

ALTO SHAAM®

OPERATION and CARE MANUAL



HOT MERCHANDISER 1000-HM

HALO HEAT COOK/HOLD/SERVE SYSTEMS



W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 U.S.A.

PHONE: 262.251.3800

800.558.8744 U.S.A./CANADA

FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY

262.251.1907 INTERNATIONAL

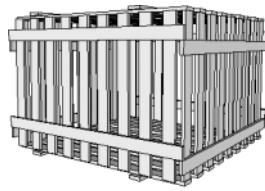
WEBSITE:

www.alto-shaam.com

ALTO-SHAAM® - HOT MERCHANDISER

UNPACKING and SET-UP

The Alto-Shaam Hot Merchandiser has been thoroughly tested, checked for calibration, and inspected to insure only the highest quality cabinet is provided.



When you receive your unit, check for any possible shipping damage and report it at once to the delivering carrier. See *Transportation Damage and Claims* section located in this manual.

The cabinet, complete with unattached items and accessories, may be delivered in one or more packages. Make certain the number of packages received matches the packing list and the accompanying bill of lading.

Save all the information and instructions packed inside the cabinet. Complete and return the warranty card to the factory as soon as possible to insure prompt service in the event of a warranty parts and labor claim.

The unit should not be used in any area where it may be affected by steam, grease, dripping water, or high temperatures. The unit should be installed level to work properly.

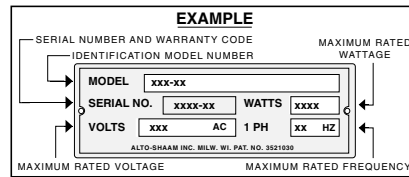
In order to maintain standards established by the National Sanitation Foundation, models mounted directly on top of an base or counter must be sealed to both the base and floor, or counter, with a R.T.V. or silastic meeting N.S.F. requirements. Otherwise, these units must be mounted on legs of a sufficient 4" (102mm) height to provide minimum unobstructed space beneath the unit. If these directions are not followed, the warranty will become null and void.

(Refer to counter layout in this manual.)

NOTE: Any claims for warranty must include the full model number and serial number of the cabinet.

ELECTRICAL INSTALLATION

An identification tag is permanently mounted on the unit.



Position the unit so that the power supply cord is easily accessible in case of an emergency. Plug the cabinet into a properly grounded receptacle **ONLY**.

**ENSURE POWER SOURCE
MATCHES VOLTAGE STAMPED
ON NAMEPLATE OF UNIT**



WARMING CHARACTERISTICS

The merchandiser is equipped with a special, low-heat-density, heating cable. Through the Halo Heat concept, the heating cable is mounted against the walls of the warming compartment to provide an evenly applied heat source, controlled by an electronic thermostat. The design and operational characteristics of the unit eliminate the need for a moisture pan or a heat circulating fan. Through even heat application, the quality of food is maintained for short periods or for longer time periods, up to several hours. The heated compartment is equipped with an electronic thermostat, indicator light, and digital display to monitor the interior air temperature.

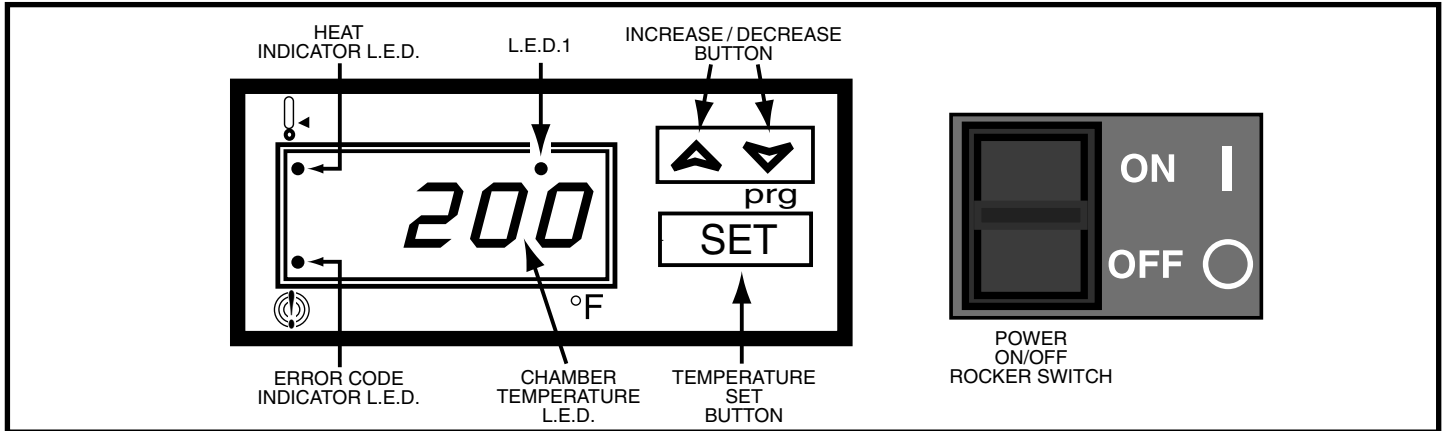
START-UP

Read this manual thoroughly before using this merchandiser, and keep this manual in a safe and easily accessible area.

1. Before operating the merchandiser, clean the interior and exterior of the unit with a clean, damp cloth and mild soap solution. Rinse carefully.
2. Clean and install the side racks, cabinet wire shelves and the bottom baffle pan.
3. Clean the glass with a window cleaner.
4. After final hook-up, locate the circuit breaker box under the unit and flip breaker switch to the ON position for full power to the merchandiser.
5. Check the operating temperature to make sure the merchandiser is functioning within the guidelines recommended for this unit.

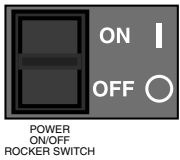
1000-HM • OPERATIONAL PROCEDURES

Thermostat Control Description and Function



The L.E.D., Light Emitting Diode, referred to is an electronic device providing illumination.

The control has a three-digit L.E.D. display. When the warming cabinet is in operation, the L.E.D. will show the chamber's internal temperature. The display will also show programming and diagnostic information.



ON/OFF Rocker Switch

The Power On/Off Rocker Switch positions may be marked with the international "I" for On and "O" for Off.



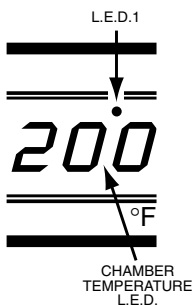
UP/DOWN Arrow Rocker Button

The UP/DOWN arrow rocker button is used to increase or decrease the set-point temperature. The minimum set-point temperature is 90°F (32°C) while the maximum set-point temperature is 200°F (93°C).



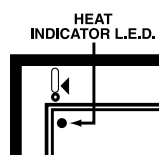
SET Button

The SET button is used to display the current set-point temperature or program a new set-point temperature. Pushing the SET button once will display the set-point temperature value for five seconds. Holding the SET button allows the programming mode to become active.



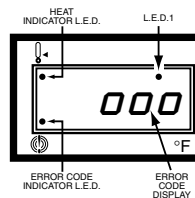
L.E.D. Display

The L.E.D. display will show the set-point temperature value when programming, or the warming chamber's temperature when calling for heat. When programming a new set-point temperature, the L.E.D.1 indicator will blink. When a new set-point temperature is chosen, the Chamber Temperature L.E.D. will flash three times to confirm.



HEAT INDICATOR L.E.D.

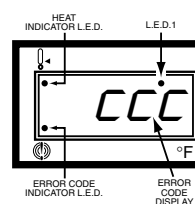
The Heat Indicator L.E.D. will illuminate and remain lit while the unit is calling for heat. It will go out when the air temperature inside the warming chamber reaches the set-point temperature on the control.



ERROR CODE DISPLAYS

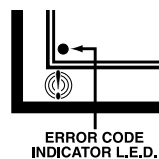
Open-Circuited

If "000" is displayed in the Error Code L.E.D., the sensor is open-circuited. Follow Trouble Shooting Guide instructions in this Operation and Care Manual.



Short-Circuited

If "ccc" is displayed in the Error Code L.E.D., the sensor is short-circuited. Follow Trouble Shooting Guide instructions in this Operation and Care Manual.



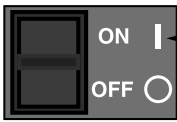
ERROR CODE INDICATOR L.E.D.

If either of the above mentioned errors codes should occur, the Error Code Indicator L.E.D. will be illuminated and remain so until error is cleared.

1000-HM • OPERATIONAL PROCEDURES

Programming and Operating Thermostat Control

Turn Power On



Press the "ON" or "I" position of the rocker switch to turn on control.

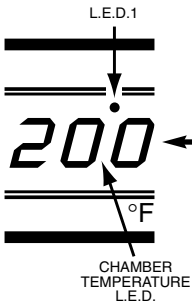
CHANGE SET-POINT TEMPERATURE



+

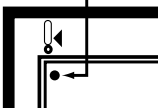


Press and hold the SET button for at least 3 seconds. After L.E.D.1 indicator blinks, release the Set Button. The control is now in the programming mode. **Press and hold** the UP or DOWN arrow rocker button to change the value shown in the display. Store the value by pressing the SET button.



The new set-point value will flash three times to confirm.

HEAT INDICATOR L.E.D.



HEAT INDICATOR L.E.D.

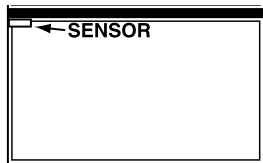
The Heat Indicator L.E.D. will illuminate as the warming chamber calls for heat. It will extinguish when the warming chamber's interior temperature reaches the set-point.

PREHEATING THE UNIT

Always preheat the unit at 200°F (93°C) for 30 minutes before loading the merchandiser with hot food.

LOADING THE CABINET

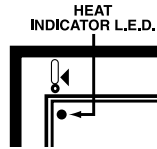
Load the merchandiser with **hot food only**. The purpose of this unit is to maintain hot food at proper serving temperature. Use a food thermometer to make certain all food has reached



an internal temperature range of 140° to 160°F (60° to 71°C). Do not fill cabinet closer than 2" from the sensor. Make certain door is securely closed after loading. Reset the control to 160°F (71°C). **This will not necessarily be the final setting.** Proper temperature range for the food being held will depend on the type and quantity of product. It is advisable to periodically check the internal temperature of each item to assure maintenance of proper food serving temperature.

CAUTION

The unit should be unplugged and a qualified service technician should be consulted if any of the following situations occur:



- The Heat Indicator L.E.D. does not illuminate after normal start-up.
- The warming cabinet does not hold the temperature as set.
- The warming cabinet fails to heat with the L.E.D. illuminated.
- The cabinet heats continuously with the control "OFF".
- Refer to Trouble Shooting Guide in this manual.

ELECTRONIC CONTROL ACCURACY

The electronic control is a precise instrument and is designed to offer trouble-free service. If you suspect the temperature inside the warming cabinet does not match the temperature indicated on the digital display, after stabilizing, follow the instructions listed below.

1. Make certain the power meets the requirements of the appliance, voltage and current rating as indicated on identification tag.
2. Verify the temperature inside the warming cabinet with a quality thermal indicator.
 - A. With the exception of the metal shelves, completely empty the warming cabinet.
 - B. Make certain the sensor, located inside the warming cabinet at the ceiling, is completely clean.
 - C. Suspend the thermal indicator in the center of the warming cabinet.
 - D. Allow the temperature, set on the electronic thermostat, to stabilize for a minimum of one hour before comparing the digital display with the reading on the thermal indicator.

DO NOT OPEN THE CABINET DOOR(S) DURING THE TEMPERATURE STABILIZATION PERIOD.

If the reading on the thermal indicator does not match the digital display within 10°F (6°C), contact a qualified service technician for appropriate action.

CARE and CLEANING



The cleanliness and appearance of this equipment will contribute considerably to operating efficiency and savory, appetizing food. There is an important relationship between cleanliness and food flavor and aroma.

Good equipment that is kept clean works better and lasts longer.

CLEAN THE MERCHANDISER DAILY

1. Disconnect the merchandiser from its power source. Make sure breaker switch is OFF.
2. Remove any left over food products and store in another case.
3. Remove the wire shelves, side racks and baffle pan. Clean these items separately with warm water or commercial detergent. Rinse carefully with a sanitizing solution.
4. Clean the interior walls of the merchandiser with a damp cloth and any good alkaline or alkaline chlorinated based commercial detergent or grease solvent at the recommended strength. Use a plastic scouring pad for difficult areas. Avoid the use of abrasive cleaning compounds, chloride based cleaners, or cleaners containing quaternary salts. Rinse well to remove all residue and wipe dry. *NOTE: Never use hydrochloric acid (muriatic acid) on stainless steel.*

NOTE

Do not use abrasive cleaners on the exterior of the merchandiser.
Use a non-abrasive cleanser or distilled white vinegar to remove water spots or other stains.

5. To help maintain the protective film coating on polished stainless steel, clean the exterior of the cabinet with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a clean cloth and wipe with the grain of the stainless steel.
6. Wash door gasket with hot, soapy water. The gasket is removable and can be washed more thoroughly, as required.



Disconnect unit from power source before cleaning or servicing.

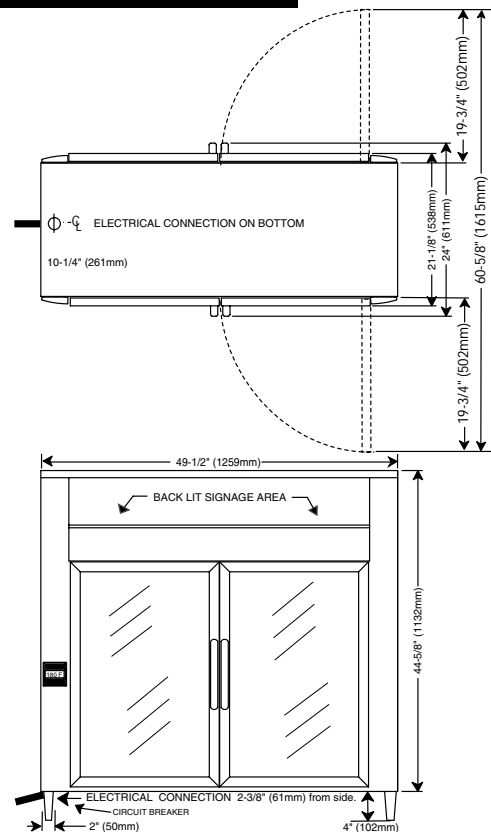
7. Clean the glass with a window cleaner.
8. Clean the menu panels with soap or mild detergent and water. Dry with a clean, damp chamois. Grease and oil may be removed with naphtha or hexane. **DO NOT USE HOUSEHOLD CLEANERS CONTAINING AMMONIA.** To avoid scratching, do not use dry cloths or scouring compounds.
9. Remember to turn power and breaker switch ON before use.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for equipment.



At no time should the unit be steamed cleaned, washed down or flooded with water or liquid solution. Do not use a water jet to clean. Severe damage or electrical hazard could result, voiding the warranty.

1000-HM Outside Dimensions



Food flavor and aroma are usually so closely related that it is difficult, if not impossible, to separate them. There is also an important, inseparable relationship between cleanliness and food flavor. Cleanliness, top operating efficiency, and appearance of equipment contribute considerably to savory, appetizing foods. Good equipment that is kept clean, works better and lasts longer.

Most food imparts its own particular aroma and many foods also absorb existing odors. Unfortunately, during this absorption, there is no distinction between *GOOD* and *BAD* odors. The majority of objectionable flavors and odors troubling food service operations are caused by bacteria growth. Sourness, rancidity, mustiness, stale or other *OFF* flavors are usually the result of germ activity.

The easiest way to insure full, natural food flavor is through comprehensive cleanliness. This means good control of both visible soil (dirt) and invisible soil (germs). A thorough approach to sanitation will provide essential cleanliness. It will assure an attractive appearance of equipment, along with maximum efficiency and utility. More importantly, a good sanitation program provides one of the key elements in the prevention of food-borne illnesses.

A controlled holding environment for prepared foods is just one of the important factors involved in the prevention of food-borne illnesses. Temperature monitoring and control during receiving, storage, preparation, and the service of foods are of equal importance.

INTERNAL FOOD PRODUCT TEMPERATURES		
HOT FOODS		
DANGER ZONE	40° TO 140°F	(4° TO 60°C)
CRITICAL ZONE	70° TO 120°F	(21° TO 49°C)
SAFE ZONE	140° TO 165°F	(60° TO 74°C)
COLD FOODS		
DANGER ZONE	ABOVE 40°F	(ABOVE 4°C)
SAFE ZONE	36°F TO 40°F	(2°C TO 4°C)
FROZEN FOODS		
DANGER ZONE	ABOVE 32°F	(ABOVE 0°C)
CRITICAL ZONE	0° TO 32°F	(-18° TO 0°C)
SAFE ZONE	0°F OR BELOW	(-18°C OR BELOW)

The most accurate method of measuring safe temperatures of both hot and cold foods is by internal product temperature. A quality thermometer is an effective tool for this purpose, and should be routinely used on all products that require holding at a specific temperature.

A comprehensive sanitation program should focus on the training of staff in basic sanitation procedures. This includes personal hygiene, proper handling of raw foods, cooking to a safe internal product temperature, and the routine monitoring of internal temperatures from receiving through service.

Most food-borne illnesses can be prevented through proper temperature control and a comprehensive program of sanitation. Both these factors are important to build quality service as the foundation of customer satisfaction. Safe food handling practices to prevent food-borne illness is of critical important to the health and safety of your customers. HACCP, an acronym for Hazard Analysis (at) Critical Control Points, is a quality control program of operating procedures to assure food integrity, quality, and safety. Taking steps necessary to augment food safety practices are both cost effective and relatively simple. While HACCP guidelines go far beyond the scope of this manual, additional information is available by contacting the USDA/FDA Food-borne Illness Education Information Center at (301)504-6803.

Chefs, cooks and other specialized food service personnel employ varied methods of cooking. Proper holding temperatures for a specific food product must be based on the moisture content of the product, product density, volume, and proper serving temperatures. Safe holding temperatures must also be correlated with palatability in determining the length of holding time for a specific product.

Halo Heat maintains the maximum amount of product moisture content without the addition of water, water vapor, or steam. Maintaining maximum natural product moisture preserves the natural flavor of the product and provides a more genuine taste. In addition to product moisture retention, the gentle properties of Halo Heat maintain a consistent temperature throughout the cabinet without the necessity of a heat distribution fan, thereby preventing further moisture loss due to evaporation or dehydration.

In an enclosed holding environment, too much moisture content is a condition which can be relieved. A product achieving extremely high temperatures in preparation must be allowed to decrease in temperature before being placed in a controlled holding atmosphere. If the product is not allowed to decrease in temperature, excessive condensation will form increasing the moisture content on the outside of the product.

HOLDING TEMPERATURE RANGE		
MEAT	FAHRENHEIT	CELSIUS
BEEF ROAST — Rare	140°F	60°C
BEEF ROAST — Med/Well Done	160°F	71°C
BEEF BRISKET	160° — 175°F	71° — 79°C
CORN BEEF	160° — 175°F	71° — 79°C
PASTRAMI	160° — 175°F	71° — 79°C
PRIME RIB — Rare	140°F	60°C
STEAKS — Broiled/Fried	140° — 160°F	60° — 71°C
RIBS — Beef or Pork	160°F	71°C
VEAL	160° — 175°F	71° — 79°C
HAM	160° — 175°F	71° — 79°C
PORK	160° — 175°F	71° — 79°C
LAMB	160° — 175°F	71° — 79°C
POULTRY		
CHICKEN — Fried/Baked	160° — 175°F	71° — 79°C
DUCK	160° — 175°F	71° — 79°C
TURKEY	160° — 175°F	71° — 79°C
GENERAL	160° — 175°F	71° — 79°C
FISH/SEAFOOD		
FISH — Baked/Fried	160° — 175°F	71° — 79°C
LOBSTER	160° — 175°F	71° — 79°C
SHRIMP — Fried	160° — 175°F	71° — 79°C
BAKED GOODS		
BREADS/ROLLS	120° — 140°F	49° — 60°C
MISCELLANEOUS		
CASSEROLES	160° — 175°F	71° — 79°C
DOUGH — Proofing	80° — 100°F	27° — 38°C
EGGS — Fried	150° — 160°F	66° — 71°C
FROZEN ENTREES	160° — 175°F	71° — 79°C
HORS D'OEUVRES	160° — 180°F	71° — 82°C
PASTA	160° — 180°F	71° — 82°C
PIZZA	160° — 180°F	71° — 82°C
POTATOES	180°F	82°C
PLATED MEALS	180°F	82°C
SAUCES	140° — 200°F	60° — 93°C
SOUP	140° — 200°F	60° — 93°C
VEGETABLES	160° — 175°F	71° — 79°C

The holding temperatures listed are suggested guidelines.



This chart is provided for the assistance of *qualified technicians only* and is not intended for use by untrained or unauthorized service personnel. If your unit is not operating properly, check the following before calling your authorized service agent. Check the power applied to the unit. Plug in outlet? Fuse OK?

Do not attempt to repair or service beyond this point. Contact manufacturer for nearest authorized service agent. Repairs made by any other service agent without prior authorization by manufacturer will void the warranty on the unit.

Trouble Shooting Guide

Error Code	Possible Cause	Action Required
<p>1. Control displays "000".</p>	<p>A. Sensor is open circuited.</p> <p>B. Associated wiring is open circuited.</p> <p>C. Control is faulty.</p>	<p>Detach the sensor from the terminal block. Use an Ohm meter to measure the resistance of the sensor. Check sensor at 32°F (0°C) using a container of ice water. If Ohm reading is 100, replace display. If Ohm reading is not 100, replace sensor.</p> <p>Check wires for integrity. Check for proper and secure connections at the thermostat and terminal block. If necessary, re-secure the faulty connections.</p> <p>Energize system after the above steps have been completed. If control still reads "000", contact factory.</p>
<p>2. Control displays "CCC".</p>	<p>A. Sensor is short circuited.</p> <p>B. Associated wiring is short circuited.</p> <p>C. Control is faulty.</p>	<p>Detach the sensor from the terminal block. Use an Ohm meter to measure the resistance of the sensor. Check sensor at 32°F (0°C) using a container of ice water. If Ohm reading is 100, replace display. If Ohm reading is not 100, replace sensor.</p> <p>Check wires for integrity. Check for proper and secure connections at the thermostat and terminal block. If necessary, re-secure the faulty connections.</p> <p>Energize system after the above steps have been completed. If control still reads "CCC", contact factory.</p>
<p>3. Unit does not operate.</p>	<p>A. Insufficient power supply.</p> <p>B. Defective power cord or plug.</p>	<p>Check power source.</p> <p>Check and replace if necessary.</p>
<p>4. No display in electronic control.</p>	<p>A. Faulty power supply board.</p> <p>B. Faulty electronic control</p>	<p>Check line voltage for 24V across pins 6 and 7 on the power supply board.</p> <p>Replace control.</p>
<p>5. Cannot control temperature but sensor and electronic control check OK.</p>	<p>A. Faulty relay.</p> <p>B. Heating element sensor.</p>	<p>Replace relay.</p> <p>Replace element.</p>
<p>6. Temperature readout incorrect.</p>	<p>A. Dirty or faulty sensor.</p> <p>B. Faulty control.</p>	<p>Detach the sensor from the terminal block. Use an Ohm meter to measure the resistance of the sensor. Check sensor at 32°F (0°C) using a container of ice water. If Ohm reading is 100, replace display. If Ohm reading is not 100, replace sensor.</p>

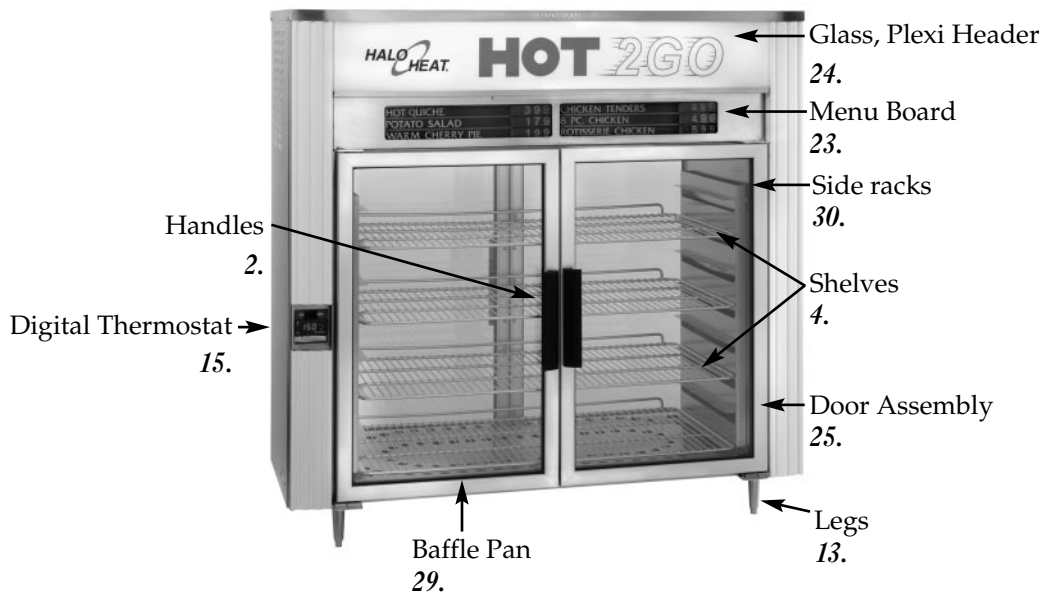


**DISCONNECT UNIT
FROM POWER SOURCE BEFORE
CLEANING OR SERVICING.**

SERVICE PARTS LIST

PART DESCRIPTION	QTY PER UNIT	A/S PART NO.	PART DESCRIPTION	QTY PER UNIT	A/S PART NO.
1. BOTTOM BRACKET	4	BT-23451	17. MAIN POWER SWITCH	1	SW-3715
2. HANDLE, DOOR	4	HD-23423	18. RELAY	1	RL-3736
3. DOOR GASKET, HOT	2	GS-22970	19. TRANSFORMER	1	TN-3935
4. HOT SHELF	4	SH-22817	20. TERMINAL BLOCK	1	BK-3023
5. SKYLIGHT	4	GL-22972	21. SENSOR	1	SN-33541
6. TOP BRACKET	4	BT-23452	TERMINAL BLOCK, SENSOR	1	BK-33546
7. TORQUEMASTER	4	HD-22973	22. PLASTIC DECOR, SIGN ENDS	4	GL-23442
8. TORQUEROD	4	HD-22974	23. MENU BOARD	1	MB-25287
9. PIN-HINGE	4	PI-2894	24. GLASS, PLEXI HEADER	2	GL-25016
10. BULB, HOLDER, LH		LP-33730	25. DOOR ASSEMBLY	4	DR-22979
BULB, HOLDER, RH		LP-33731	26. FUSEHOLDER FOR CONTROL	1	FU-33227
11. BULB, FLUORESCENT	4	LP-33728	FUSE	2	FU-33070
12. BALLAST, 120/208-240V	2	LP-33729	27. FUSEHOLDER FOR BALLAST	1	FU-33227
13. LEGS, 4" (102mm)	4	LG-2044	FUSE, 120/208-240V	2	FU-33376
14. CORD, 14/4, 10' (3048mm)	1	CD-3338	28. PANEL OVERLAY	1	PE-22622
15. DIGITAL THERMOSTAT	1	TT-33563	29. BAFFLE PAN	1	13536
16. SWITCH, 16A, ROCKER	1	SW-3409	30. SIDE RACKS	2	13528

Refer to Service Views on pages 7, 8 and 9.

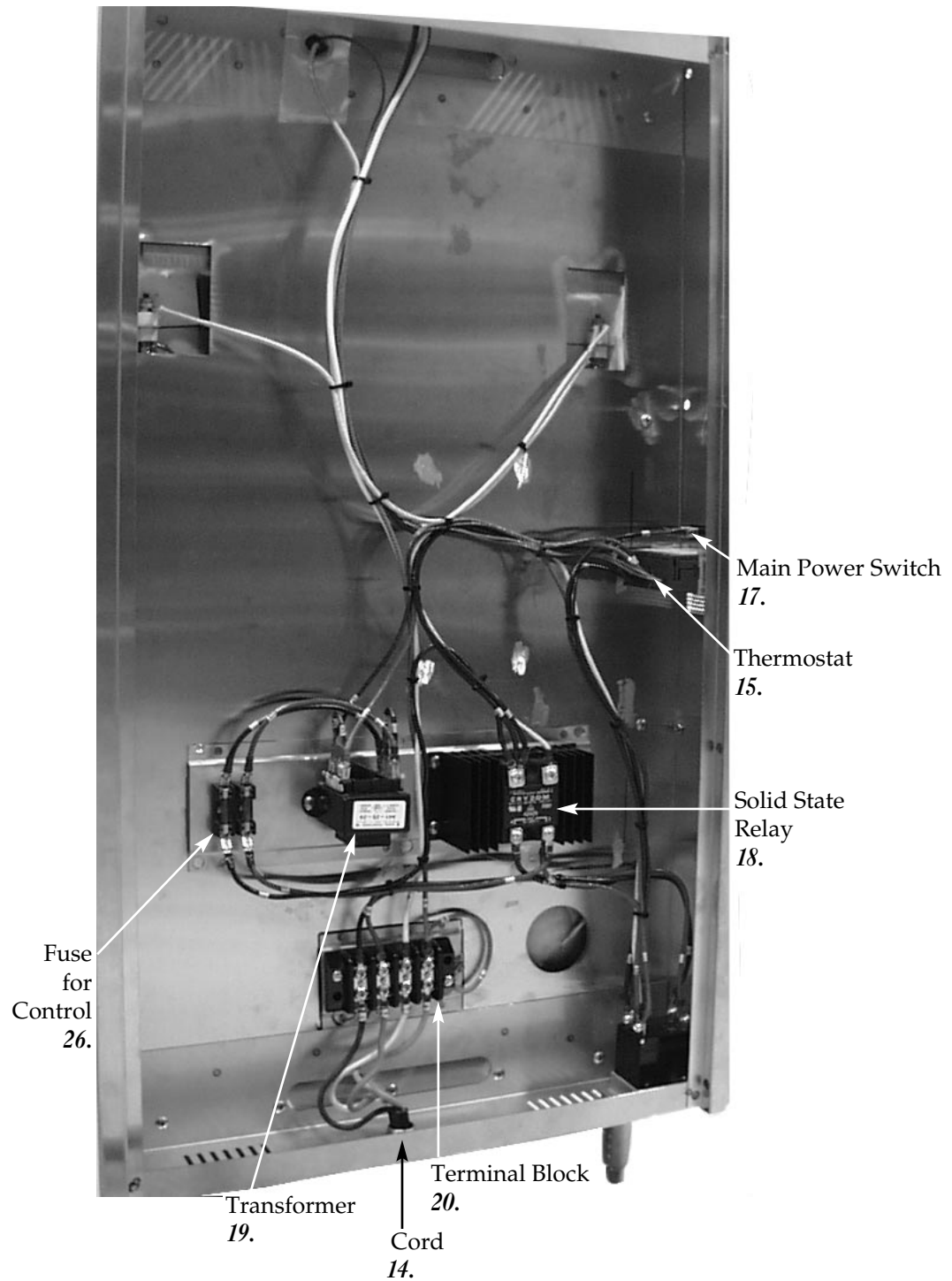


Disconnect unit from power source before cleaning or servicing.

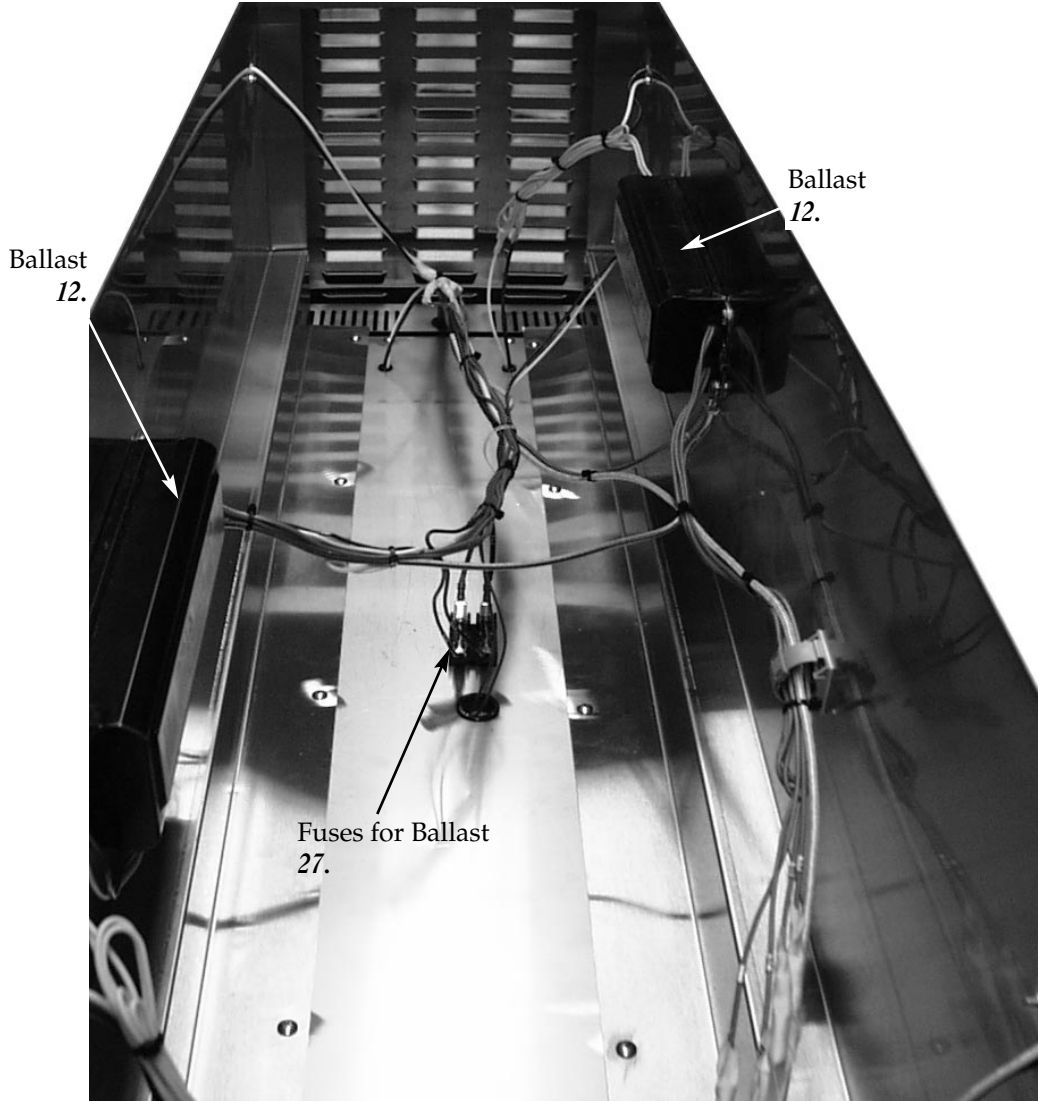
Cable Replacement Kit

Heating Cable Service Kit.	No. 4880
<small>includes:</small>	
CB-3045 Cable Heating Element	134 feet
CR-3226 Ring Connector	4
IN-3488 Insulation Corner	1 foot
BU-3105 Shoulder Bushing	4
BU-3106 Cup Bushing	4
SL-3063 Insulating Sleeve	4
TA-3540 Electrical Tape	1 roll
ST-2439 Stud, 10-32	4
NU-2215 Hex Nut	8

1000-HM Hot Merchandiser Interior Service View

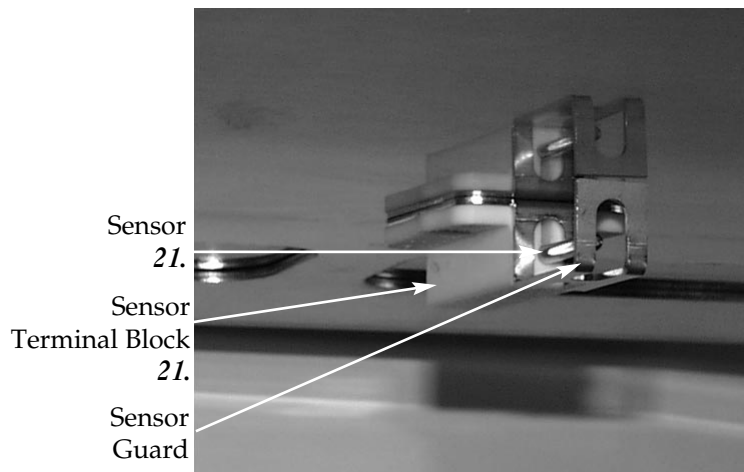


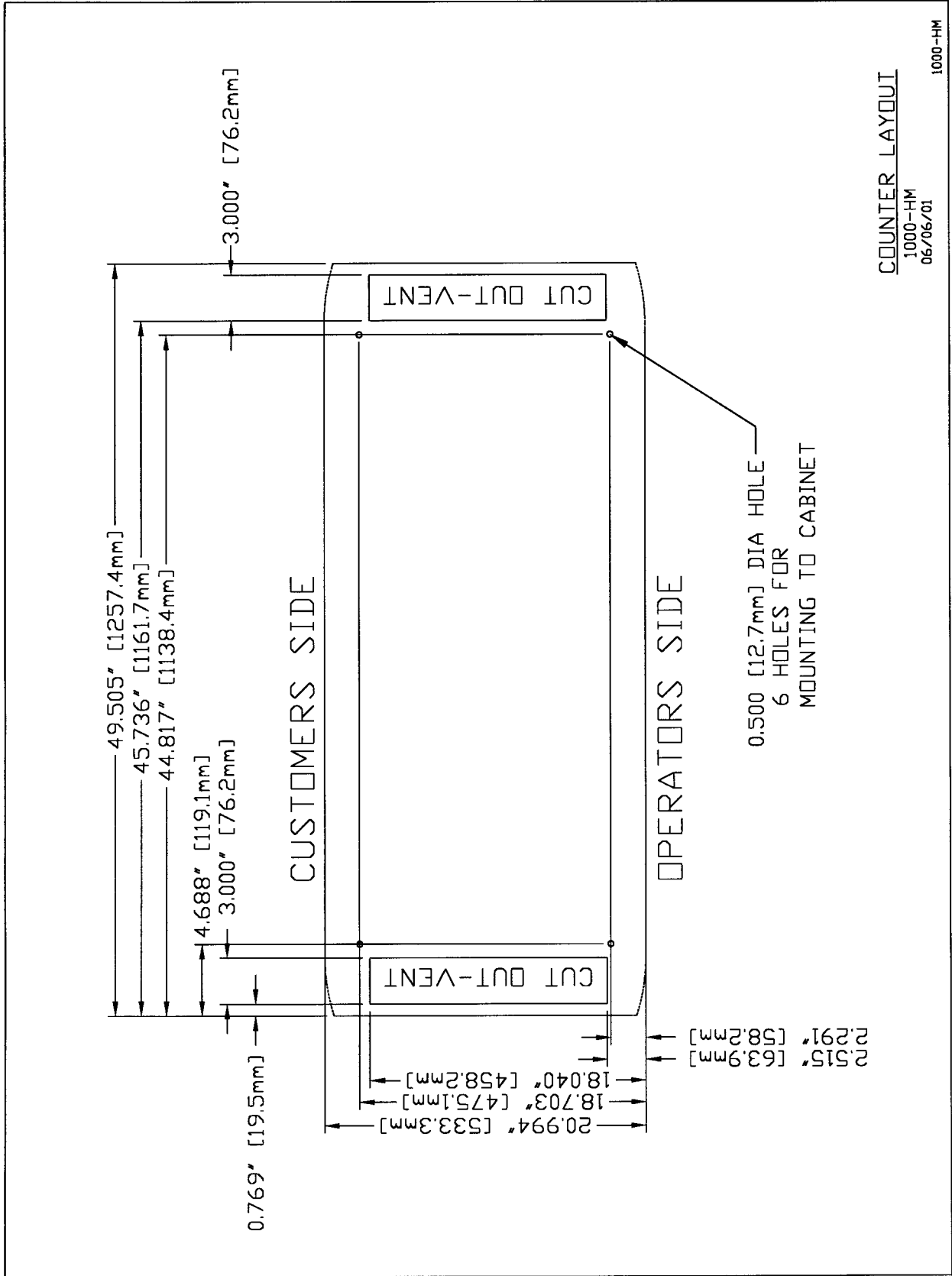
1000-HM Hot Merchandiser Interior Service View



Top of Merchandiser

Merchandiser Ceiling



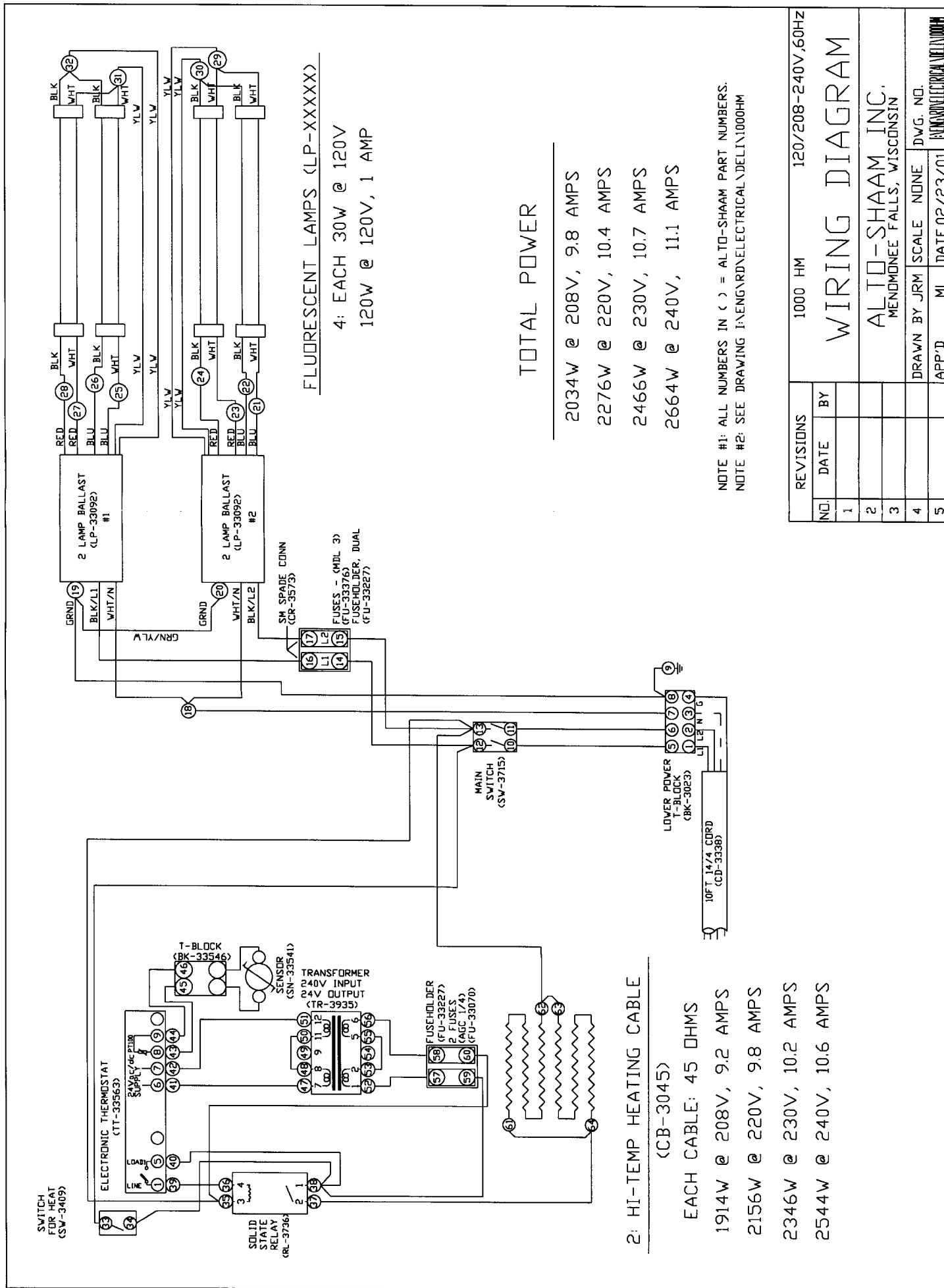


COUNTER LAYOUT

1000-HM

06/06/01

1000-HM



REVISIONS		1000 HM	120/208-240V,60HZ
NO.	DATE	BY	
1			
2			
3			
4			
5			

WIRING DIAGRAM

ALTO-SHAAM INC.
 MENOMONEE FALLS, WISCONSIN

DRAWN BY JRM SCALE NONE DWG. NO. I:\ENGGARD\ELECTRICAL\DEL\1000HM

APP'D ML DATE 02/23/01

TRANSPORTATION DAMAGE and CLAIMS



All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
3. Note all damage to packages directly on the carrier's delivery receipt.
4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
5. If the driver refuses to allow inspection, write the following on the delivery receipt:
Driver refuses to allow inspection of containers for visible damage.
6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
7. Save any packages and packing material for further inspection by the carrier.
8. Promptly file a written claim with the carrier and attach *copies* of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

ALTO-SHAAM® LIMITED WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser that any original part that is found to be defective in material or workmanship will, at our option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The labor warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

The parts warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

Exceptions to the one year part warranty period are as listed:

- A. Halo Heat cook/hold ovens include a five (5) year parts warranty on the heating element. Labor will be covered under the terms of the standard warranty period of one (1) year or fifteen (15) months.
- B. Alto-Shaam Quickchillers include a five (5) year parts warranty on the refrigeration compressor. Labor will be covered under the terms of the standard warranty period of one (1) year or fifteen (15) months.

This warranty does not apply to:

1. Calibration
2. Replacement of light bulbs and/or the replacement of display case glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions.
5. Any losses or damage resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
6. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose. In no event shall the Company be liable for loss of use, loss of revenue, or loss of product or profit, or for indirect or consequential damages. This warranty is in lieu of all other warranties expressed or implied and Alto-Shaam, Inc. neither assumes or authorizes any persons to assume for it any other obligation or liability in connection with Alto-Shaam equipment.

ALTO-SHAAM, INC.

Warranty effective January 1, 2000

Record the model and serial numbers of the unit for easy reference. Always refer to both model and serial numbers in your correspondence regarding the unit.

Model: _____
Serial Number: _____
Purchased From: _____
Date Installed: _____ Voltage: _____

HALO HEAT COOK/HOLD/SERVE SYSTEMS BY ALTO-SHAAM®

W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • U.S.A.

PHONE: 262.251.3800

FAX: 262.251.7067 • 800.329.8744 U.S.A./CANADA

WEBSITE:

800.558.8744 U.S.A./CANADA

262.251.1907 INTERNATIONAL

www.alto-shaam.com