

OPERATION and CARE MANUAL



HEATED DISPLAY CASE

MODELS: HN-96

HNSYS-96

HN-96/PR

HNSYS-96/PR

HN-96/PL

HNSYS-96/PL



HALOHEAT COOK/HOLD/SERVE SYSTEMS

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ALTO-SHAAM. HEATED DISPLAY CASES

UNPACKING and SET-UP

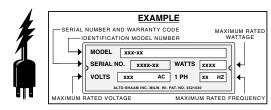
The Alto-Shaam Hot Display Case has been thoroughly tested, checked for calibration, and inspected to insure only the highest quality display case is provided. When you receive your cabinet, check for any possible shipping damage and report it at once to the delivering carrier. See Transportation Damage and Claims section located in this manual.

In order to maintain established National Sanitation Foundation standards, all stationary floor models must be sealed to the floor with a R.T.V. or silastic meeting N.S.F. requirements or have 6"(153mm) unobstructed clearance beneath the unit. Counter and table units must be mounted on legs of a sufficient 4"(102mm) height to provide minimum unobstructed space beneath the unit. These legs are supplied with the unit. Warranty will become null and void if these directions are not followed. Save all the information and instructions packed inside the deli case. Complete and return the warranty card to the factory as soon as possible to assure prompt service in the event of a warranty parts and labor claim.

<u>NOTE</u>: Any and all claims for warranty must include the full model number and serial number of the unit.

ELECTRICAL INSTALLATION

1. An identification tag is permanently mounted on case.



- 2. A proper receptacle or outlet configuration or permanent wiring for this unit must be installed by a licensed electrician in accordance with applicable, local electrical codes.
- 3. Plug the case into a properly grounded receptacle only, positioning the unit so that the power cord is easily accessible in case of an emergency. Arcing will occur when connecting or disconnecting the display case unless all controls are in the OFF



ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON NAMEPLATE OF UNIT

PROCEDURES

1. DO NOT ADD WATER TO THE CASE

Halo Heat display cases maintain a constant but gentle temperature and eliminate much of the moisture loss associated with conventional display cases. Because of this gentle heat, it is not necessary to add water to the deli case. As a matter of fact, adding water is not recommended since water will accelerate the deterioration of the product, and may damage the case.

2. PLACE DIVIDERS and SERVING PANS IN CASE

Refer to the pan layout diagrams for different types of pan accommodations. A complete pan configuration layout is located in this manual. It is <u>VERY</u> important to

note, no matter what type of pan configuration you choose, pan separator bars or divider bars must be used to close all gaps between pans, and all gaps between the pans and the edges of the display case. If these gaps are not closed, a natural chimney will be created, and most of the heat will be pulled out of the bottom of the case, into the display area. As a consequence, heat distribution will be uneven and uniform temperature will be difficult to hold. If needed, additional pan divider bars are available.

3. TURN DISPLAY LIGHTS "ON" AND SET THE THERMOSTAT(s) AT NUMBER "10" TO PREHEAT

An indicator light will illuminate when the thermostat(s) is (are) turned "ON." The indicator(s) will remain lit as long as the unit is preheating or calling for heat. The unit should be preheated, at the number 10 setting, for a minimum of twenty minutes before loading the case with food. When preheating is completed, or whenever the unit reaches any temperature set by the operator between 1 and 10, the indicator light(s) will go "OUT".

4. LOAD HOT FOODS INTO THE UNIT

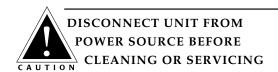
Be certain only hot food is transferred into the display case. Before loading food into the case, use a pocket-type meat thermometer to make certain all products have reached an internal temperature of 140° to 160° F. (60° to 71°C). If any food product is not at proper serving temperature, use a Halo Heat cooking and holding oven, set at 250° to 275°F (121° to 135°C), to bring the product within the correct temperature range.

5. RESET THERMOSTAT AS NEEDED

After all product is loaded into the unit and the doors are closed, reset the thermostat. For fully enclosed cases, reset the thermostat to number 8. For self-service units, maintain the thermostat at number 9 or 10. Cases with a self-service section should be set at number 9 or 10 for the self-service section only. *These settings will not necessarily be final*. Proper temperature range depends on the type of products and the quantities being held, so it is necessary to periodically use a pocket thermometer to check each item to make certain the correct temperatures are being maintained. Proper temperature range is between a minimum of 140-160°F (60°-71°C). Normally this will require a thermostat setting between 6 and 8 in fully enclosed cases. Self-service cases or sections will always require a higher thermostat setting.

6. PLACEMENT OF FOOD PROBE (OPTIONAL)

If the unit is equipped with the probe accessory, wipe each probe and probe tip with a disposable alcohol pad to clean and sanitize before using. If the probe is left in its bracket, the LED temperature display will indicate the ambient air temperature inside the case. To place a probe into food kept in the case, remove the probe from the bracket and push the probe tip halfway into the product, positioning the tip at the center of the food mass.



If placing into solid foods such as meat roast or poultry breasts, push the probe in from a straight downward position or in from the side to the center position. If placing into a semi-liquid or liquid product, the probe cable will probably need to be secured to keep the probe positioned properly. Do not let the probe tip touch the edges or side of the container. Tape the probe cable to the lip or edge of the container. Wipe each probe tip with a clean paper towel to remove food debris after each use. Follow by wiping probes with a disposable alcohol pad. Return each probe to the proper bracket position.

7. SERVE FRESH HOT FOOD

Keep hot deli foods looking fresh. Occasionally stir or rotate foods as needed. Serve products in the proper package or container. Keep display case doors closed after serving. Wipe spills immediately to assure maximum eye appeal and ease end of the day cleanup.

CARE and CLEANING

The cleanliness and appearance of this unit will contribute considerably to operating efficiency and savory, appetizing food. Good equipment that is kept clean works better and lasts longer.

1. CLEAN THE PROBES DAILY

Remove all food soil from probes. Wipe entire probe and cable assembly with warm detergent solution and a clean cloth. Remove detergent by wiping each probe and cable with clean rinse water and a cloth. Wipe probes with disposable alcohol pad or sanitizing solution recommended for food contact surfaces. Allow probe and cable to air dry in probe holding bracket.

2. THOROUGHLY CLEAN THE UNIT DAILY

- A. Turn lights and adjustable thermostat(s) to the "OFF" position, and disconnect unit from power source.
- B. Remove, cover or wrap, and store unused products under refrigeration.
- C. Clean the interior metal surfaces of the cabinet 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 or oven cleaner for difficult areas. Avoid the use of abrasive cleaning compounds, chloride based cleaners, or cleaners containing quaternary salts. Rinse carefully to remove all residue and wipe dry.

NOTE: Never use hydrochloric acid (muriatic acid) on stainless steel.

- D. Clean the glass with a window cleaner.
- E. To help maintain the protective film coating on polished stainless steel, clean the exterior of the unit 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.

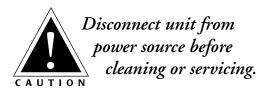
Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for equipment.

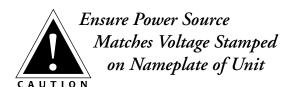
At no time should the inside or outside of the cabinet be washed down, flooded with water or liquid solution.

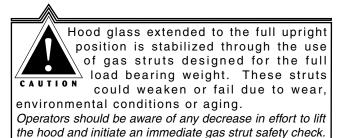
Do not use water jet to clean.

NEVER STEAM CLEAN.

Severe damage or electrical hazard could result.







DO NOT LIFT THE HOOD IN THIS CONDITION.

SAFETY ALERT

optimized using the factory provided bulbs. These lamps should be replaced with an exact replacement or with a factory recommended replacement. These bulbs have been treated to resist breakage and must be replaced with similarly treated bulbs in order to maintain

compliance with NSF standards.

CAUTION

SANITATION GUIDELINES

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.

The most accurate method of measuring safe temperatures of

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) (60° TO 74°C) SAFE ZONE 140° TO 165°F COLD FOODS DANGER ZONE ABOVE 40°F (ABOVE 4°C) SAFE ZONE (2°C TO 4°C) 36°F TO 40°F 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

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 importance 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.

GENERAL HOLDING GUIDELINES

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.

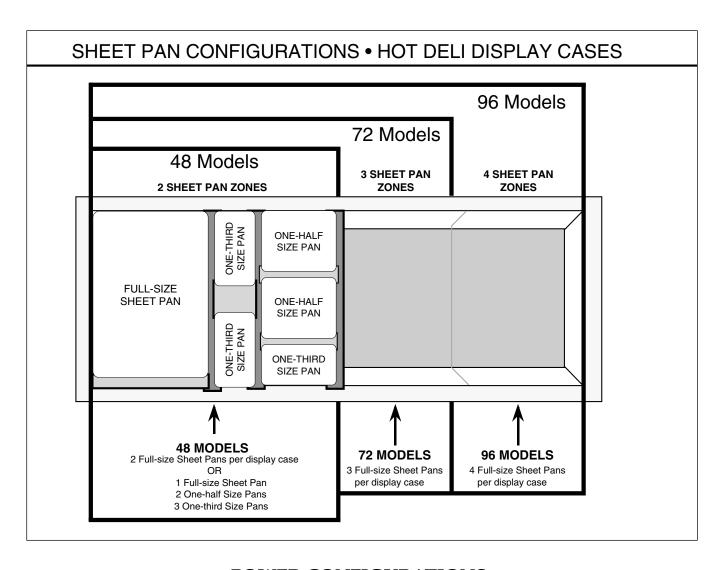
Halo Heat maintains the maximum amount of product moisture content without the addition of water, water vapor, or steam. Maintaining maximum natural product moisture preserves the natural flavor of the product and provides a more genuine taste. In addition to product moisture retention, the gentle properties 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.

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.

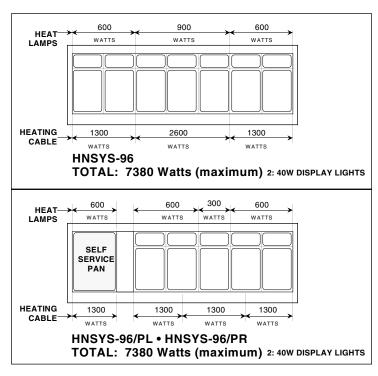
Most Halo Heat Holding Equipment is provided with a thermostat control between 60° and 200°F (16° to 93°C). If the unit is equipped with vents, close the vents for moist holding and open the vents for crisp holding.

If the unit is equipped with a thermostat indicating a range of between 1 and 10, use a metal-stemmed indicating thermometer to measure the internal temperature of the product(s) being held. Adjust the thermostat setting to achieve the best overall setting based on internal product temperature.

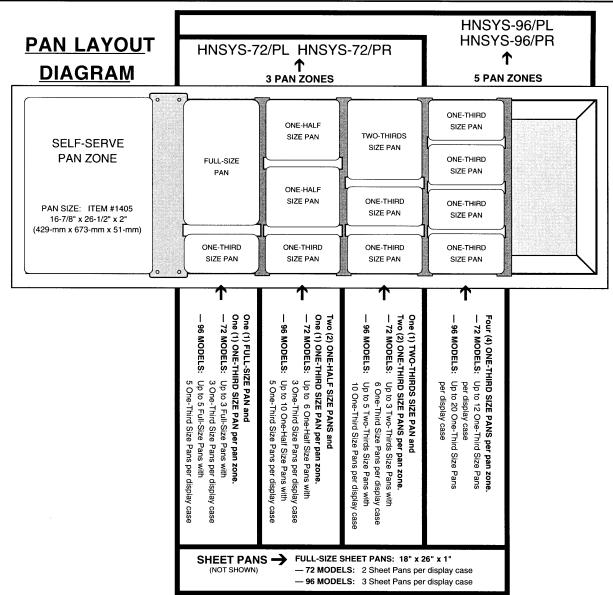
HOLDING TEMPERATURE RANGE							
MEAT	FAHRENHEIT	CELSIUS					
BEEF ROAST — Rare	140°F	60°C					
BEEF ROAST — Med/Well Done	160°F	71°C					
BEEF BRISKET	160° — 175°F	71° — 79°C					
CORN BEEF	160° — 175°F	71° — 79°C					
PASTRAMI	160° — 175°F	71° — 79°C					
PRIME RIB — Rare	140°F	60°C					
STEAKS — Broiled/Fried	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 only.							



POWER CONFIGURATIONS



PAN CONFIGURATIONS • SELF-SERVE

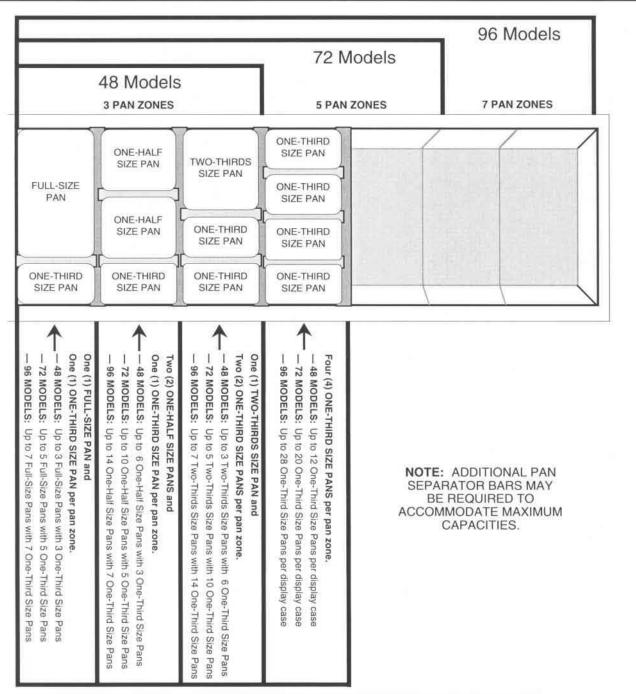


STANDARD PAN SIZES						
FULL-SIZE PAN						
12" x 20" x 4"	325-mm x 530-mm x 100-mm GN 1/1					
12" x 20" x 2-1/2"	325-mm x 530-mm x 65-mm GN 1/1					
ONE-HALF SIZE PAN						
12" x 10" x 4"	325-mm x 265-mm x 100-mm GN 1/2					
12" x 10" x 2-1/2"	325-mm x 265-mm x 65-mm GN 1/2					
TWO-THIRDS SIZE PA	7N					
12" x 14" x 4"	325-mm x 352-mm x 100-mm GN 2/3					
12" x 14" x 2-1/2"	325-mm x 352-mm x 65-mm GN 2/3					
ONE-THIRD SIZE PAN	l					
12" x 6" x 4"	325-mm x 176-mm x 100-mm GN 1/3					
12" x 6" x 2-1/2"	325-mm x 176-mm x 65-mm GN 1/3					
FULL-SIZE SHEET PAN						
18" x 26" x 1"	N/A					

STANDARD PAN DIVIDER & SEPARATOR BARS							
Item No.	DESCRIPTION	SIZE (72 MODELS	96 MODEL			
11046	SHEET PAN DIVIDER BAR	1-3/8" x 27-13/16"	(35-mm x 706-mm)	_			
11047	ONE-THIRD SIZE PAN	3-1/4" x 7"	(83-mm x 178-mm)	_	_		
11317	FULL, HALF & THIRD SIZE - LONG	1" x 27-7/8"	(25-mm x 708-mm)	4	6		
11318	FULL, HALF & THIRD SIZE - SHORT	1" x 12-3/4"	(25-mm x 324-mm)	15	21		
11319	SHEET PAN DIVIDER BAR	3-1/4" x 27-3/16"	(83-mm x 706-mm)	_	_		
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17-3/4"	(45-mm x 451-mm)	3	4		
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	(150-mm x 706-mm)	2	3		
11732	SHEET PAN DIVIDER BAR	3-3/4" x 27-13/16"	(95-mm x 706-mm)	_	1		
1865	GASTRONORM DIVIDER (220V)	7/8" x 27-7/8"	(22-mm x 708-mm)	4	6		

NOTE: ADDITIONAL PAN SEPARATOR BARS MAY BE REQUIRED TO ACCOMMODATE MAXIMUM CAPACITIES.

PAN CONFIGURATIONS

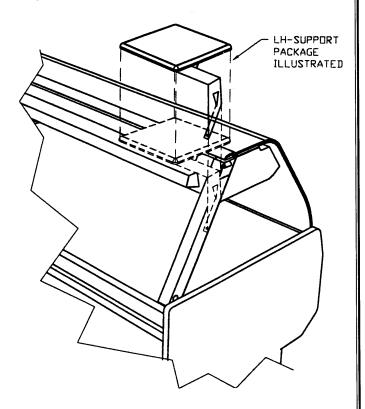


ITEM No.	DESCRIPTION	SIZE (V	V × 1.)		MODELS		
ILEM INC.	DESCRIPTION	SILL (V	* ^ L)	48	72	96	
11046	SHEET PAN DIVIDER BAR	1-3/8" x 27-13/16"	(35mm x 706mm)	1	==:	-	
11047	ONE-THIRD SIZE PAN	3-1/4" x 7"	(83mm x 178mm)	1		s -	
11317	FULL, HALF & THIRD SIZE - LONG	1" x 27-7/8"	(25mm x 708mm)	2	4	6	
11318	FULL, HALF & THIRD SIZE - SHORT	1" x 12-3/4"	(25mm x 324mm)	9	15	21	
11319	SHEET PAN DIVIDER BAR	3-1/4" x 27-3/16"	(83mm x 706mm)	1	-	7:5—	
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17-3/4"	(45mm x 451mm)	2	3	74	
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	(150mm x 706mm)	-	2	3	
11732	SHEET PAN FILLER	3-3/4" x 27-13/16"	(95mm x 706mm)	-	==:	3	
1865	GASTRONORM DIVIDER (220V)	7/8" x 27-7/8"	(22mm x 708mm)	2	4	16	

INSTALLATION INSTRUCTIONS — OPTIONAL SCALE PLATFORM

- 1. Disconnect the unit from the power source.
- 2. Lift hood glass up to access the outer top.
- 3. Position the platform mounting bracket in the desired location along the upper rear edge on the outer top, making sure that the bracket is tight against the bend in the top. Using the bracket as a template, mark and punch six mounting holes in the outer top. Drill these six holes with a No. 21 drill, and tap with a 10-32 UNF thread.
- Attach the scale shelf assembly to the outer top using the six 10-32x1/2" slotted truss-head screws provided (Alto-Shaam part number SC-2661).
- Remove the four nuts from the bottom of the platform.
 Mount support (bracket provided) to platform using screws as a guide. While pushing up on support, mark two mounting holes on the support.
- 6. Remove the support. Drill these mounting holes with a No. 21 drill and tap with a 10-32" UNF thread. Replace support and mount to unit with the two 10-32x1/2" screws provided (Alto-Shaam part number SC-2661). Replace nuts on platform bottom and tighten support to platform.
- 7. Apply a silicone bead to all perimeter meeting surfaces between the mounting bracket and the outer top.

NOTE: These platforms are intended for use in the CLOSED position ONLY. They slide away from the unit for cleaning. Using scales with platforms in the OUT position may result in incorrect data on scales.





The scale shelf platform can be removed from the mounting bracket assembly by removing the 10-32 screw/stop located on the bottom of the scale shelf. Removing the screw allows the shelf to be slid past, and lifted off the shelf guide pins. Failure to replace this screw prior to use could result in serious bodily injury, and/or damage to equipment.

HN-96/PR, HNSYS-96/PR HN-96/PL, HNSYS-96/PL

Cable He	#4881	#4878*	
includes:			
CB-3045	Cable Heating Element	210'	72'
CR-3226	Ring Connector	12	4
IN-3488	Insulation Corner	1'	1'
BU-3105	Shoulder Bushing	12	4
BU-3106	Cup Bushing	12	4
SL-3063	Insulating Sleeve	12	4
TA-3540	Electrical Tape	1	1
ST-2439	Stud, 10-32	12	4
NU-2215	Hex Nut	24	8
	* for 2' self-service well		

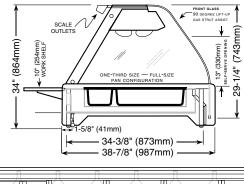
HN-96, HNSYS-96

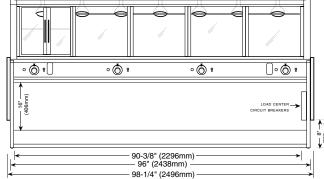
Cable Heating Service Kit #14228

	0
includes:	
CB-3045	Cable Heating Element
CR-3226	Ring Connector
IN-3488	Insulation Corner 8 feet
BU-3105	Shoulder Bushing8
BU-3106	Cup Bushing
SL-3063	Insulating Sleeve 8
TA-3540	Electrical Tape
ST-2439	Stud, 10/32
NU-2215	Hex Nut

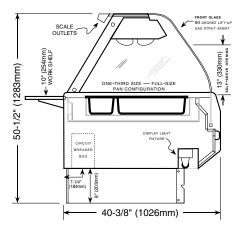
HN-96 Series Options & Accessories

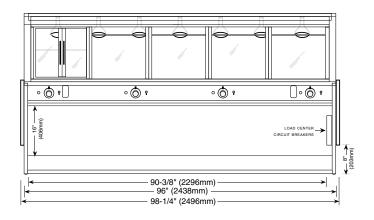
Bulb (100 Watt, 130 Volt)	LP-33253
Carving Station, Single Well	
Custom Panel, End Panel and Bumper Colors FA	
End Panel, Black Laminate (HNSYS ONLY)	
End Panel, Kiosk Assembly Kit (HN ONLY)	
Gauge, Interior Ambient Temperature	
Glass Cover, 2' Curved (HN-96/PL, HN-96/PR)	
Glass, Tempered End Pane, Bronze Reflective	
►LEFT-HAND	GL-22601
⇒RIGHT-HAND	
Independent Circuit Cordset Pkg*: HN (120/208-240 o	
Independent Load Center Pkg*: HNSYS (120/208-240	ONLY) 14220
*NOT CSA APPROVED	•
Menu Board System (TWO REQUIRED)	MB-23092
Platform, Scale (120/208-240V ONLY), LEFT-HAND	14548
Platform, Scale (120/208-240V ONLY), RIGHT-HAND	14547
Pocket Thermometer, °F	TH-3300
Pocket Thermometer, °C	TH-3412
Product Temp. Probe Package, HN-96	
Product Temp. Probe Package, HN-96/PL & HN-96/Pl	R5296
Timer Bar (ELECTRONIC)	
⇒HN(SYS)-96/PL, 6 ft	55202
⇒HN(SYS)-96/PR, 6 ft	55204
⇒HN(SYS)-96/P, 8 ft	55206
⇒HN(SYS)-96/PL, 8 ft	55216
⇒HN(SYS)-96/PR, 8 ft	55218
⇒Probe assembly, for 6 ft. Timer Bar	44085
⇒Probe assembly, for 8 ft. Timer Bar	44086
Trim Kit, Dual Case	4584
➡Tempered Divider Glass	GL-22598
Work Surface, Stainless Steel	15605
Pan Divider Bars for HNSYS-96/PL or PR	
➡FULL/HALF/THIRD SIZE (LONG BAR)	11317
➡FULL/HALF/THIRD SIZE (SHORT BAR) 21	
⇒SHEET PAN4	
➡S-PAN DIVIDER (LONG)	
→PAN GRID. 1	
⇒SELF-SERVE PAN	1405
. OTTEN	





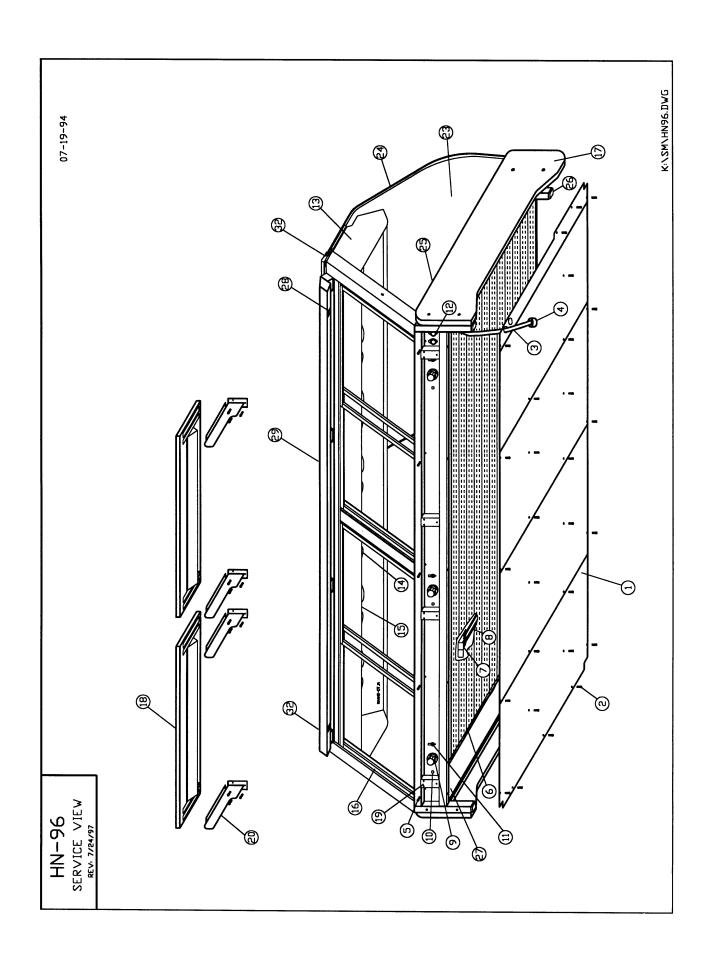
EXTERIOR DIMENSIONS

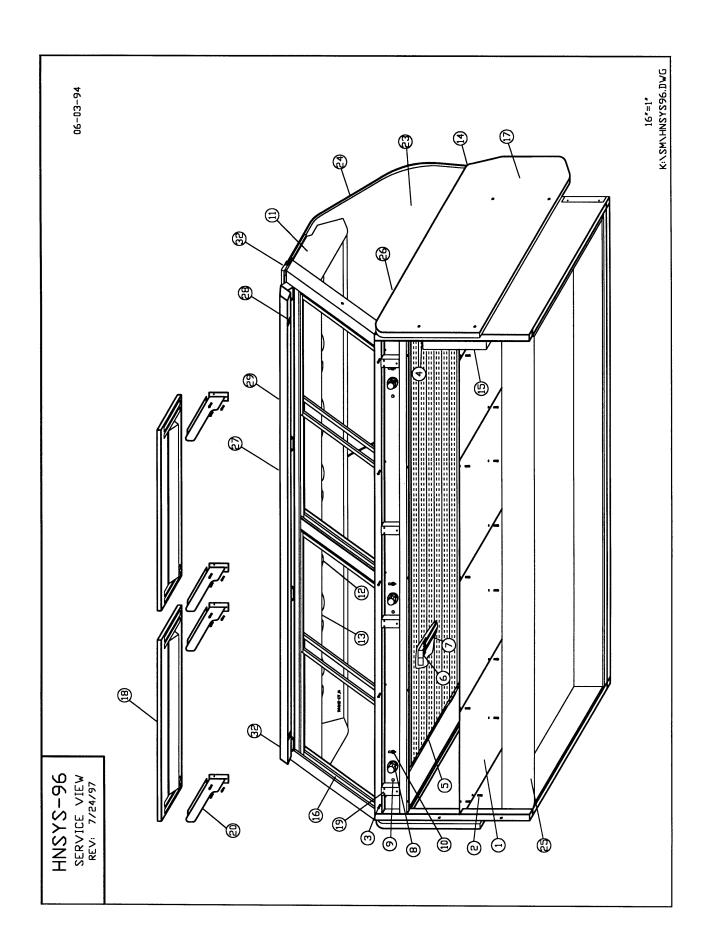


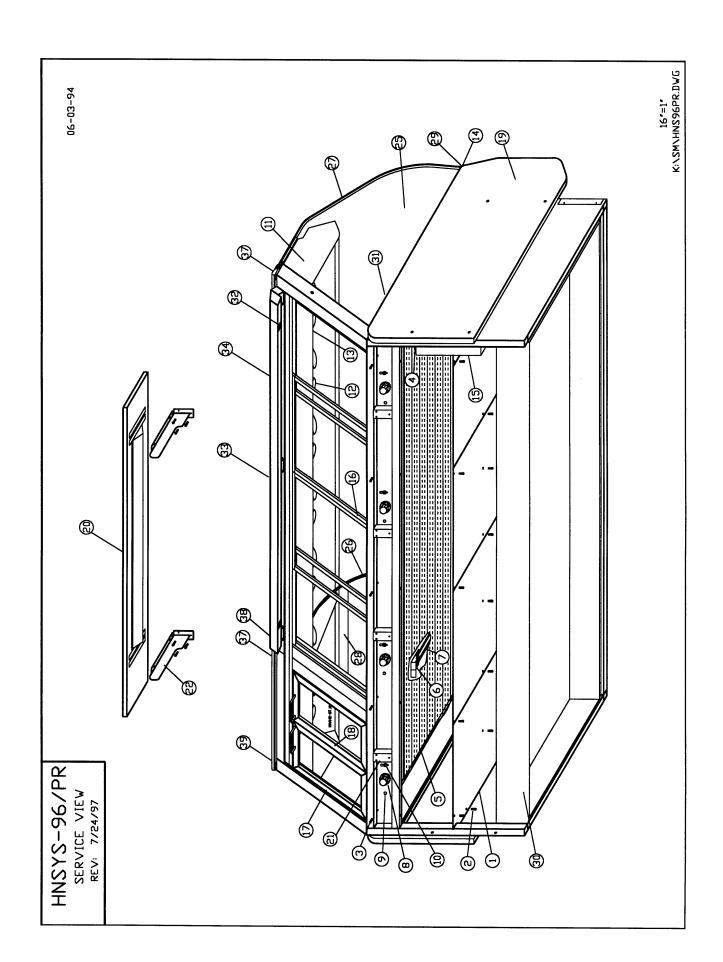


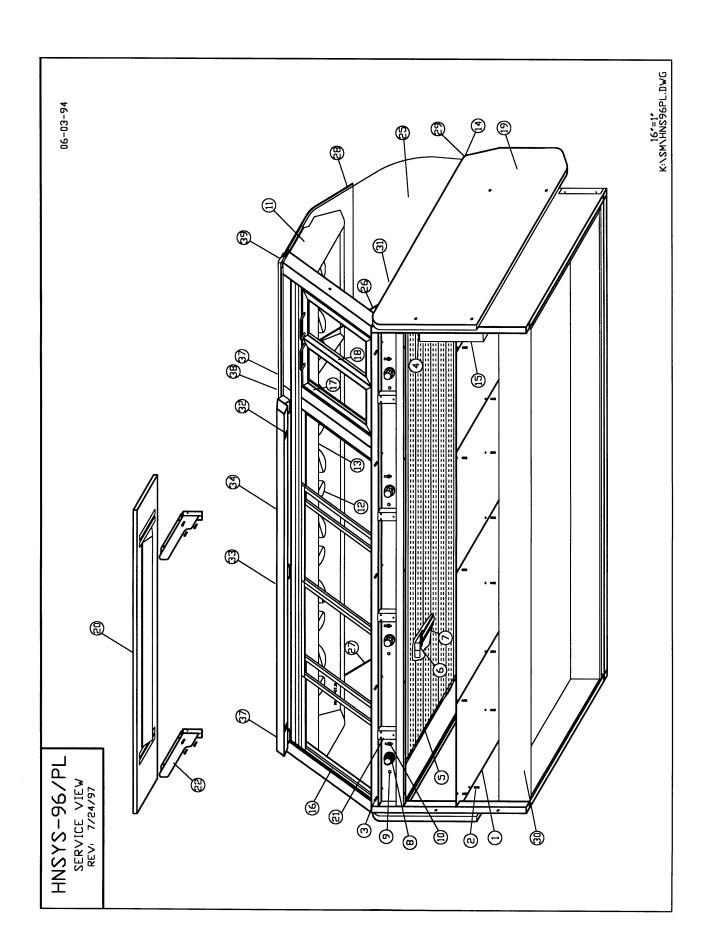
	H N - 9 6			HNSYS-96		
12/	22/00 PART DESCRIPTION	QTY	ALTO-SHAAM PART NO.	12/22/00 PART DESCRIPTION	QTY	ALTO-SHAAM PART NO.
1.	BOTTOM END PANEL	1	13028	1. BOTTOM END PANEL	1	13028
	BOTTOM RIGHT-HAND PANEL, 4'	1	13029	BOTTOM RIGHT-HAND PANEL, 4'	1	13029
	BOTTOM LEFT-HAND PANEL, 4'	1	13030	BOTTOM LEFT-HAND PANEL, 4'	1	13030
	BOTTOM PANEL, 6'	1	13031	BOTTOM PANEL, 6'	1	13031
	BOTTOM PANEL, 8'	1	13032	BOTTOM PANEL, 8'	1	13032
	SCREWS, 8-32X1/2"	29	SC-2425	SCREWS, 8-32X1/2"	29	SC-2425
	SCREWS, 8-32X1/4"	2	SC-2459	SCREWS, 8-32X1/4"	2	SC-2459
3.	CORD: 6' (1829mm)	1	CD-3987	3. CONTROL PANEL MOUNTING SCREWS	7	SC-2459
4.	PLUG	1	PG-3988	4. CONDUIT TUBING: 6" (152.4mm)	2	TU-3874
5.	CONTROL PANEL MOUNTING SCREWS	7	SC-2459	5. INSULATION: 34" x 95" (864mm x 2413mm)	2	IN-22364
6.	INSULATION: 34" x 95" (864mm x 2413mm)	2	IN-22364	6. CABLE CONNECTION HARDWARE		on/-
7.	CABLE CONNECTION HARDWARE			7. HEATING CABLE: 264' (80467mm)	1	CB-3045
8	HEATING CABLE: 264' (80467mm)	1	CB-3045	8. THERMOSTAT THERMOSTAT KNOB	3	TT-3498 KN-3473
	THERMOSTAT	3	TT-3498			LI-3025
9.	THERMOSTAT THERMOSTAT KNOB	3	KN-3473	9. INDICATOR LIGHT	3	
1.0				10. BULB SWITCH	3	SW-3616
	INDICATOR LIGHT	3	LI-3025	11. INNER TOP SPOT	1	4713
11.	BULB SWITCH	3	SW-3616	12. BULBS	14	LP-33592
12.	FUSEHOLDER (120V UNITS), INCLUDES	2	FU-33041	13. BULB SOCKET	14	RP-3952
	— FUSE, 15 AMP	2	FU-3775	14. DISPLAY LIGHT BULB	2 2	LP-3376
	— FUSEHOLDER MTG SCREWS	4	SC-2077	DISPLAY LAMP SHIELD DISPLAY LIGHT FIXTURE	2	LP-3967 LP-3966
13.	INNER TOP SPOT	1	4713	1/4 - 20 X 1/2" SLOT RD SCREW	4	SC-2332
14.	BULBS	14	LP-33592	1/4 X 20 HEX NUT	4	NU-2437
15.	BULB SOCKETS	14	RP-3952	1/4" SPLIT RING LOCKWASHER	4	WS-2294
16.	DOOR ASSEMBLY, INCLUDES	1	DR-22482	3/8" 90 DEGREE CONNECTOR CONDUIT TUBING: 8' (2438mm)	2	CR-3292 TU-3976
	— LEFT-HAND GLASS DOOR - IN	2	DR-22482A	15. CIRCUIT BOX (120V), INCLUDES	1	CI-3906
	— RIGHT-HAND GLASS DOOR - OUT	2	DR-22482B	— BREAKER, 20 AMP	2	CI-3908
	— TOP TRACK	2	TK-23750	— BREAKER, 15 AMP	2	CI-33071
	— BOTTOM TRACK	2	TK-24267	GROUND BAR KIT	1	CI-3878
	— GUIDES #44049	16	DR-22480F	16. DOOR ASSEMBLY, INCLUDES	1	DR-22482
	— DOOR BUMPER ASSEMBLY	2	DR-22480G	— LEFT-HAND GLASS DOOR - IN	2 2	DR-22482
17.	END PANEL	2	PE-22685	— RIGHT-HAND GLASS DOOR - OUT — TOP TRACK	2	DR-22482 TK-23750
18.	CUTTING BOARD ASSEMBLY	2	4016	— BOTTOM TRACK	2	TK-24267
19.	CUTTING BOARD BRACKET (BASE)	4	12069	— GUIDES #44049	16	DR-22480
	CUTTING BOARD BRACKET MTG. SCREWS	12	SC-24520	— DOOR BUMPER ASSEMBLY	2	DR-22480
20.	CUTTING BOARD BRACKET	4	BT-2342	17. END PANEL	2	PE-22639
23.	END GLASS	2	GL-22597	18. CUTTING BOARD ASSEMBLY	2	4016
20.	END GLASS GASKET, 5' (1524mm)	1	GS-22547	19. CUTTING BOARD BRACKET (BASE)	4	12069
24	FRONT GLASS	2	GL-22595	CUTTING BOARD BRACKET MTG. SCREWS	12	SC-24520
	PAN DIVIDER BARS (NOT SHOWN)	2	GE 22)))	20. CUTTING BOARD BRACKET	4	BT-2342
۷).	PAN DIVIDER BARS (NOT SHOWN) FULL/HALF/THIRD SIZE (LONG BAR)	6	11317	23. END GLASS CASKET 5' (1524mm)	2	GL-22597
	FULL/HALF/THIRD SIZE (SHORT BAR)	21	11317	END GLASS GASKET, 5' (1524mm)	1	GS-22547
	SHEET PAN	4	11320	24. FRONT GLASS	2	GL-22595
	S-PAN DIVIDER (LONG)	3	11357	25. BASE BOTTOM	1	12564
	SHEET PAN FILLER BAR: 3-3/4" (95mm)	1	11732	26. PAN DIVIDER BARS (NOT SHOWN) FULL/HALF/THIRD (LONG BAR)	6	11217
26.	ADJUSTABLE LEGS	4	LG-22686	FULL/HALF/THIRD (LONG BAR) FULL/HALF/THIRD (SHORT BAR)	21	11317 11318
27	TERMINAL BLOCKS, 4 POS	2	BK-3597	SHEET PAN	4	11320
	SNAP-IN RECEPTACLE (120V)	2	RP-3396	S-PAN DIVIDER (LONG)	3	11357
۷٥.	RECEPTACLE (120V) RECEPTACLE FUSE, 15 AMP (120V)	1	FU-33351	SHEET PAN FILLER BAR: 3-3/4" (95mm)	1	11732
	RECEPTACLE FUSE, 13 AMP (120V) RECEPTACLE FUSEHOLDER, 15 AMP (120V)	1	FU-33352	27. OUTLET HOUSING COVER	1	4981
20				28. SNAP-IN RECEPTACLES (120V)	2	RP-3396
	OUTLET HOUSING COVER (120V)	1	4981	29. RECEPTACLE FUSE, 15 AMP (120V)	1	FU-33351
	8' (2438mm) PROBE PKG OPT (120V) (NOT SHOWN)	1	5297	RECEPTACLE FUSEHOLDER, 15 AMP (120V)	1	FU-33352
31.	IND. CIRCUIT CORDSET OPTION (120V)*	1	14221	30. 8' (2438mm) PROBE PKG OPTION (NOT SHOWN)	1	5297
32.	FRONT GLASS STRUT	4	SU-22704	31. LOAD CENTER PACKAGE OPT (120V) (NOT SHOWN)	1	14220
				32. FRONT GLASS STRUT	4	SU-22704
	T CSA APPROVED			33. SNAP-IN BUMPER (NOT SHOWN)		

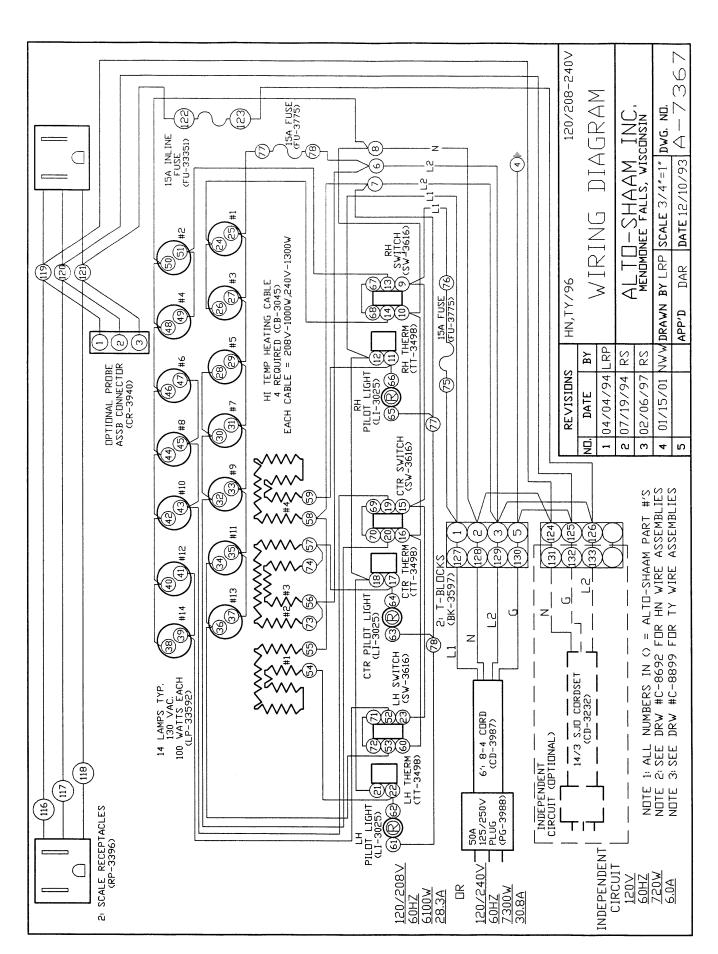
HNSYS-96/PR• Pass-thr		ALTO-SHAAM	HNSYS-96/PL Pass-thru		ALTO-SHAAN
PART DESCRIPTION	QTY	PART NO.	PART DESCRIPTION	QTY	ALTO-SHAAN PART NO.
. BOTTOM END PANEL	1	13028	1. BOTTOM END PANEL	1	13028
BOTTOM RIGHT-HAND PANEL, 4'	1	13029	BOTTOM RIGHT-HAND PANEL, 4'	1	13029
BOTTOM LEFT-HAND PANEL, 4'	1	13030	BOTTOM LEFT-HAND PANEL, 4' BOTTOM PANEL, 6'	1 1	13030 13031
BOTTOM PANEL, 6' BOTTOM PANEL, 8'	1 1	13031 13032	BOTTOM PANEL, 8'	1	13031
SCREWS, 8-32X1/2"	29	SC-2425	SCREWS, 8-32X1/2"	29	SC-2425
SCREWS, 8-32X1/4"	2	SC-2459	SCREWS, 8-32X1/4"	2	SC-2459
3. CONTROL PANEL MOUNTING SCREWS	7	SC-2459	3. CONTROL PANEL MOUNTING SCREWS	7	SC-2459
4. CONDUIT TUBING: 6" (152mm)	2	TU-3874	4. CONDUIT TUBING: 6" (152mm)	2	TU-3874
5. INSULATION: 34" x 95" (864mm x 2413mm)	2	IN-22364	5. INSULATION: 34" x 95" (864mm x 2413mm)	2	IN-22364
6. CABLE CONNECTION HARDWARE	-	111 22301	6. CABLE CONNECTION HARDWARE		
	1	CD 20/5	7. HEATING CABLE: 66' (20117mm)	1	CB-3045
7. HEATING CABLE: 66' (20117mm) HEATING CABLE: 205' (62484mm)	1	CB-3045 CB-3045		1	CB-3045
3. THERMOSTAT	4	TT-3498	8. THERMOSTAT	4	TT-3498
THERMOSTAT THERMOSTAT KNOB	4	KN-3473	THERMOSTAT KNOB	4	KN-3473
). INDICATOR LIGHT	4	LI-3025	9. INDICATOR LIGHT	4	LI-3025
). BULB SWITCH	4	SW-3616	10. BULB SWITCH	4	SW-3616
			11. 2' INNER TOP SPOT	1	4687
1. 2' INNER TOP SPOT 6' INNER TOP SPOT	1 1	4687 4681	6' INNER TOP SPOT	1	4681
	14		12. BULBS	14	LP-33592
2. BULBS		LP-33592	13. BULB SOCKET	14	RP-3952
3. BULB SOCKET	14	RP-3952	14. DISPLAY LIGHT BULB	2	LP-3376
i. DISPLAY LIGHT BULB	2	LP-3376	DISPLAY LAMP SHIELD	2	LP-3967
DISPLAY LAMP SHIELD DISPLAY LIGHT FIXTURE	2 2	LP-3967 LP-3966	DISPLAY LIGHT FIXTURE	2	LP-3966
1/4 - 20 X 1/2" SLOT RD SCREW	4	SC-2332	1/4 - 20 X 1/2" SLOT RD SCREW	4	SC-2332
1/4 X 20 HEX NUT	4	NU-2437	1/4 X 20 HEX NUT	4	NU-2437
1/4" SPLIT RING LOCKWASHER	4	WS-2294	1/4" SPLIT RING LOCKWASHER 3/8" 90 DEGREE CONNECTOR	4 2	WS-2294 CR-3292
3/8" 90 DEGREE CONNECTOR	2	CR-3292	CONDUIT TUBING: 8' (2438mm)	1	TU-3976
CONDUIT TUBING: 8' (2438mm)	1	TU-3976	15.CIRCUIT BOX (120V), INCLUDES	1	CI-3906
. CIRCUIT BOX (120V), INCLUDES	1	CI-3906	— BREAKER, 20 AMP	3	CI-3900 CI-3907
— BREAKER, 20 AMP — BREAKER, 15 AMP	3 2	CI-3907 CI-33071	— BREAKER, 15 AMP	2	CI-33071
— GROUND BAR KIT	1	CI-330/1 CI-3878	— GROUND BAR KIT	1	CI-3878
DOOR ASSEMBLY - INCLUDES	1	DR-22481	16.DOOR ASSEMBLY - INCLUDES	1	DR-2248
— LEFT-HAND GLASS DOOR - IN	1	DR-22481A	— LEFT-HAND GLASS DOOR - IN	1	DR-2248
— RIGHT-HAND GLASS DOOR - IN	1	DR-22481B	— RIGHT-HAND GLASS DOOR - IN	1	DR-2248
— TOP TRACK	1	TK-23749	— TOP TRACK	1	TK-23749
— BOTTOM TRACK	1	TK-24267	— BOTTOM TRACK — CENTER GLASS - OUT	1 2	TK-24267 DR-22481
— CENTER GLASS - OUT	2	DR-22481E	— CENTER GLASS - OUT — GUIDES #44049	16	DR-2248
— GUIDES #44049	16 2	DR-22480F DR-22480G	— DOOR BUMPER ASSEMBLY	2	DR-22480
— DOOR BUMPER ASSEMBLY			17. SELF-SERVE DOOR, LEFT-HAND	1	4407
7. SELF-SERVE DOOR, LEFT-HAND HINGE, LEFT-HAND to unit	1 2	4407 HG-22167	HINGE, LEFT-HAND to unit	2	HG-22167
			18. SELF-SERVE DOOR, RIGHT-HAND	1	4409
8. SELF-SERVE DOOR, RIGHT-HAND HINGE, RIGHT-HAND to unit	1 2	4409 HG-22168	HINGE, RIGHT-HAND to unit	2	HG-22168
HINGE BUSHING to unit	4	BU-2722	HINGE BUSHING to unit	4	BU-2722
HINGE MOUNTING SCREWS to unit	8	SC-2352	HINGE MOUNTING SCREWS to unit	8	SC-2352
. END PANEL	2	PE-22639	19. END PANEL	2	PE-22639
CUTTING BOARD ASSEMBLY	1	4016	20. CUTTING BOARD ASSEMBLY	1	4016
I. CUTTING BOARD ASSEMBLI I. CUTTING BOARD BRACKET (BASE)	2	12069	21. CUTTING BOARD BRACKET (BASE)	2	12069
CUTTING BOARD BRACKET (BASE) CUTTING BOARD BRACKET MTG. SCREWS	6	12069 SC-24520	CUTTING BOARD BRACKET MTG. SCREWS	6	SC-24520
2. CUTTING BOARD BRACKET	2	BT-2342	22. CUTTING BOARD BRACKET	2	BT-2342
			25. END GLASS	2	GL-22597
5. END GLASS END GLASS GASKET, 4' (1219mm)	2	GL-22597 GS-22547	END GLASS GASKET, 4' (1219mm)	1	GS-22547
6. INNER END GLASS	1	GS-22547 GL-22598	26. INNER END GLASS	1	GL-22598
DIVIDER GLASS GASKET, 3' (914mm)	1	GL-22598 GS-22548	DIVIDER GLASS GASKET, 3' (914mm)	1	GS-22548
7. FRONT GLASS: 6' (1829mm)	1	GL-22596	27. FRONT GLASS: 6' (1829mm)	1	GL-22596
			28. SELF-SERVE GLASS: 2' (610mm)	1	GL-22592
3. SELF-SERVE GLASS: 2' (610mm)	1	GL-22592	29. CUSTOMER GUARD: 2' (610mm)	1	11115
O. CUSTOMER GUARD: 2' (610mm)	1	11115	30. BASE BOTTOM	1	12564
). BASE BOTTOM	1	12564		1	12704
PAN DIVIDER BARS (NOT SHOWN)			31. PAN DIVIDER BARS (NOT SHOWN) PART NUMBERS ARE REFERENCED IN THIS MANUAL		
PART NUMBERS ARE REFERENCED IN THIS MANUAL		DD		2	RD 3206
2. SNAP-IN RECEPTACLES (120V)	2	RP-3396	32. SNAP-IN RECEPTACLES (120V)		RP-3396
6. OUTLET HOUSING COVER (120V)	1	4980	33. OUTLET HOUSING COVER (120V)	1	4980
i. RECEPTACLE FUSE, 15 AMP (120V)	1	FU-33351	34. RECEPTACLE FUSE, 15 AMP (120V)	1	FU-33351
RECEPTACLE FUSEHOLDER, 15 AMP (120V)	1	FU-33352	RECEPTACLE FUSEHOLDER, 15 AMP (120V)	1	FU-33352
. 6' (1829mm) PROBE PKG OPT (120V) (NOT SHOWN)	1	5296	35. 6' (1829mm) PROBE PKG OPT (120V) (NOT SHOWN)	1	5296
. LOAD CENTER OPTION (120V) (NOT SHOWN)	1	14220	36. LOAD CENTER OPTION (120V) (NOT SHOWN)	1	14220
. FRONT GLASS STRUT	2	SU-2870	37. FRONT GLASS STRUT	2	SU-2870
B. FRONT GLASS STRUT	1	SU-22704	38. FRONT GLASS STRUT	1	SU-22704
	1	SU-22431	39. FRONT GLASS STRUT	1	SU-22431
. FRONT GLASS STRUT	1	00 22 131	40. SNAP-IN BUMPER (NOT SHOWN)	1	11751

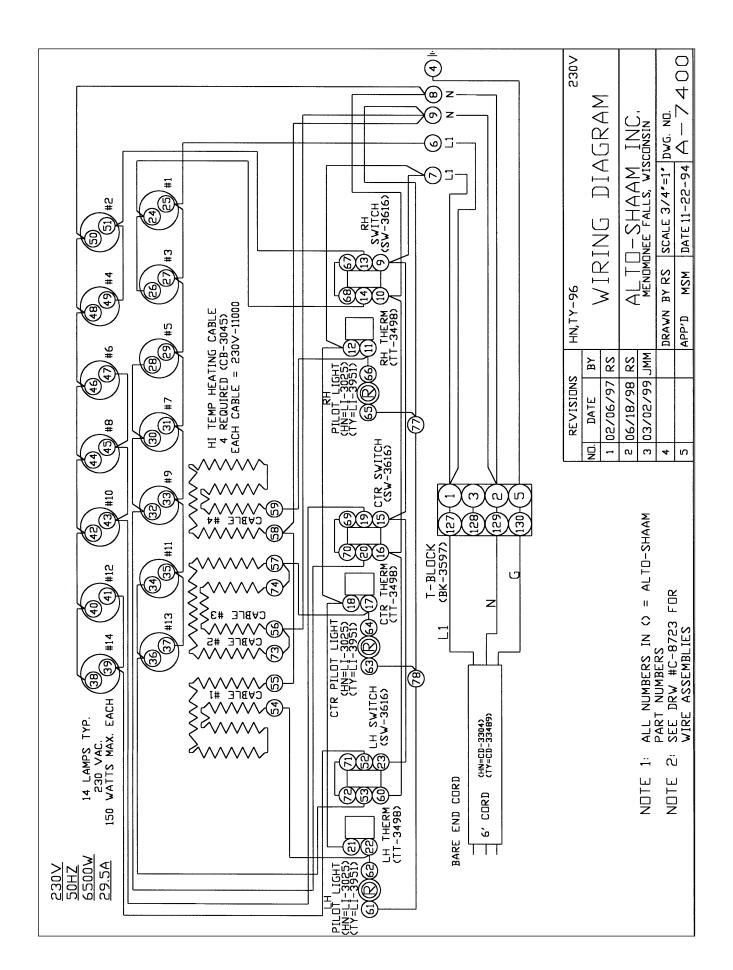


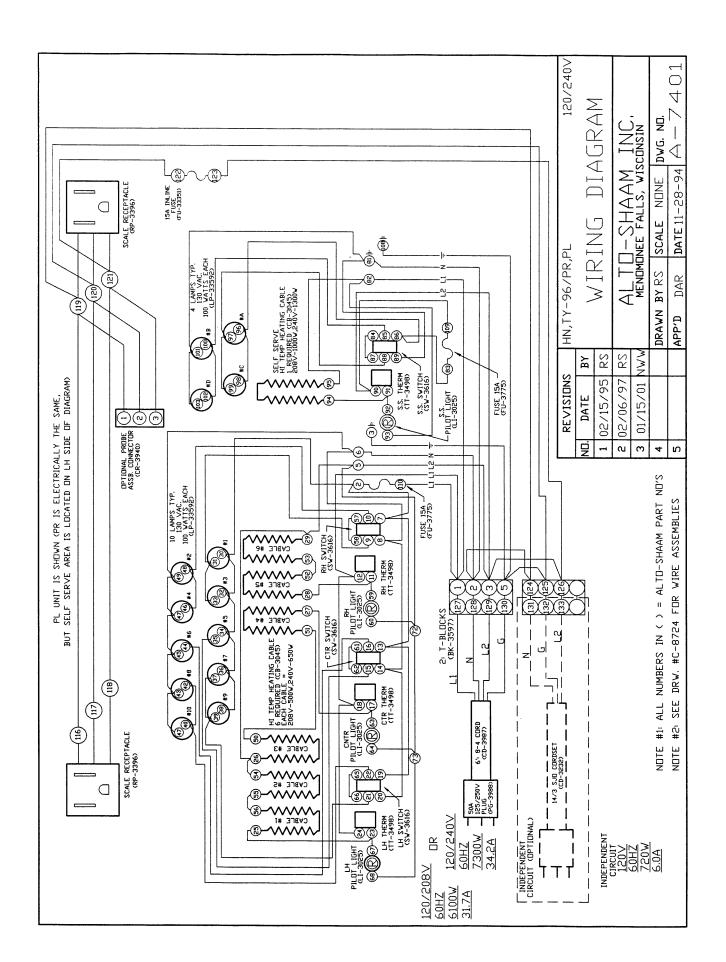


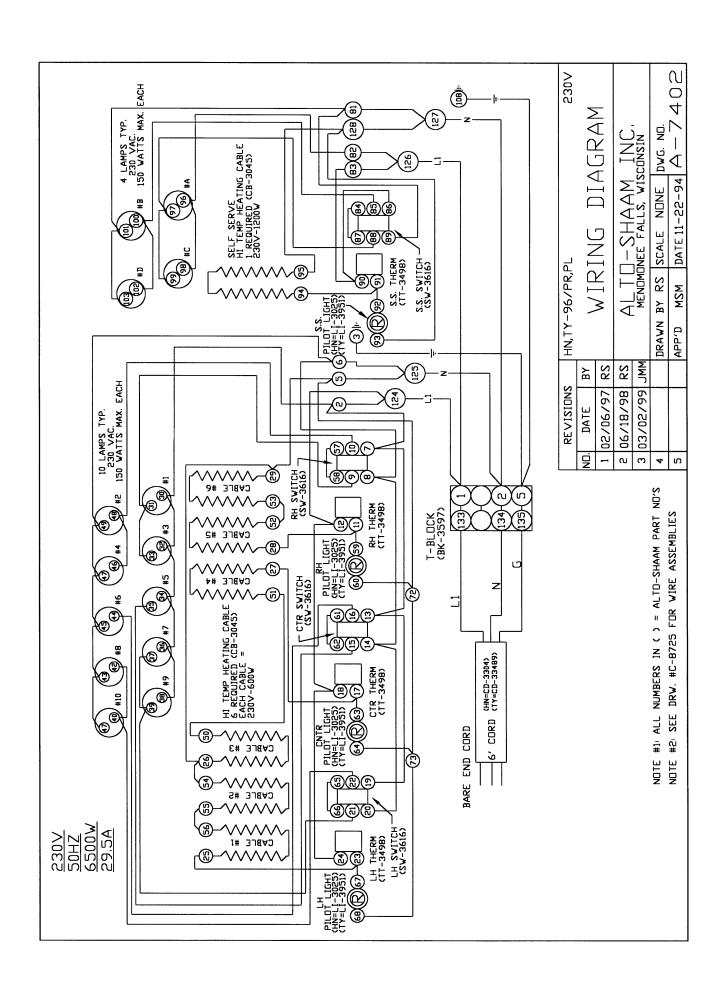


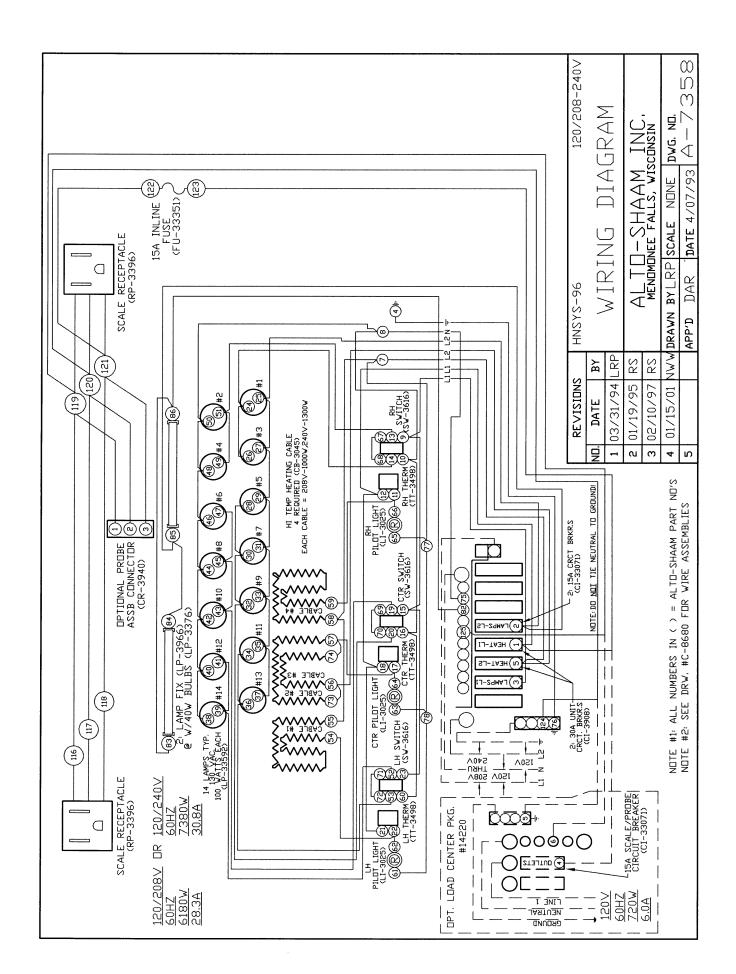


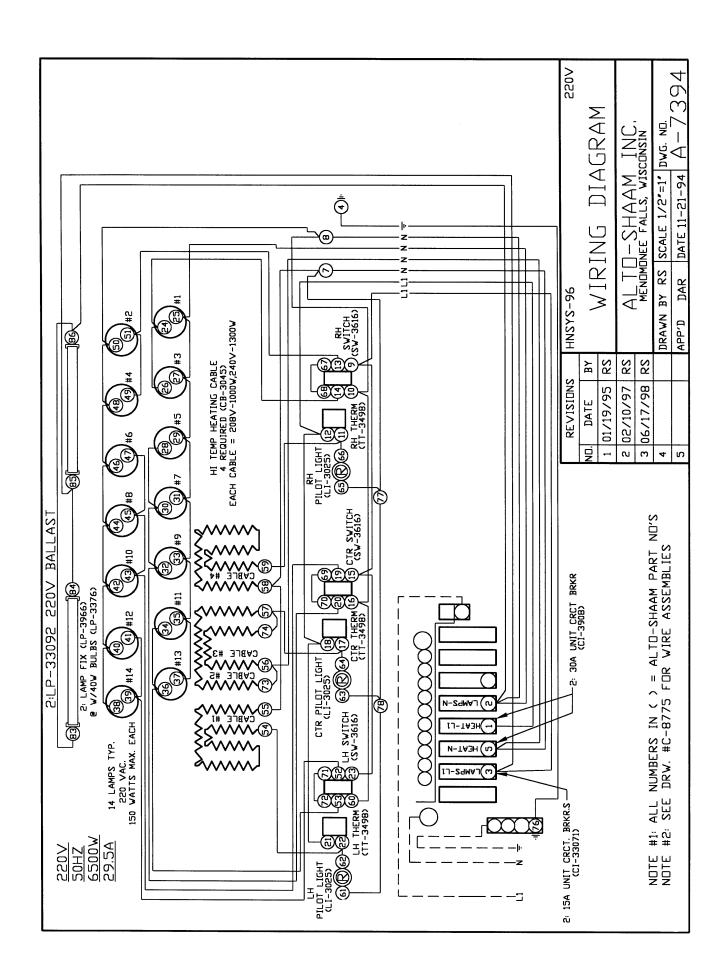


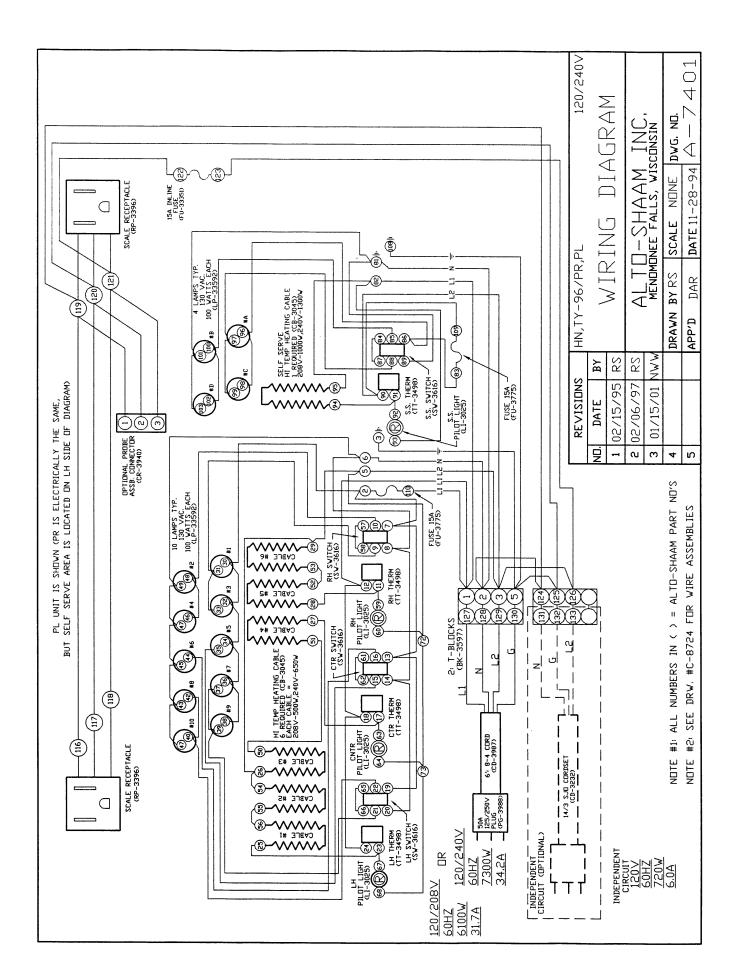


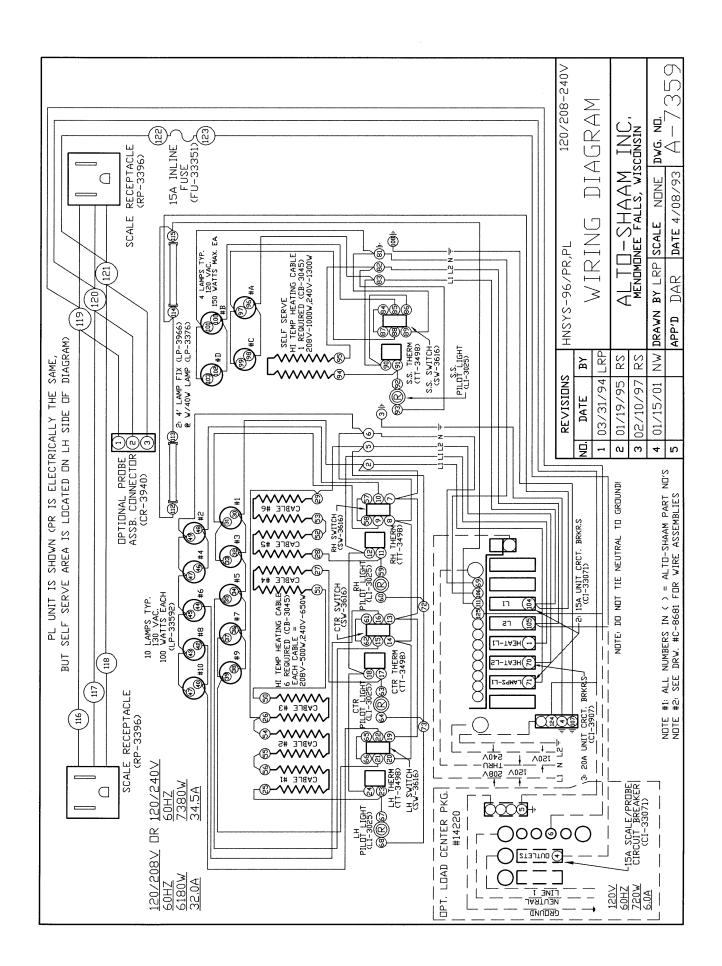


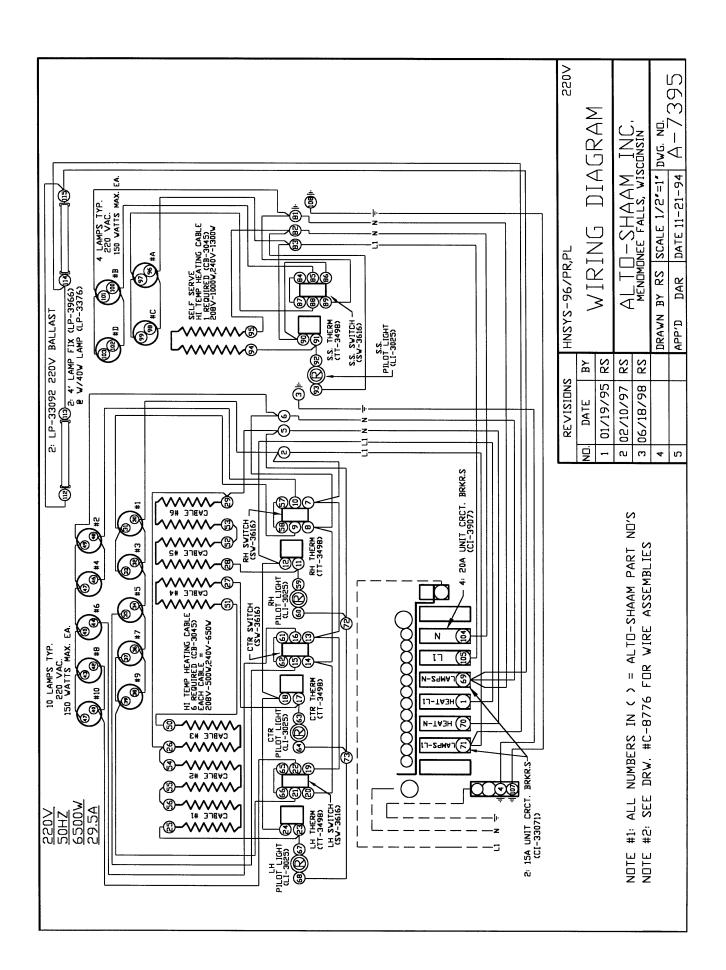


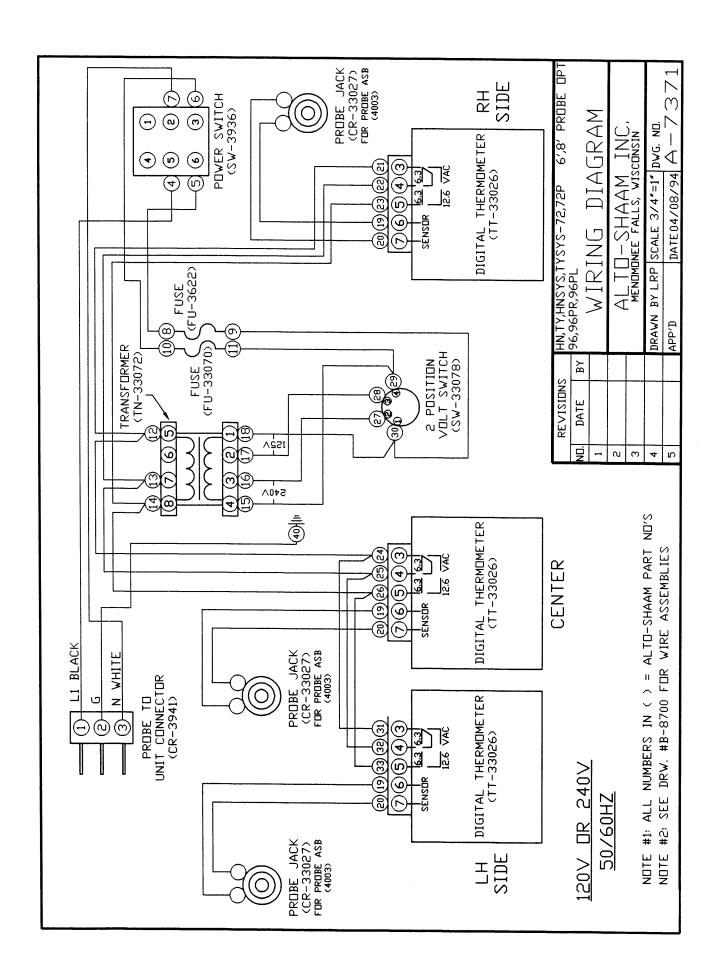












TRANSPORTATION DAMAGE and CLAIMS



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.

- 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.
- 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
- Replacement of light bulbs and/or the replacement of display case glass due to damage of any kind.
- Equipment damage caused by accident, shipping, improper installation or alteration.
- 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

W 164 N 9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • USA

800.558.8744 u.s.a./canada

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262.251.1907 INTERNATIONAL

WEBSITE:

www.alto-shaam.com