

OPERATOR'S MANUAL HEATED LANDING ZONE (HLZ)

This equipment chapter is to be
inserted in the Equipment Manual.

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OPERATOR'S MANUAL操作手册
HEATED LANDING ZONE (HLZ)

THIS OPERATOR'S MANUAL SUPERCEDES ALL PREVIOUS EDITIONS OF THE HLZ OPERATOR'S MANUAL. 此手册代替以前所有版本的HLZ操作手册

FOR YOUR SAFETY, DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND NEAR THIS OR ANY OTHER APPLIANCE. 为了您的安全，不要在此设备边上使用或存放汽油或其他可燃性挥发气体。

DANGER危险

Safe and satisfactory operation of your equipment depends on its proper installation.正确的安装保证了您对设备安全和满意的操作

Installation must conform to local codes or, in the absence of local codes, with the latest edition of your national electrical code, i.e. National Electrical Code, NFPA 70 (USA); Canadian Electrical Code Part 1, CSA-C22.1; or European Community standards (CE).安装应遵循当地用电标准。如没有，可以按照国家最新电力安装标准执行。

If this appliance is equipped with a three-prong grounding plug for your protection against electrical shock, it must be plugged directly into a properly grounded three-prong outlet. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS UNIT! 如果此设备用接地插头以避免触电事故，该设备必须妥善插入正确接地的插座。不要将接地线煎断

THIS APPLIANCE IS INTENDED FOR INDOOR USE ONLY. IT IS NOT SUITABLE FOR OUTDOOR USE.此设备仅用于室内，不能在户外进行操作。

DO NOT USE WATER JETS TO CLEAN THIS EQUIPMENT. THE EQUIPMENT WILL BE DESTROYED AND ALL WARRANTIES VOIDED不要用水枪冲洗设备，否则会造成设备损坏保固失

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS/LIQUIDS NEAR ANY COOKING APPLIANCE不要在此设备边上使用或存放汽油或其他可燃性挥发气体。

HAZARD COMMUNICATION STANDARD, (HCS) - THE PROCEDURES IN THIS MANUAL INCLUDE THE USE OF CHEMICAL PRODUCTS. THESE CHEMICAL PRODUCTS WILL BE PRINTED IN BOLD FACE, FOLLOWED BY THE ABBREVIATION (HCS) IN THE TEXT PORTION OF THE PROCEDURE. SEE THE HAZARD COMMUNICATION STANDARD (HCS) MANUAL FOR THE APPROPRIATE MATERIAL SAFETY DATA SHEET (MSDS).根据HCS规定，此手册所包含商业产品使用程序，这些商业产品可以用粗体字印刷，跟在HCS后面。查看MSDS看具体的安全数据

HEATED LANDING ZONE

CHAPTER 1: WARRANTY INFORMATION 保固信息

The Frymaster Corporation makes the following limited warranties to the original purchaser only for this equipment and its replacement parts 工厂对从原厂采购的设备和原厂设备上所更换之部件提供以下保固:

1.1 Warranty Provisions – Heated Landing Zone (HLZ) 保固政策

- A. The Frymaster Corporation warrants all components against defects in material and workmanship for a period of 1 year 工厂为所有由于材质或加工工艺所造成的零部件损坏提供1年零件保固.
- B. All parts, with the exception of fuses, are warranted for 1 year after installation date of cabinet 自安装之日起, 所有部件 (除了保险丝) 享受1年保固.
- C. If any parts, except fuses, become defective during the first year after installation date, Frymaster will also pay straight-time labor costs to replace the part, plus up to 100 miles/160 km of travel (50 miles/80 km each way) 如果所有零件 (除保险丝) 在安装日起1年内损坏, 工厂还提供直接修理人工以及160公里 (80公里双程) 的差旅费用. .

1.2 Parts Return 零件退回

All defective in-warranty parts must be returned to a Frymaster Authorized Factory Service Center within 60 days for credit. After 60 days, no credit will be allowed 所有更换保固零件应在60天内退回指定维修中心, 如果超过60天, 保固失效.

1.3 Warranty Exclusions 非保固项目

This warranty does not cover equipment that has been damaged due to misuse, abuse, alteration, or accident such as 保固并不包括由于不当使用, 疏忽, 事故导致的故障, 如:

- improper or unauthorized repair 不正确或未经授权的维修;
- failure to follow proper installation instructions and/or scheduled maintenance procedures as prescribed in your MRC cards 没有按照正确安装指导或定期维护保养程序 (在MRC卡中所描述程序) 进行操作;
- improper maintenance 不正确的维护;
- damage in shipment 运输损坏;
- abnormal use 不当使用;
- removal, alteration, or obliteration of the rating plate 丢失, 替换或涂改设备铭牌;

This warranty also does not cover 并且, 保固还不包括:

- transportation or travel over 100 miles/160 km (50 miles/80 km each way), or travel time over two (2) hours 超过160公里 (80公里双程) 或2小时以上的差旅部分;
- overtime or holiday charges 节假日加班;
- consequential damages (the cost of repairing or replacing other property which is damaged), loss of time, profits, use or any other incidental damages of any kind 由于设备维修所导致其他设备财产的损失.

There are no implied warranties or merchantability or fitness for any particular use or purpose 除此以外无其他特殊保固.

For international warranty, the above procedures apply, except that the customer is responsible for freight and duty charges 对于国际市场用户, 除了遵循以上程序外, 客户应负责运费和关税等.

HEATED LANDING ZONE

CHAPTER 2: PARTS/SERVICE INFORMATION 零件/服务信息

2.1 Ordering Parts 零件订购

Parts orders may be placed directly with your local Frymaster Factory Authorized Service Center (FASC)/distributor. A list of Frymaster FASCs/distributors was included with the unit when shipped. If you do not have access to this list, please contact the Frymaster Service Department at 1-800-24- FRYER or 1-318-865-1711. 如需要订购零件，请同Frymaster授权的当地维修商联系。Frymaster会随设备附一张维修商清单。如果您没有此清单，请通过1-800-24- FRYER 或 1-318-865-171同Frymaster服务部联系获得。

To speed up your order, the following information is required 为了缩短您订购零件的时间，请提供以下信息：

Model Number 型号 _____

Serial Number 序列号 _____

Voltage 电压 _____

Item Part Number 零件号码 _____

Quantity Needed 需要数量 _____

2.2 Service Information 服务信息

Service may be obtained by contacting your local Frymaster Authorized Service Center/Distributor. Service information may be obtained by calling the Frymaster Service Department. The following information will be needed in order to assist you quickly and efficiently 请通过联系Frymaster当地授权维修商以获得维修服务。服务信息可以通过至电Frymaster服务部获得。以下信息可以帮助您更快更有效地获得服务：

Model Number 型号 _____

Serial Number 序列号 _____

Nature of the Problem 问题描述 _____

Additional information (i.e. cooking environment, time of day) may be helpful in solving your service problem. Contact your service technician. 如烹炸环境，烹炸时间等额外信息，可能对解决您所碰到的问题有帮助，请同技术员联络。

RETAIN AND STORE THIS MANUAL IN THE EQUIPMENT MANUAL FOR FUTURE USE. 请将此手册妥善保管，以便将来使用。

HEATED LANDING ZONE

CHAPTER 3: INSTALLATION AND OPERATION 安装和操作

The **Heated Landing Zone** or **HLZ** is designed to hold assembled sandwiches. By circulating heated air evenly across the open staging area, the Heated Landing Zone keeps sandwiches hot without drying or cooking. The Heated Landing Zone meets all McDonald's standards for safety, efficiency, food safety, and cleanliness. **HLZ**设备是用于保存三文治的设备。就算在敞开的空间里，HLZ也可以通过循环加热空气，在不令三文治丧失水分的情况下保持三文治的温度。HLZ符合麦当劳安全、高效、食品安全和清洁的要求。

3.1 HLZ Installation/Setup 安装

Upon arrival, inspect the HLZ for concealed damage. Immediately report any damage to the delivering freight company. Claims must be filed within 15 days after receipt of the unit. Make sure that the unit is placed on an even surface and that the area surrounding the HLZ is free of clutter that would interfere with airflow. 设备到达后，检查是否有隐蔽性损坏。如果发现，立即同运输公司报告。报告必须在收到设备的15天内发出。要确保HLZ放在稳固的表面，并且保持空气流通。

Install Optional Burger Bumper (Units Built Before 10/98)

安装可选汉堡缓冲器（10/98年前的设备）

The burger bumper may be placed on either side of the HLZ to prevent pass through of product. Burger bumpers are provided by the kitchen equipment supplier. See Figure 1. 汉堡缓冲器可以放置在HLZ任意两面以避免产品冲出。缓冲器由设备供应商提供。

Optional Burger Bumper
Installed (before 10/98)

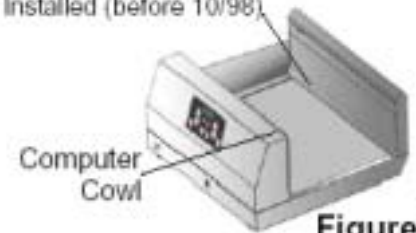


Figure 1

Install Filter Screen (Units Built After 10/98)

安装过滤网（10/98以后的设备）

The filter screen is design to prevent debris from entering the computer Cowl Assembly and clogging the blower assembly. Simply fit the part on to the vent opening of the computer cowl assembly. The filter screen will snap into position. If equipped with an optional holding screw, tighten screw to pull the filter screen snug into position. 过滤网可以放置碎屑进入控制器并堵塞吹风机。将此网安装在控制器的通气口。如果有额外的固定螺丝，将螺丝拧紧令网到位。



The filter screen snaps into place on rear of the air-intake tower.

Power Requirements 电力要求

- Voltage – 208 VAC and 240 VAC models are available 设备可以提供208VAC和240VAC两种选择
- Frequency – 60 Hz 电流-60HZ
- Single phase 单相
- 20 amp service 20安培

3.2 HLZ Operation

1. Plug the unit into the power source. 插上电源
2. See Chapter 5, *Computer Operation and Programming*, for proper computer setup and operation. 见第五章控制器操作和编程部分
3. Place product in the HLZ in accordance with the restaurant's established procedures. 按照餐厅程序放入产品
4. When closing the store, remove all product from the HLZ and perform daily preventive maintenance in accordance with the MRC. Turn the computer OFF. 打烊时要将所有产品取出，根据MRC做清洁，关闭控制器



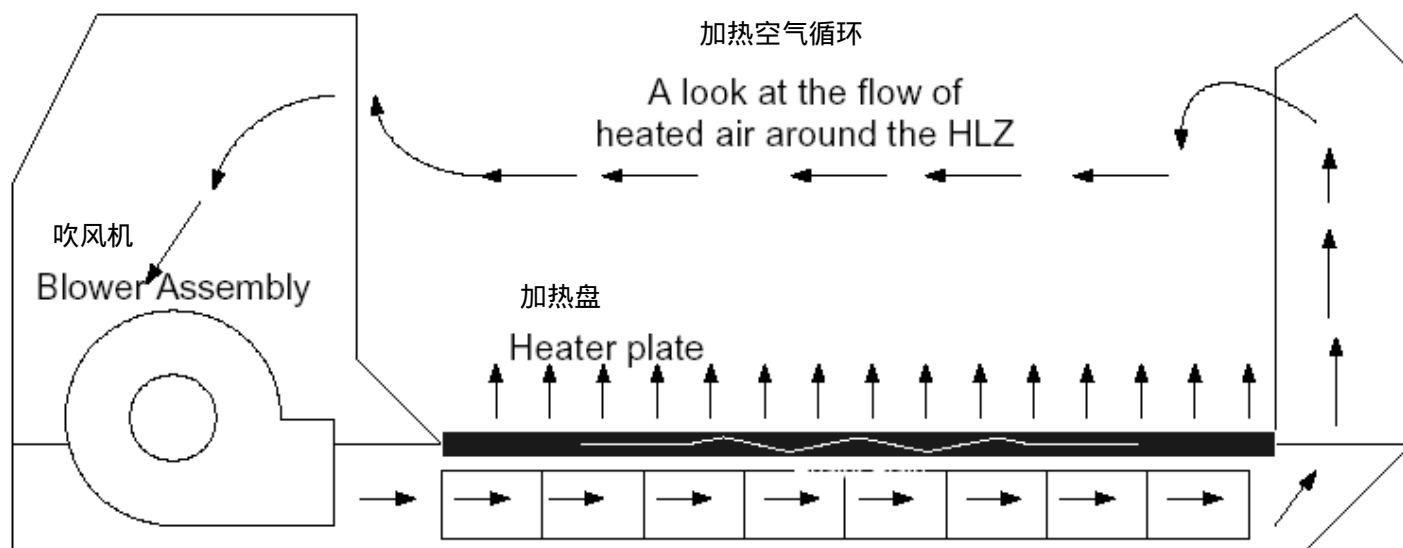
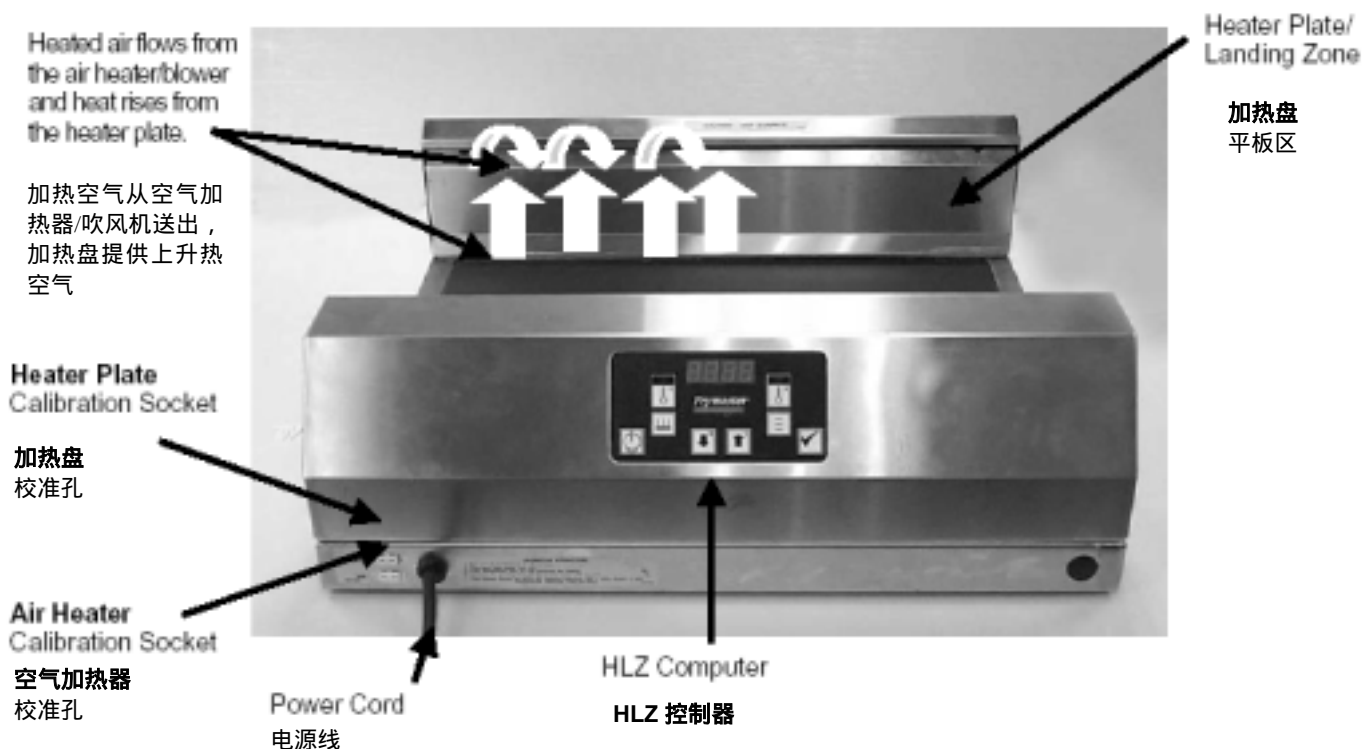
DANGER

If the 240 VAC model is operated on 208 VAC, the unit will heat slowly and may not reach maximum temperature. If the 208 VAC model is operated on 240 VAC, component damage is likely. To ensure proper operation, the power source should match the voltage on the rating plate on the bottom. 如果240VAC装在208VAC上，设备会加热缓慢不能到达最高温度。如果208VAC接在240VAC上，可能导致损坏。必须按照铭牌上要求妥善接电。

THIS APPLIANCE IS EQUIPPED WITH A GROUNDING PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND MUST BE PLUGGED INTO A PROPERLY GROUNDED RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG. 此设备提供1个接地插头，以防止触电提供保护。因此必须妥善接地，不要将接地线剪断或去除。

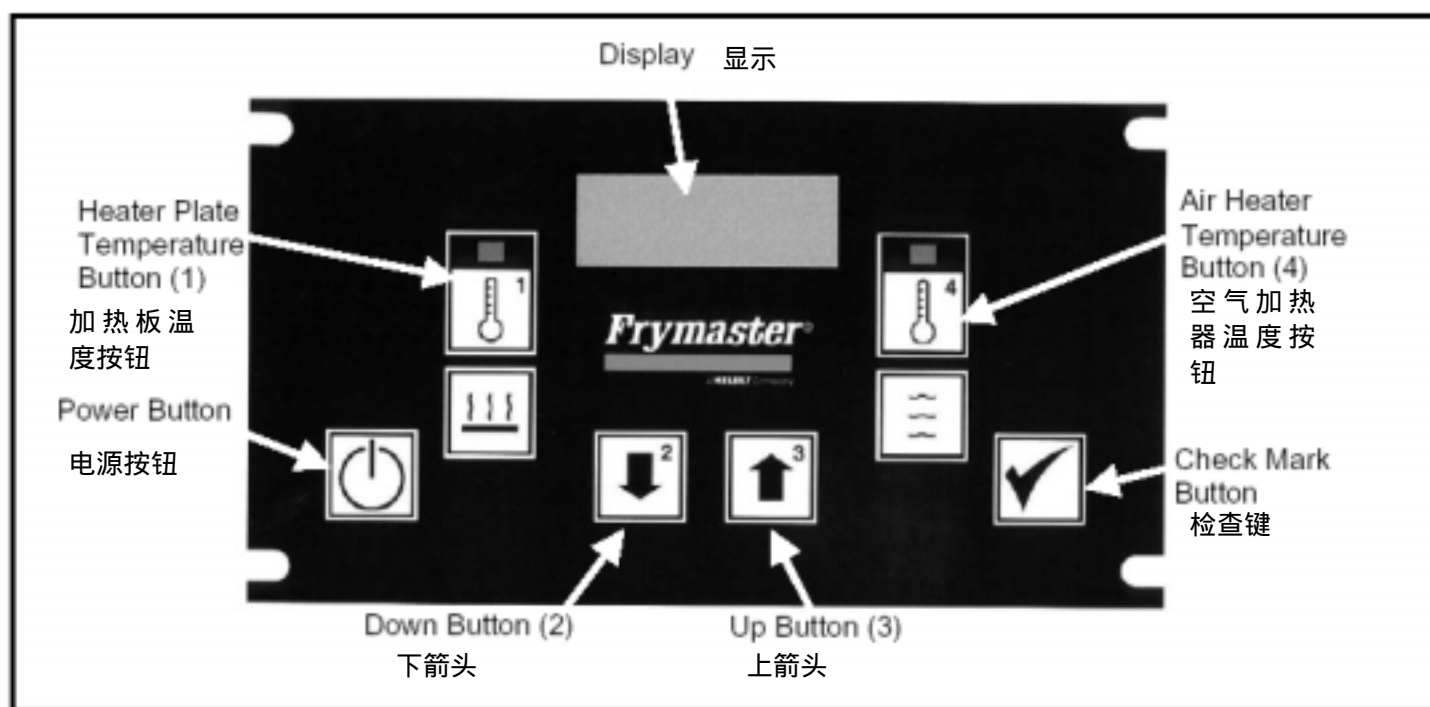
HEATED LANDING ZONE

CHAPTER 4: HLZ MODEL/COMPONENT IDENTIFICATION 元器件辨别



HEATED LANDING ZONE

CHAPTER 5: COMPUTER OPERATION AND PROGRAMMING 控制器操作和编程



HLZ Computer.控制器

5.1 Programming Temperatures 温度编程

You are able to program the setpoint temperature of both the air heater and the heater plate via the computer interface. The heater plate factory default is set to the McDonald's standard of 160°F. The air heater factory default is set to the McDonald's standard of 220°F. If the factory default temperature settings are acceptable, skip to Section 7.2, Page 6. 您可以通过控制器，编辑空气加热器和加热盘的设定温度。加热盘工厂出厂设定是麦当劳的标准设定160°F，而空气加热管是麦当劳标准220°F。如果工厂设定符合您的要求，可以直接看7.2，第6页。

Ensure that the HLZ computer is OFF (nothing in the display). Press ; then enter 1, 2, 3, 3. Use the numerals in the upper right-hand corner of each key. 确保HLZ的控制器在OFF位置（没有任何显示 ），按 然后按1，2，3，3。使用右上方的按钮。

按 然后

The display will read **SET** and the LEDs on both the Heater Plate button (1) and the Air Heater button (4) will light (see previous diagram, *HLZ Computer*). Press the button that corresponds to the heater you wish to program. 显示**SET**，然后加热盘按钮（1）和空气加热器（4）的LED指示灯会同时闪亮（见HLZ控制器的接线图）。按相关要编程的按钮进行编程。

Press the UP and DOWN arrow keys to achieve the desired set-point temperature, then press the button once. Both heater LEDs will light. 按上下箭头锁定需要的设定温度，然后按此按钮，加热指示灯会亮。

按的 or 得到需要的设定温度，然后按 确定

When both heaters are programmed, press again to store the programmed setpoints and exit the programming mode OR press either of the buttons (1 or 4) to change the setpoint temperature for a heater. Program as previously described. 当两个加热器都编程完成后，按 储存编辑的设定温度并退出编程模式或按两边任一 按钮（1或4）改变任一加热器的设定温度。



HEATED LANDING ZONE

CHAPTER 5: COMPUTER OPERATION AND PROGRAMMING 控制器操作和编程

5.2 Operation 操作

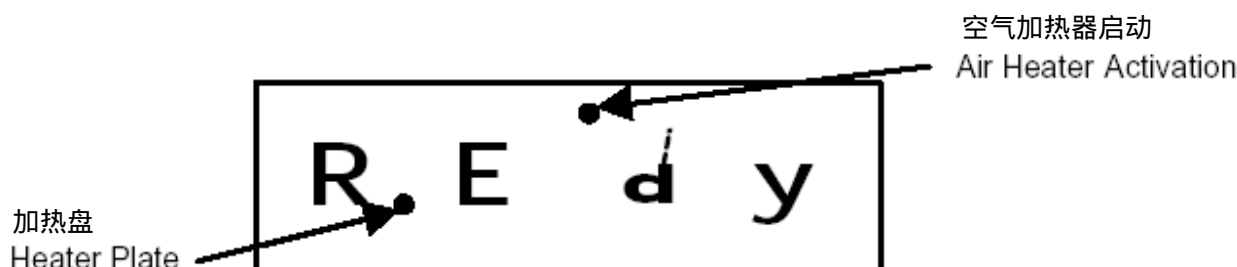
1. Press the power button, turning the HLZ on (the display will light and cycle through an initialization sequence). The display will read -LO- until the air heater and heater plate are within 15°F of setpoint. It will take approximately 10 minutes for the HLZ to achieve operating temperature. 按电源按钮，打开HLZ（显示闪烁，开始初始循环）显示-LO-，直到空气加热器和加热盘到达设定温度的15°F范围内。到达HLZ操作温度需要大概10分钟。

NOTE: A small LED will light in the display when the heater plate or air heater is energized. 当加热盘和空气加热器通电后，会有一个小LED指示灯闪亮。

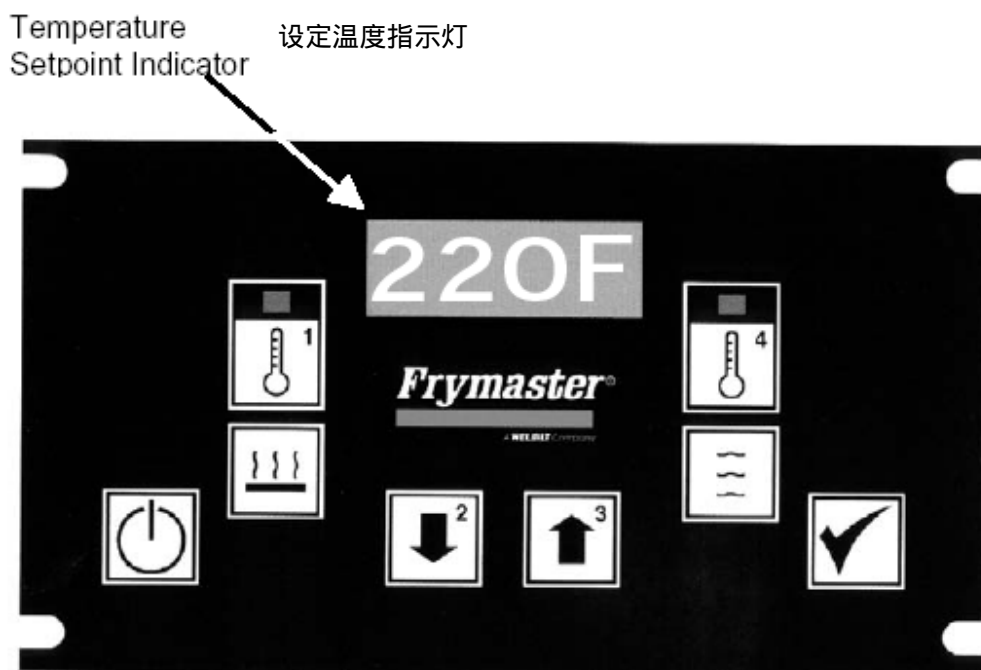
Press  to turn on the computer. 按  打开控制器

The display will read -LO- until both heaters are within 15° F of setpoint. 显示-LO-，直到空气加热器和加热盘到达设定温度的 15°F 范围内

2. When the HLZ is ready for operation, the display reads R E d y (ready). Place product in the HLZ in accordance with the restaurant's established procedures 当HLZ可以操作后，显示Redy(ready)。按照餐厅的程序放入产品。



NOTE: To check the *actual* temperature of a heater, press the corresponding Temperature button once. To check the *setpoint* temperature of a heater, press the button twice (an indicator will light when the setpoint is displayed). 如需要检查加热器的实际温度，按相关温度按钮一次，如需要检查加热器的设定温度，按按钮两次（当显示设定温度时指示灯会闪亮）。



HEATED LANDING ZONE

CHAPTER 5: COMPUTER OPERATION AND PROGRAMMING 控制器操作和编程

5.3 Switching Between Fahrenheit and Celsius Temperature Scales 华氏和摄氏温度转换

Follow these steps to switch between Fahrenheit and Celsius temperature displays (refer to diagram, *HLZ Computer*, on Page 5-1) 按照以下步骤在华氏和摄氏温度之间转换 (根据5-1HLZ控制器线路图) :

1. Unplug unit from power supply 拔下设备插头.
2. Press and hold either temperature bulb button 按任一温度按钮.
3. Plug unit back into power supply with button depressed 按住按钮重新插上插头.
4. S T O R will be shown in the display 显示STOR.
5. Release the temperature button 放开温度按钮.
6. Press the power button 按电源开关.

Now, the unit will display the temperature in Celsius rather than Fahrenheit 现在, 设备显示从原先的华氏转换到摄氏温度.

HEATED LANDING ZONE

CHAPTER 6: OPERATOR TROUBLESHOOTING简单故障排除

Symptom 现象	Possible Cause 可能原因
No computer display; no flow from air tower 控制器不显示，没有气流	<ul style="list-style-type: none"> ● No power没有电 ● Circuit breaker out空气开关跳闸 ● Low voltage电压太低 ● Bad fuse保险丝损坏 ● Bad transformer变压器损坏 ● Hi-limit out高温极限启动
No flow from air tower 没有气流	<ul style="list-style-type: none"> ● Bad latching relay封闭继电器损坏
After 20 minutes of operation computer display shows PROB 操作20分钟后显示PROB	<ul style="list-style-type: none"> ● RTD probe has failed. Isolate failed component by checking temperature of air and heater plate with the temperature display keys on the computer. The plate temperature should be within $\pm 15^{\circ}\text{F}$ of setpoint. The air heat should be within $\pm 25^{\circ}\text{F}$ of setpoint. If both temperatures are good, the computer is likely bad.探头损坏。通过检测空气加热器和加热盘的显示温度，切断损坏的元件。加热盘的温度应在设定温度的$\pm 15^{\circ}$间，空气加热器应在$\pm 25^{\circ}\text{F}$。如果两边温度都正确，可能是控制板损坏。
After 20 minutes of operation computer display shows HI 操作20分钟后显示HI	<ul style="list-style-type: none"> ● Plate heater, plate heater relay or RTD are faulty. 加热盘，加热盘继电器或RTD损坏
After 20 minutes of operation computer display shows LO 操作20分钟后显示LO	<ul style="list-style-type: none"> ● Air heater, air heater relay or RTD are faulty 空气加热器，空气加热器继电器或RTD损坏。

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One Company, Countless Solutions

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819-6194
MAR 2005



Planned Maintenance
System: Maintenance
Requirement Card
(MRC)

Heated Landing Zone (HLZ)

Frymaster L.L.C.

HC 000

Holding Equipment

Pictures and additional

Information 图片和额外信息:

Corresponding Chapter of

Equipment Manual 根据设备手册

When 周期

Daily and as needed. 每日或根据需要

Tools工具

McD® All Purpose Super

Concentrate (A.P.C.) 清洁液 (HCS);

Stainless steel pan filled with

lukewarm water.

放满清水的不锈钢盘

Precaution 小心!

HAZARD COMMUNICATION STANDARD (HCS) – The procedure(s) in this manual include the use of chemical products. These chemical products will be highlighted with italic letters followed by the abbreviation (HCS). See Hazard Communication Standard(HCS) manual for the appropriate Material Safety Data Sheet(s) 此手册包含的程序包括使用化学物品。这些化学物品将用斜体字加以强调并注明(HCS).具体查看(HCS)手册

Heated Landing Zone Cleaning HZA 清洁

Note: Do not use *McD Sink Sanitizer (HCS)* to clean the stainless steel surfaces of the Heated Landing Zone. 不要用麦当劳水槽消毒水 (HCS) 去清洁 HLZ 的不锈钢表面。

Note: DO NOT use any other tool or medium to clean the Heated Landing Zone than what is prescribed in this maintenance guide. Wire brushes, abrasive pads, or metal scrapers will permanently damage heated surfaces. 不要使用维护保养指导里推荐范围外的清洁工具或药水清洁 HLZ。使用钢丝绒, 砂纸或金属刮刀会损坏HLZ的加热表面。

DO NOT use any other cleaner than *McD A.P.C. (HCS)*. Using other compounds may result in damage to control components. 不要使用麦当劳 A.P.C. 以外的清洁剂, 否则可能导致控制元件的损坏。

1. At the end of the operating day, turn the computer to the OFF position. 在结束一天的操作后, 将控制器关闭
2. Let the unit cool. 让设备冷却下来
3. Use a wet, clean/sanitized cloth to clean the heated surfaces of the unit. A nylon pot brush may be used for hard to remove stains or food items. 用一干净的湿毛巾清洁设备的加热表面。如有食物的残渣, 可以用尼龙刷去除。
4. Wipe clean all stainless steel surfaces with another clean, sanitized towel that has been soaked in *McD A.P.C. (HCS) solution*. 用另一消毒过的湿毛巾清洁已经被*McD A.P.C.*清洁过的表面

When 周期

Monthly.每月

Tools工具

McD® All Purpose Super

Concentrate (A.P.C.)(HCS), 麦当劳

专用 A.P.C. (H.C.S), stainless steel

pan filled with lukewarm water, nylon

pot brush, clean sanitized towel. 放

满清水的不锈钢盘, 尼龙锅刷, 干净的

毛巾

Heated Landing Zone Filter Screen Cleaning 清洁网格

1. Remove filter screen. 将网格取下
2. Use a wet, clean/sanitized cloth to clean the filter screen. A nylon pot brush may be used for hard to remove stains or food items 用一干净湿布清洁网格。如有食物的残渣, 可以用尼龙刷去除。
3. Dry filter screen with a clean, sanitized cloth and reinstall on the heated landing zone unit. 用一干净的消毒布擦干网格, 重新装回HLZ。

When 周期

Semi-annually 半年.

Tools

Atkins Digital

Thermometer with
appropriate patch cord.

Atkins 温度计

Heated Landing Zone Temperature Calibration 温度校准

1. Ensure the Heated Landing Zone is clean. 确保HLZ清洁
2. Twenty minutes after the unit has been turned on and the heaters have achieved operating temperature (appears in the display), plug the digital thermometer into the receptacle that corresponds to the heater you wish to measure. The plugs are marked “AIR” and “PLATE” for easy identification. Allow 3 minutes for the thermometer to stabilize. 在打开设备20分钟后，加热器已经加热到操作温度（显示），将数字温度计插到你测量的加热器的插座，此插头标记了“Air（空气加热器）”和“PLATE(加热盘)”，非常容易辨别。
3. Read the temperature on the thermometer. The temperature read from the thermometer should be within ± 15 degrees F for the air heater or ± 10 degrees F for the heater plate of the temperature as read by the computer. Press the heater temperature switch once to get the actual temperature reading. See the Equipment Manual for computer switch identification. 读取温度计上的温度，所读取温度数据同控制器显示的读数相比较，应该 ± 15 F 空气加热器， ± 10 F加热盘。
4. Call your local Factory Authorized Service Center if any heater is out of tolerance. 如温差超出范围，请联系当地工厂指定维修商。