-thru doors which allow viewing and access to the hot foods from both front and back. HENNY PENNY 陈列保温柜是食物处理设

中的基本设备，它用于陈列食品，并对热的食品起到保温作用。此高效能、高品质的陈列保温柜可以将热的食品保存在适宜的温度和湿度中。HENNY PENNY 陈列保温柜前后门板透明，可以从前后观察并存取食品。

1-2. FEATURES 特点

- Moist heat (HCW-3, and lower section HCW-5 and HCW-8)
保持湿度的加热方式(HCW-3, HCW-5和HCW-8下层)
- Dry heat in top section (HCW-5 and HCW-8 only)
上层干加热方式 (只适用于HCW-5 and HCW-8)
- Easy to keep clean
容易清洁
- Automatic water fill system with manual bypass
自动进水系统及手动补水
- HCW-3 and the lower section HCW-5 holds three trays of product
HCW-5下层和HCW-3可以存放3盘食品
- Lower section HCW-8 holds five trays
HCW-8下层可以保存5盘食品
- Top section HCW-5 holds two trays of product
HCW-5上层可以保存2盘食品
- Top section HCW-8 holds three trays
HCW-8上层可以保存3盘食品
- All heat sources are adjustable
所有加热源可以调节
- Flip-up, see-through door panels
前后透明门板

1-3. PROPER CARE正确保养

As in any unit of food service equipment, the Henny Penny Heated Display Cabinet does require care and maintenance. Requirements for the maintenance and cleaning are contained in this manual and must become a regular part of the operation of the unit at all times.同其他食品加工设备一样，此陈列保温柜也需要保养和维护，本手册包含有保养和清洁指引并需要成为此设备日常操作的一个不可或缺的组成部分。

1-4. ASSISTANCE帮助

Should you require outside assistance, just call your local independent Henny Penny distributor in your area, call Henny Penny Corp. at 1-800-417-8405 toll free or 1-937-456-8405, or go to Henny Penny online at www.hennypenny.com. 如果你需要额外帮助，可与当地HENNY PENNY指定的代理联系，或拨打免费电话1-800-417-8405和付费电话1-937-456-8405及登陆www.hennypenny.com同HENNY PENNY联系。

1-5. SAFETY安全

The only way to ensure safe operation of the Henny Penny Heated Display Cabinet is to fully understand the proper installation, operation, and maintenance procedures. The instructions in this manual have been prepared to aid you in learning the proper procedures. Where information is of particular importance or is safety related, the words NOTICE, CAUTION, or WARNING are used. Their usage is described below.充分掌握正确的安装、操作及保养程序，是保证安全操作HENNY PENNY陈列保温柜的唯一方法。本手册提供的内容有助于您学习正确的程序。在一些特别重要或同安全紧密相关的地方,使用了NOTICE(注意), CAUTION(小心),或WARNING(警告)等警示性标记, 其用法如下所述:



SAFETY ALERT SYMBOL is used with DANGER, WARNING, or CAUTION which indicates a personal injury type hazard. 感叹号用于警示可能引起人身伤害, 需要提醒操作人员危险,警告或小心的地方



NOTICE is used to highlight especially important information. **NOTICE(注意)**用于特别重要的信息



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage. 不带感叹号的CAUTION(小心), 用于警示存在潜在的财产损失的可能性.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. 带感叹号的CAUTION(小心), 用于警示存在一般人身伤害的可能性



The word **WARNING** is used to alert you to a procedure, that if not performed properly, might cause personal injury. **WARNING(警告)**, 用于警告可能存在严重人身伤害直至死亡的严重后果.

SECTION 2. INSTALLATION 安装

2-1. INTRODUCTION 介绍

This section provides the installation instructions for the Henny Penny Heated Display Cabinet. 此部分提供Henny Penny陈列保温柜的安装指引

NOTICE

Installation of this unit should be performed only by a qualified service technician.

设备安装只能由合格的技术人员担当



Do not puncture the skin of the unit with drills or screws as component damage or electrical shock could result. 不能用钻头或螺丝刀戳破设备的外壳,否则将导致零件损坏或触电.

2-2. UNPACKING 拆除包装

The Henny Penny Heated Display Cabinet has been tested, inspected, and expertly packed to ensure arrival at its destination in the best possible condition. The cabinet has been bolted to a wooden skid. All glass items have been packed in cartons and taped inside the unit and the doors taped shut. The unit is then packed inside a triple wall corrugated carton with sufficient padding to withstand normal shipping treatment. 为了保证设备在最佳状况下抵达目的地, Henny Penny 保温柜已经经过测试, 检查和专业的包装. 保温柜放置在一个垫有纸板的木制垫板上,所有玻璃部件包装在纸板箱内并妥善放置在设备内部, 门被绑在关闭位置。保温柜包装在一个坚固的三层隔板的硬纸板箱内, 并装有大量填充材料, 以承受运输途中正常的磕碰.

NOTICE

Any shipping damages should be noted in the presence of the delivery agent and signed prior to his or her departure.

任何运输途中的损坏必须在运输行的交货单中予以说明并由运输者签字确认

2-2. UNPACKING (Continued) 拆除包装 (续)

Step 1



To remove the Henny Penny Heated Display Cabinet from the carton, you should:

按照以下步骤取出纸箱中的Henny Penny陈列保温柜：

1. Carefully cut banding straps. 小心剪断纸箱的装箱带

Step 2



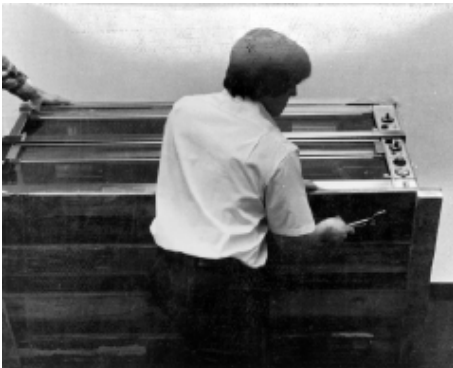
2. Open top flaps and remove packing. 打开纸板箱顶盖，并移走包装

Step 3



3. Lift carton off skid. 垂直提起纸板箱

Step 4



4. Remove four bolts from under skid. 拆下四颗固定螺栓

The unit is now ready for location and set-up. 此设备现在可以定位和安装了。

2-3. LOCATION定位

Place the unit on a table, preferably with a cut-out opening below the cabinet to allow easy service connections and serviceability. When setting up the Henny Penny Heated Display Cabinet, be sure to level the table. 将保温柜放置于工作台上，在工作台上的适当位置最好有一个开口，便于连接和维修。当安装 HENNYPENNY陈列保温柜的时候，要注意设备必须保持水平

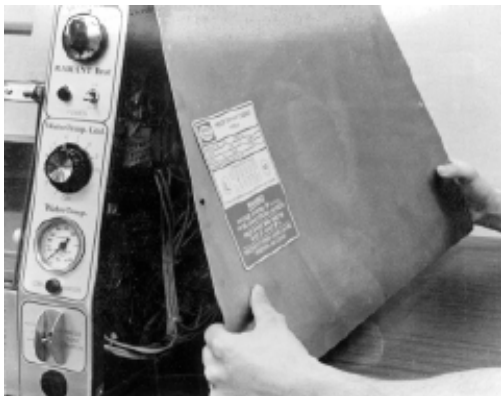
NOTICE

The unit has built-in draining capabilities, but this becomes ineffective when set on an unlevel table. 此保温柜自身有排水功能，但如果保温柜不能处于水平的位置时，排水功能将失去效用。

After the Henny Penny Heated Display Cabinet has been leveled on the table, run a bead of silicone rubber (silicone or equivalent sealant must be a NSF listed material) around the perimeter of the unit sealing it to the table top. You are now ready to make the electrical and drain connections to the unit. 当HENNY PENNY陈列保温柜水平放置在桌子上后，在其周围打一层硅胶（硅胶或NSF指定的具有同等功能的密封剂）使其密封后就可以连接电线和排水管了。

2-4. REMOVE CONTROL END PANEL拆下控制箱侧板

1. Remove the seven screws fastening the end panel to the cabinet. 拆下固定侧板的七颗螺丝



Step 2

2. Slide bottom of end panel out first allowing top to drop below shelf edge. 然后将侧板底部轻轻拉出，以便顶部能从上柜边缘脱下。

2-5. DRAIN CONNECTION

排水连接

The drain can be connected to a 1 inch N.P.T. directly below the water well or to a 3/4 inch N.P.T. from the operator's side. We recommend the 1 inch N.P.T. connection as this will allow straight down draining of the water.排水管可直接连接到水管接口下面1英寸N.P.T.或从操作者处3/4英寸N.P.T.上。我们建议最好连接到1英寸N.P.T.上，这样可以直接向下排水。

2-6. ELECTRIC CONNECTION

电气连接

The heated display cabinet is available from the factory wired for 208 or 230 volts, single phase, 3-wire (includes neutral) or three phase, 4-wire (includes neutral) 60 Hz. service. The proper power service cable must be provided at installation. Check the data plate on the side panel of the control end to determine the correct power supply.此陈列保温柜可以连接208或230伏电压，单相三线（包括零线）或三相四线（包括零线），60HZ电气供应。在安装中必须使用合格的电缆线。检查控制器侧板上的名牌，使用正确的电源。

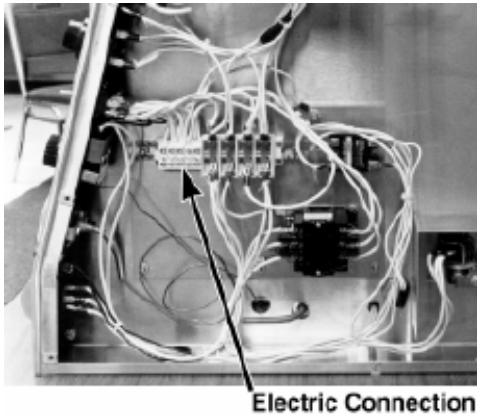


This unit must be adequately and safely grounded. Refer to local electrical codes for correct grounding procedures. If unit is not adequately grounded, electrical shock could result. 此设备应根据当地电气标号和程序安全并充分的接地，如果未能充分接地，则有可能导致触电事故。

A separate disconnect switch with proper capacity fuses or breakers must be installed at a convenient location between the cabinet and the power source. The field supply wiring to the cabinet should be an insulated copper conductor rated for 600 volts and 90°C.在设备和电源间方便的位置必须安装一个配备合适的保险丝的断路开关。接入设备的接线必须有耐得住600伏和90°C绝缘护套。

2-6. ELECTRICAL CONNECTION

(Continued) 电气连接 (续)



The electrical power can be connected from the bottom or from the operator's side. There is a 1-3/32 inch diameter hole for either connection. Again, we recommend the bottom connection as this will give a cleaner appearance to the unit. Please observe the electrical connection information on the data plate located on the side panel of the control end. 电线应从底部或操作人员的一侧连接，有一个直径为1-3/32英寸的孔用于连接。我们再次建议按照此连接以便设备有一个整洁的外观。请观察设备控制器侧板上铭牌上的电气连接信息。

CAUTION

Voltage potential of L1 and L2 to ground cannot exceed 125 volts, or damage to the unit could result.

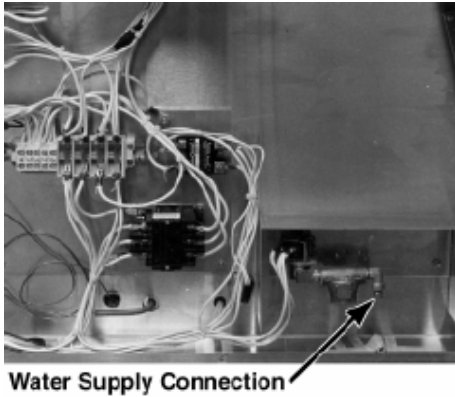
L1 和 L2 接地不能超过 125 伏，否则会导致设备损坏。

2-7. ELECTRIC DATA TABLE

电数据

<u>Model/型号</u>	<u>Volts/伏</u>	<u>Phase/相</u>	<u>Watts/瓦</u>	<u>Amps/安培</u>
HCW-2	120/230	1	760	4.7
HCW-2	120/208	1	760	4.9
HCW-3	120/230	3	3400	10.7
HCW-3	120/230	1	3400	16.3
HCW-3	120/208	3	3400	11.5
HCW-3	120/208	1	3400	17.6
HCW-5	120/230	3	4160	12.2
HCW-5	120/230	1	4160	18.0
HCW-5	120/208	3	4160	13.1
HCW-5	120/208	1	4160	19.5
HCW-8	120/208	3	8080	26.0
HCW-8	120/208	1	8080	40.0
HCW-8	120/230	3	8080	24.0
HCW-8	120/230	1	8080	35.1
HCS-5	120/208	3	8080	22.6
HCS-5	120/208	1	8080	40.0
HCS-5	120/230	3	8080	19.8
HCS-5	120/230	1	8080	35.1

2-8. WATER SUPPLY CONNECTION供水连接



The automatic water system has a 1/4 inch compression fitting for copper tubing. Hot water would be preferred. We recommend using the automatic water system as this will allow the unit to maintain a more even water temperature and help ensure that the unit never runs dry of water. 自动供水系统具有一个1/4英寸的铜的紧固接头连接。最好是使用热水。我们建议使用自动供水系统以保持稳定的水温并确保不间断供水。

A straight-through bulkhead fitting is furnished with the unit for 1/4 inch copper tubing to protect the water line where it passes through the sheet metal. 一个带直通档板的装置由一根1/4英寸的铜管与供水系统连接，铜管可保护通过薄金属片的供水线路。

Reinstall the end panel. 重新装上侧板。

NOTICE

This unit as manufactured requires the installation of an appropriate back-siphoning device (as per National Plumbing Code ASA-A40.8-1955) to be connected to the water inlet line. This device to be connected in accordance to the basic plumbing code of the Building Officials and Code Administrators International, Inc. (BOCA), and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

此设备要求在安装一个合适的止逆阀 (管道规则ASA-A40.8-1955) 同进水管相连接。此装置应按照(BOCA) 和(FDA)要求连接.

A water shut-off valve should be installed in a convenient location.

在适当位置安装一个水阀

2-9. LIGHT BULBS AND

GLASS PANELS 灯泡和玻璃



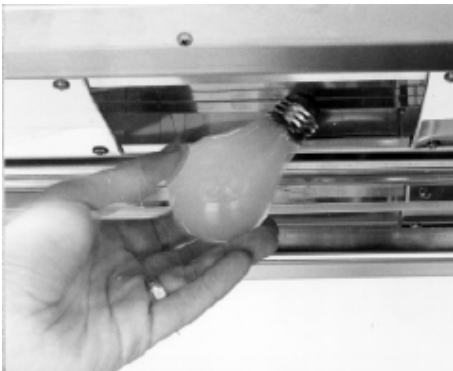
Step 1

1. Cut the tape holding the doors shut and remove all boxes and boxes and packing. One carton contains the glass panels and the other contains the light bulbs. 剪断封门的胶带，取出保温柜内所有的包装盒，其中一个纸板盒内是玻璃，另一个内是灯泡。
2. Install the light bulbs and glass panels. 装上灯泡和玻璃
3. The unit is now ready to be cleaned per instructions in the Operations section of this manual. 可以按照本手册的操作部分对设备进行清洁了

Replacing Light Bulbs 更换灯泡



Light bulbs and glass may be hot. Severe burns could result. 灯泡和玻璃的温度非常高，可能导致烫伤！



Step 2

1. Remove the glass panel by carefully pushing up on back of panel and sliding away from you. The panel will fall into your hand. See photo at left. 推开后面板，玻璃板会掉到你手里，小心取下。
2. Remove the light bulb. 取下灯泡
3. Replace the light bulb with a Westinghouse #60A19/35, 130 Volt bulb. 换成 Westinghouse #60A19/35, 130V 灯泡

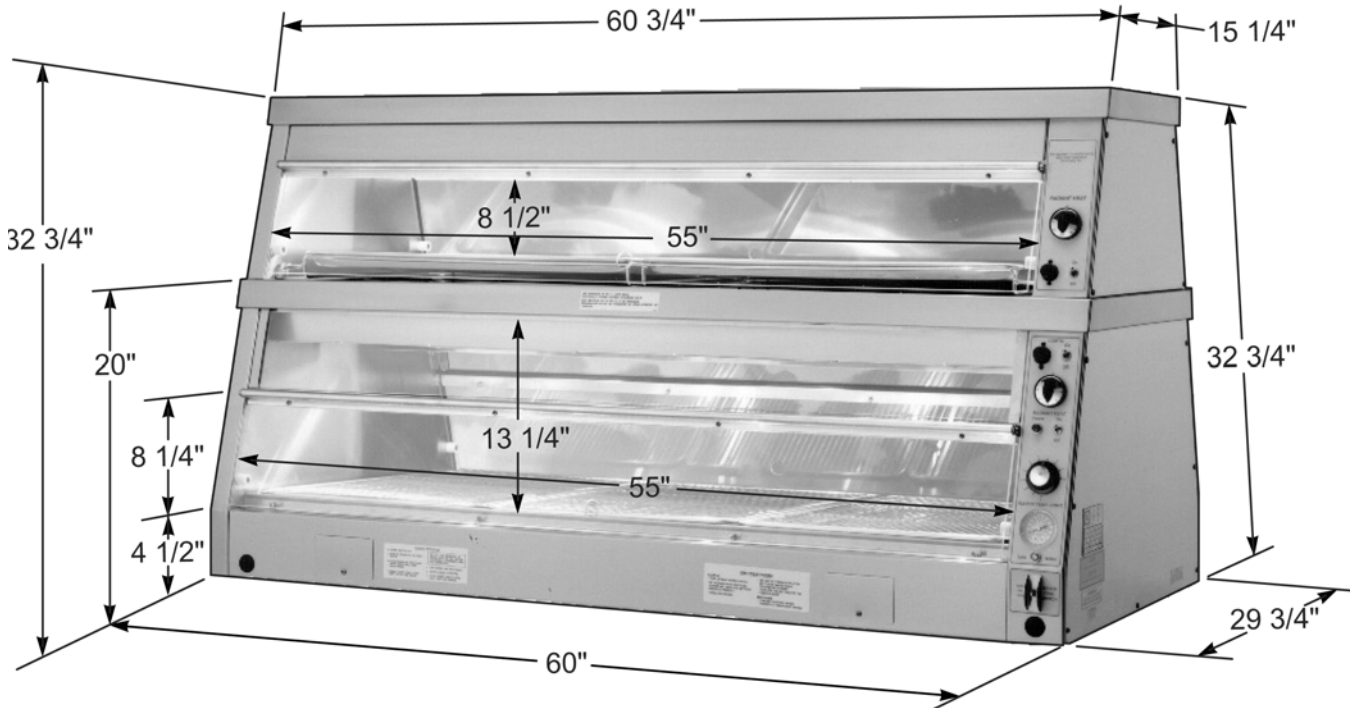


If this bulb is not available, a standard 60 watt bulb will work until a long life bulb can be obtained.

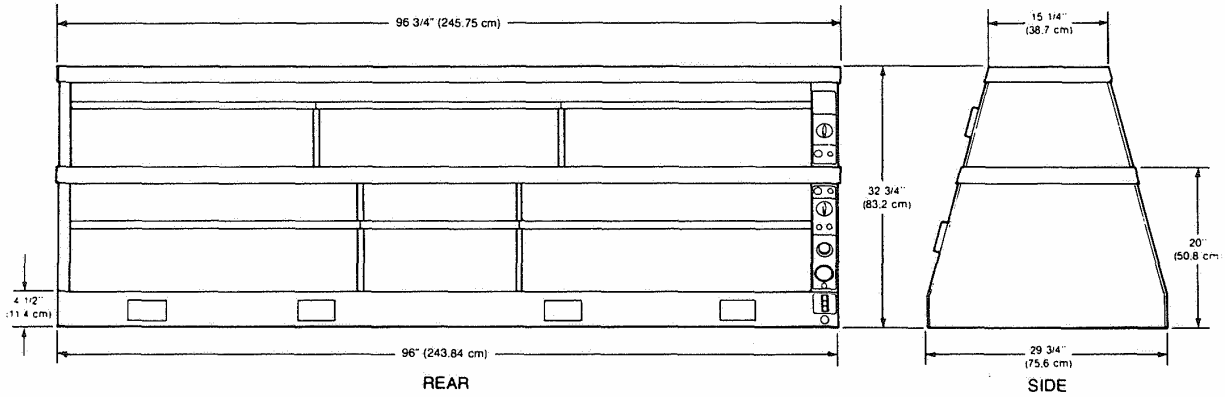
如果没有，可用普通60瓦灯泡暂时代替，有了后再换。

4. Replace the glass panel. 把玻璃板放回原处。

2-10. CABINET DIMENSIONS 陈列保温柜规格



Model HCW-5



Model HCW-8

SECTION 3. OPERATING INSTRUCTIONS操作指导

3-1. INTRODUCTION

简介

This section provides operating procedures for the heated display cabinets. The Introduction, Installation and Operation sections should be read, and all instructions should be followed before operating the cabinet.

此部分提供陈列保温柜的操作程序。此指引中安装和操作部分应仔细阅读，在安装保温柜前遵循所有指引

3-2. OPERATING CONTROLS

操作控制器

Figures 3-1 through 3-12 identify and describe the function of all the operating controls and the major components of the cabinet.

图3-1到3-12说明所有操作控制部件和保温柜主要元件的功能。

3-2. OPERATING CONTROLS (Continued)操作控制器 (续)

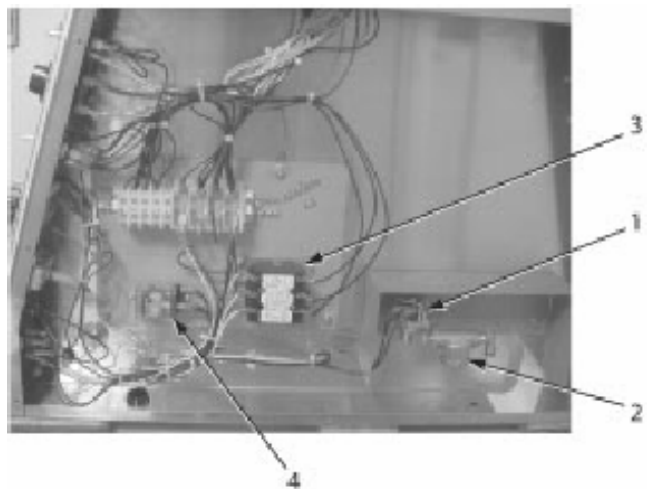


Figure 3-1



Figure 3-2



Figure 3-3

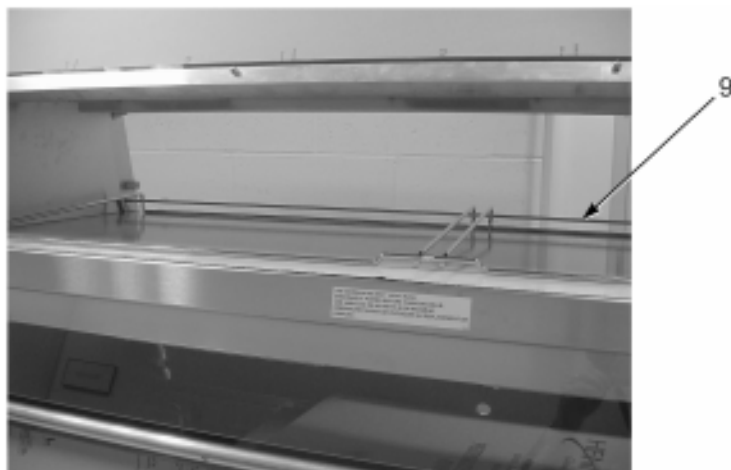


Figure 3-4



Figure 3-5

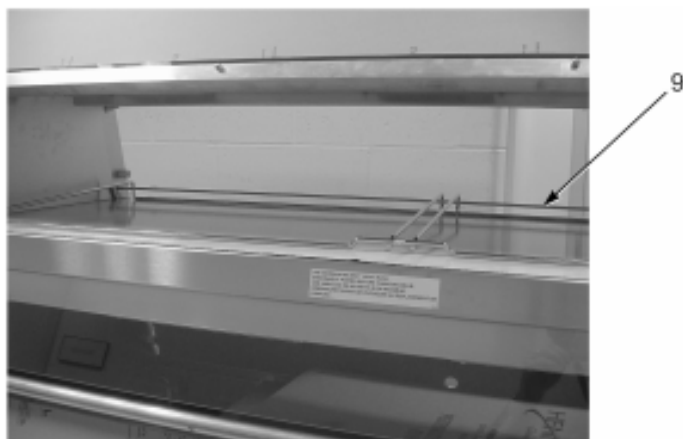


Figure 3-6

3-2. OPERATING CONTROLS (Continued) 操作控制器 (续)

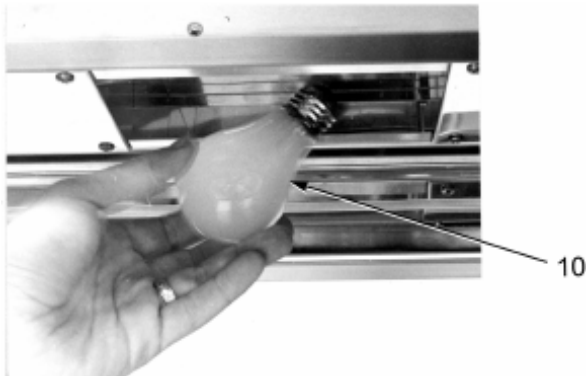


Figure 3-7

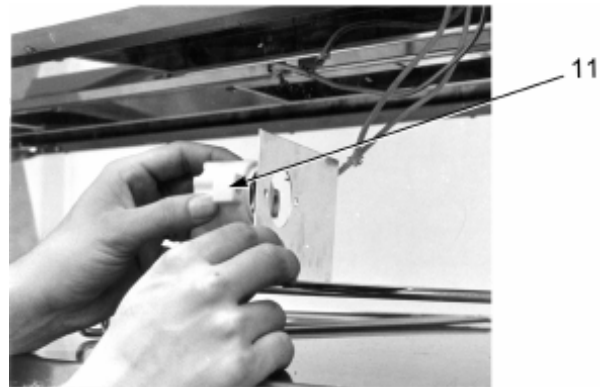


Figure 3-8



Figure 3-9

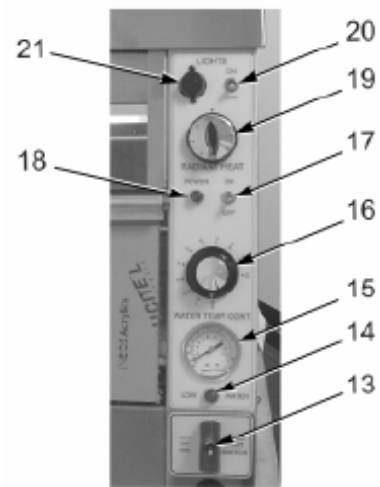


Figure 3-10

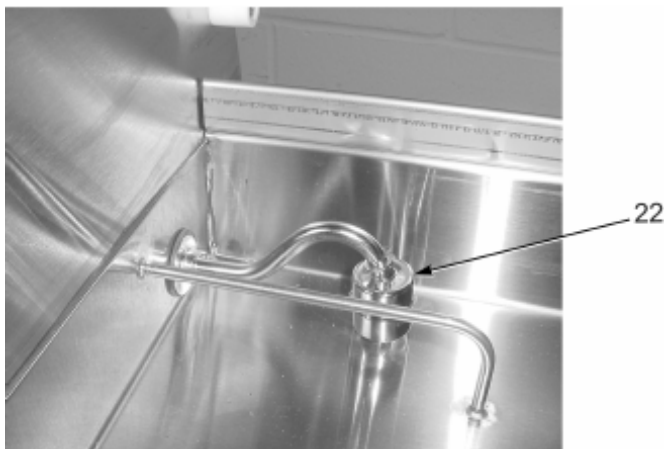


Figure 3-11

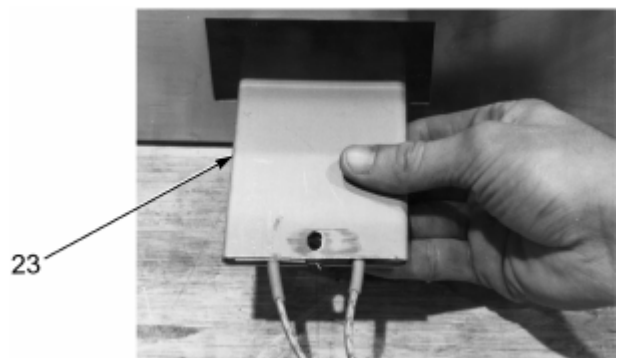


Figure 3-12

3-2. OPERATING CONTROLS (Continued) 操作控制器 (续)

Fig. No. 图号	Item No. 编号	Description 名称	Function 功能
3-1	1	Water Valve 水阀	An electrical solenoid valve energized by the float switch or the water control switch (in manual position) that allows water to flow into the water pan 水阀是一个电磁阀由浮球开关或水位控制开关 (在手动位置) 控制，当打开进水电磁阀时水就流入水盘
3-1	2	Water Strainer 滤网	A filter to prevent particles plugging the water valve 避免杂质堵塞水阀的过滤装置
3-1	3	Contactator 接触器	The relay that directs power to the water heaters 将电接入水阀的继电器
3-1	4	Relay 继电器	Shuts the heat off to the water pan when a low water condition is sensed by the float switch 当浮球开关感应到低水位的时候，继电器会切断水盘加热
3-2	5	Radiant Heater 辐射加热器	A long tubular heater mounted in a reflector located in the ceiling panel of the unit 辐射加热器是一个长管状加热器，它安装在顶部的反射罩内
3-3	6	High Temperature Limit 高温极限	A safety device mounted to the bottom of the water pan which detects an over temperature condition if the water pan runs dry 高温极限是安装在水盘底部的一个安全装置，如果水盘中的水干了，它可以探测到高温并切断加热器。
3-4	7	Perforated Bun Pan 有孔面包盘	Used over the water pan to allow the humidity to pass thru the chicken 有孔面包盘置于水盘上方，有利于水蒸气从鸡块间逸出
3-5	8	Water Pan Grid 水盘支架	A grid that sets in the water pan to prevent a bun pan from dropping into the water when being lifted out 当取出面包盘时，水盘支架可以防止面包盘入水中

3-2. OPERATING CONTROLS (Continued) 操作控制器 (续)

Fig. No.	Item No.	Description	Function
图号	编号	名称	功能
3-6	9	Pan Support - Top 盘支撑架	Tilts the bun pans used in the top toward the customer side of the unit 支撑面包盘向顾客一方倾斜
3-7	10	Light Bulb 灯泡	A 60 watt rated, long-life bulb that should be replaced by the same wattage bulb 一个60瓦的灯泡，可以用相同瓦数的灯泡更换
3-8	11	Lamp Socket 灯座	A high temperature ceramic socket for holding the light bulb 灯座由耐高温陶瓷做成，用于安装照明灯
3-9	12	Tinted Glass 有色玻璃	Specially tempered colored glass with a thin film of silicone that protects the light bulbs as well as color the light 有色玻璃片是带有一层薄的硅树脂的特殊钢化玻璃，它可以保护灯泡并改变光线的颜色
3-10	13	Water Control Switch 水位控制开关	A three-position switch with center position being OFF; in the position marked AUTOMATIC (up), the water level in the unit will be controlled by the float switch; in the position marked MANUAL (down), the water valve is opened directly by the switch; the MANUAL position is spring loaded so that the water valve will close when the switch is released 此开关时一个三位开关，中间位为关闭，开关在标有“AUTOMATIC (自动)”的位置(朝上)时，由浮球开关自动控制。在标有“MANUAL (手动)”的位置(朝下)时，直接由开关控制。在“MANUAL”位置的时候，有自动复位功能。因此，当手离开开关时，电磁阀将关闭
3-10	14	Water Light 水位指示灯	A light operated directly by the float switch, which when illuminated, indicates low water conditions no matter what position the water control switch is in 水位指示灯直接由浮球开关控制，无论水位控制开关在哪个位置，当指示灯亮时，表明处于低水位。

3-2. OPERATING CONTROLS (Continued) 操作控制器 (续)

Fig. No. 图号	Item No. 编号	Description 名称	Function 功能
3-10	15	Thermometer 温度表	Indicates the water temperature 指示水温
3-10	16	Water Thermostat 温控器	An electro-mechanical device used to regulate the water temperature 一个调节水温的机电装置
3-10	17	Power Switch 电源开关	A two-position, three pole switch used to turn on and off the heat and water control systems 电源开关是一个双位三级开关，用于接通或断开加热和水控制系统
3-10	18	Power Light 电源指示灯	A light, when illuminated, indicating when the power switch is on and the heat and water system controls are energized; if the power light goes out during normal operation, this means the water pan high temperature limit has opened indicating that the unit is out of water 指示灯亮的时候表示电源接通，加热系统和水控制系统通电。如果在正常工作的时候指示灯熄灭，表明水盘高高温度极限断开，水盘中没有水了。
3-10	19	Radiant Heat Infinite Regulator 辐射加热调节器	A time proportioning controller, which means the higher the number setting, the greater percentage of time the radiant heat will be on 调节器是时间比例控制器，数字调得越大，辐射加热器工作时间越长。
3-10	20	Light Switch 灯开关	A two-position, two pole switch used to turn the lights ON and OFF 此开关是双位双柱开关，用于控制灯的点亮与熄灭
3-10	21	Light Fuse Holder 灯保险丝座	A 15 amp protective device for the lighting circuit, that must be replaced by a fuse of the same size and rating 灯电路的15安培的保护装置，必须用同规格保险丝替换

3-2. OPERATING CONTROLS (Continued) 操作控制器 (续)

Fig. No.	Item No.	Description	Function
图号	编号	名称	功能
3-11	22	Float Switch	An electro-mechanical sensing device used to automatically control the water level in the water pan; the float switch can be inactivated by the water control switch; the float switch illuminates the low water light when it senses a low water condition
		浮球开关	自动控制水盘水位的机电感应装置，水位控制开关可关闭浮球开关，当侦测到低水位会点亮低水位指示灯
3-12	23	Water Heater	Two flat strip heaters, attached to the bottom of the water pan, which measure approximately 3” wide by 25” long, and are rated at 1020 watts each
		水加热器	水加热器是两个扁平的、大约长25”宽3”的装置，每个加热器的功率为1020瓦

3-3. START-UP开机

NOTICE

Before using, the Henny Penny Heated Display Cabinet should be thoroughly cleaned as indicated in the Shut-Down and Cleanup section of this manual.

在操作前应按照关机和清洁部分的指引彻底清洁保温柜



Step 2



Step 3



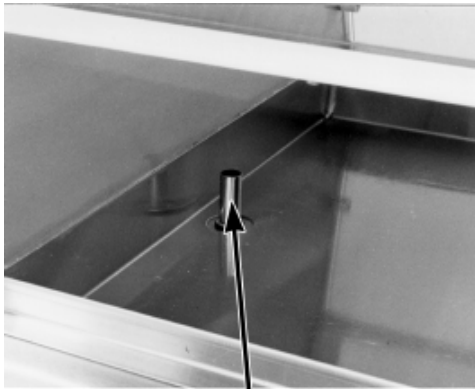
Step 4

1. Move all switches and controls on the cabinet to the OFF position. 将所有开关和控制器到OFF位置
2. Turn on power supply for the cabinet at the main circuit breaker. 将保温柜的主电源断路器合上
3. Place the grids in the water pan. 将支架放入水盘
4. Install the perforated bun pans over the water well. This will help in a more rapid heat up of the water. 将有空面包盘放在水面正上方，这有利于水温迅速上升。
5. Close the doors. 关上有机玻璃门
6. Turn the power switch to the ON position. 将电源开关打开
7. Turn the light switch to the ON position. 将灯开关打开
8. Turn the radiant heat switch to the desired setting. We recommend starting at "6" for the lower radiant. If you have upper radiant, start at "4". These settings are adjustable and may change as you become familiar with the food product in this unit. 将辐射加热开关拨到设定值。我们建议下层辐射加热器在6的位置开始，如果有上层，建议在4开始。当你开始对此设备保存食品的特性开始了解后可以这些设定进行调整。
9. Turn the water control switch to AUTOMATIC. 将水位控制开关打到AUTOMATIC位置
10. After approximately one minute, turn the water thermostat to the desired setting. We recommend about 3.5 to 4 or a water temperature of 150°F. 在大约经过1分钟后，将水温控制器拨到设定值，建议在3.5到4之间，或水温在150°F。

3-4. OPERATION WITH PRODUCT 食品存放

1. Place product on wire grids in the pans.将食品放在算子上
2. Serve product from the outside edges first. The product closest to the door opened often will cool fastest.靠近门边缘的食品较容易冷却，宜先取出
3. Only leave the doors open when demand requires. During slow periods, keep the doors closed.在存取食品后，要记得将门关闭

3-5. SHUT-DOWN AND CLEANUP 关机和清洁



Drain Standpipe

Step 6

1. Turn the water thermostat to OFF将水温度计关闭.
2. Turn the radiant heat to OFF将辐射加热关闭.
3. Turn the water control switch to OFF.将水位控制开关关闭
4. Open the doors.打开门
5. Remove all the pans.将所有盘取出
6. Remove the drain standpipe.移除排泄立管
7. Remove the grids from the water pan and clean with soap and water at sink.将水盘内所有支架取出，用皂液和水清洁

8. If cleaning a five-pan unit (HCW-5), or eight-pan unit (HCW-8), remove wire pan support from top section and clean with soap and water at sink. 如果清洁5盘的设备 (HCW-5) 或8盘设备 (HCW-8) ， 应从上部取出盘支撑架， 然后放入洗涤槽， 用皂液和水清洗。

CAUTION

Do not use steel wool, other abrasive cleaners or cleaners/sanitizers containing chlorine, bromine, iodine or ammonia chemicals, as these will deteriorate the stainless steel material and shorten the life of the unit.

不要用钢丝绒，或其他磨损性的清洁材料/或蘸取酒精、溴、碘酒、氨等化学成分的清洁剂清洁保温柜，以免伤害不锈钢表面，缩短设备使用寿命

Do not spray the unit with water, such as, with a garden hose. Failure to follow this caution could cause component failure.

不要用水喷洒设备，如用灌溉花园的水枪。否则会导致元器件损坏

9. Clean all surfaces with a soft cloth, soap, and water. 用软布蘸皂液和水清洁所有表面
10. Clean around electrical controls with a damp cloth. 用一块湿布擦拭电子控制器周围。
11. Install the drain standpipe. 安装排泄竖管
12. Turn off the lights and power switch. 关闭指示灯
13. Leave the doors open until ready to use again. 将门打开准备再次使用。

SECTION 4. TROUBLESHOOTING故障排除

4-1. TROUBLESHOOTING GUIDE故障排除指引

PROBLEM 问题	CAUSE 原因	CORRECTION 改正措施
Product not holding 食品不保温	<ul style="list-style-type: none"> ● Doors are not keep closed 门没关好 ● Product held too long 食品放置时间太久 ● Water temperature too low 水温太低 ● Radiant heat too low 辐射加热太低 ● Light bulbs out 灯泡坏了 	<ul style="list-style-type: none"> ● Keep doors closed when holding possible 除存取食品外，其余时间保持门关闭 ● Only hold product for recommended times 只在规定时间内保存食品 ● Turn to higher setting 提高温度设定 ● Turn to higher setting 提高温度设定 ● Replace as required, per light Bulbs and Glass Panels section 按照要求更换，参见灯泡和玻璃面板部分
Doors are fogging 有机玻璃门结雾	<ul style="list-style-type: none"> ● Doors left open too much allowing doors to cool and cause condensation 有机玻璃门打开过久，门变冷而发生了冷凝作用 ● Radiant heat not high enough 辐射温不够高 ● Water temperature too high 水温太高 	<ul style="list-style-type: none"> ● Keep doors closed when possible 有机玻璃门打开后应尽快关上 ● Turn to higher setting 提高温度设定 ● See recommended settings and temperature 按要求设定水温值
Water will not fill 水不能注入	<ul style="list-style-type: none"> ● Water supply has been shut- off or disconnected 水源被关闭或未连接 	<ul style="list-style-type: none"> ● Check the water supply 检查水源
Lights will not turn on 所有灯不亮	<ul style="list-style-type: none"> ● Defective fuse 保险丝损坏 	<ul style="list-style-type: none"> ● Replace 15 amp fuse 更换 15 安培保险丝
Not all lights on 灯不全亮	<ul style="list-style-type: none"> ● Faulty light bulbs 灯泡坏 	<ul style="list-style-type: none"> ● Replace with recommended bulb, per Light Bulbs and Glass Panels section 按照要求更换，参见灯泡和玻璃面板部分
Water will not reach desired temperature 水温不能达到设定温度	<ul style="list-style-type: none"> ● Bun pans are not over water 面包盘没有盖在水上面 	<ul style="list-style-type: none"> ● Place perforated bun pans over water 将有空面包盘盖在水面上

NOTICE

More detailed troubleshooting information is available in the Technical Manual, available at www.hennypenny.com, or 800-417-8405 or 937-456-8405.

更多的故障排除细节的信息在技术手册中，可以从www.hennypenny.com下载或致电1-800-417-8405或1-937-456-8405索取

GLOSSARY

HENNY PENNY HOLDING CABINETS

air temperature probe 空气温度探头	a round device located inside the cabinet that measures the inside air temperature and sends that information to the control panel 一个在保温柜内部测量保温柜内部 并将相关信息发送给控制面板的装置
concentration ring assembly 湿度侦测组件	a metal assembly located in the water pan in the bottom of the unit that helps keep an even humidity level inside the cabinet 位于保温柜底部水盘的金属组件，帮助使保温柜内部保持适当湿度
clean water pan setpoint 清洁水盘设定点	a preset temperature at which a sensor warns the operator that the water pan has excessive lime deposits 一个预设的传感器的温度，用于当水垢积存到一定程度时警告操作者
control panel 控制面板	the components that control the operating systems of the unit; the panel is located on the top front surface of the cabinet 控制整个设备的操作系统的部件，位于保温柜正面顶部
deliming agent 水垢去除剂	a cleaner used to remove lime deposits in the water pan 用于清除水垢的清洁剂
drain valve 排泄阀	a device that lets the water drain from the water pan into a shallow pan on the floor; the valve should be closed while the unit is in use if humidity is desired 用于将水盘中的水排泄出设备的装置。如果需要保湿，则应保持排泄阀关闭
float switch 浮球开关	a device that senses low water levels in the water pan 感受水盘中低水位的装置
food probe 食品探头	a sensor located outside the cabinet that, when inserted into the product, communicates the temperature of the product to the control panel 放置在设备外部的感应器，当插入产品内部时，可以将产品内部温度数值输送到控制面板
food probe receptacle 食品探头插座	the connection where the food probe is inserted in order to communicate with the control panel 当食品探头插入产品，传送数值到控制面板的连接处
humidity sensor 湿度感应器	a device that measures the percentage of humidity inside the cabinet during use 在使用过程中感应保温柜内部湿度的装置
humidity setting 湿度设定	a preset moisture level at which the cabinet operates; this setting is programmed at the factory but can be changed in the field 在保温柜操作过程中预设的湿度，此湿度标准是由工厂出厂时设定但也可以进行更改

LED LED指示灯	an electronic light on the control panel 控制面板上的指示灯
minimum holding temperature 最低保存温度	the lowest temperature at which a food product can be safely held for human consumption 可以被接受的被人类安全食用的最低食品保存的温度
module 模块	the removable top part of the cabinet that contains all of the operating system 位于保温柜顶部的包含全部操作系统的可移除的部件
out of water trip point 加水警告点	a preset temperature at which a sensor warns the operator that the water pan needs refilled 预先设定的温度以警告操作者水盘需要加水
parameters 参数	a preset group of setpoints designed for holding specific food products at certain temperature and humidity levels 一系列预设的设定点以使保温柜保持一定的温度和湿度标准
power switch 电源开关	the ON/OFF switch that sends electricity to the unit's operating systems; this switch does not disconnect the electrical power from the wall to the unit ON/OFF开关输送或关闭通向操作系统的电力，此开关并不能关闭从墙体到设备的电连接。
pressure sprayer 压力喷雾	a device that shoots a stream of water under pressure; this device should NOT be used to clean a holding cabinet 在一定压力下将水喷射水雾的装置，此装置不能用于保温柜的清洁。
probe clip 探头夹片	a metal holder that attaches to the outside of the control panel to hold the food probe when not in use; the clip is an optional accessory 位于保温柜外部的金属卡片，以便在食品探头不使用的時候夾住探頭，此金屬卡片屬於可選部件
product load capacity 产品容积	the highest recommended number of pounds/kilograms of food product that can be safely held in the cabinet 工厂建议的保温柜所能安全保存食品最高的磅或公斤数
proof function	a program used for allowing bread to rise
relative humidity 相对湿度	the humidity level outside the cabinet 保温柜外部环境的湿度
set point 设定点	a preset temperature or humidity; the setpoint is a programmable feature 预设的温度或湿度，设定点是一个可编程的功能

system initialization 系统初始化	a programming process that resets factory settings 重新返回工厂设定的程序
temperature setting 温度设定	a preset temperature up to which the cabinet will heat; this setting is programmed at the factory but can be changed in the field 预设的保温柜所应达到的温度。此温度属于出厂设定但可以通过编程改变
vent activation switch 排气开关	an automatic control that opens and closes the vent on the rear of the cabinet to maintain the preset humidity level 位于保温柜后部可以自动开关以保持预设湿度的装置
vented panels 排气面板	openings on the cabinet that allow air access on the sides and rear of the module 在模块后部以及保温柜侧面通气的开口
water fill line 注水线	the line marked on the inside of the water pan that shows the maximum water level to prevent overflow onto the floor 在水盘内部标注的最高水位线以防止水溢流
water heater sensor 水加热感应器	a part in the water heater that sends a message to the controls when the water pan is limed up or empty 水加热器的一部分，在水垢积存到一定程度或没有水的时候传送信息到控制面板
water jet 水喷嘴	a device that shoots a stream of water under pressure; this type of device should NOT be used to clean a holding cabinet 在一定压力下将水喷射水雾的装置，此装置不能用于保温柜的清洁。
water pan 水盘	the area in the cabinet that holds water for creating humidity inside the cabinet 用于保存一定量的水以保持保温柜内部湿度的地方