



ALTO SHAAM®

OPERATION AND CARE MANUAL

**HOT DISPLAY CASE
— SELF-SERVICE (PASS-THROUGH)**

**MODELS: ED-48/P ED-72/PR
ED-72/P ED-96/PL
ED-72/PL ED-96/PR**



COOK/HOLD/SERVE SYSTEMS BY ALTO-SHAAM®



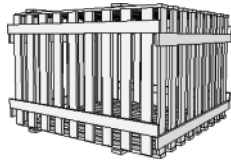
W164 N9221 Water Street • P.O. Box 450
Menomonee Falls, Wisconsin 53052-0450 • U.S.A.
PHONE: (262) 251-3800 (800) 558-8744 U.S.A./CANADA
FAX: (262) 251-7067 (800) 329-8744 U.S.A./CANADA

www.alto-shaam.com



ALTO-SHAAM® SELF-SERVICE HOT 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 cabinet is provided. When you receive your display case, check for any possible ship-ping 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 display 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.

NOTE: Any and all claims for warranty must include the full model and serial number of the display 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 VERY 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

A red 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 red indicator light(s) will go "OUT".

4. LOAD HOT FOODS INTO DISPLAY CASE

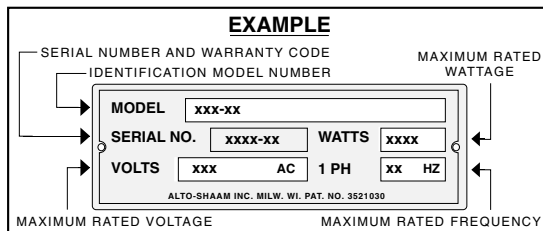
Be certain only hot food is transferred into the display case. Before loading food into the case, use a pocket-type meat thermometer to make certain all products have reached an internal temperature of 140° to 160° F (60° to 71°C). If any food product is not at proper serving temperature, use a Halo Heat cooking and holding oven, set at 250° to 275°F (121° to 135°C), to bring the product within the correct temperature range. In the full-service section of the unit, products may be loosely covered with clear plastic wrap. When required, the plastic wrap may remain on the product, in the display case, up until the time it is served. **Be certain only hot PREPACKAGED foods are used in the self-service section of the display case.**

5. RESET THERMOSTAT AS NEEDED

After all products are loaded into the display case and the doors are closed, it is necessary to reset the thermostat. For fully enclosed sections, reset the thermostat to the number "8" setting. For self-service sections, the thermostat should be maintained at the number "9" or number "10" setting. Cases with a self-service section should also be maintained between number "9" and number "10" for the self-service section **only**. THESE SETTINGS WILL NOT NECESSARILY BE FINAL. Since proper temperature range depends on the type of products and the quantities being held, 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° and 160° F (60° and 71° C). Normally, this will require a thermostat setting of between number "6" and "8" in fully enclosed cases. Self-service cases or sections will always require a higher thermostat setting.

ELECTRICAL INSTALLATION

1. An identification tag is permanently mounted on case. Always position the appliance so the power supply cord is easily accesible in case of emergency.



2. Plug the case into a properly grounded receptacle ONLY. Arcing will occur when connecting or disconnecting the display case unless all controls are in the OFF position.



ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON NAMEPLATE OF UNIT

OPERATING PROCEDURES

1. DO NOT ADD WATER TO DISPLAY 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 display 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.



Disconnect the unit from the power source before cleaning or servicing.

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 DELI 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.

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 DISPLAY CASE 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 well to remove all residue and wipe dry.



NO SCRAPERS



NO STEEL PADS

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
- Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for equipment recommended for stainless steel surfaces. Spray the cleaning agent on the cloth and wipe with the grain of the stainless steel.

At no time should the case be steam cleaned, flooded with water or liquid solution. Do not use waterjet to clean. Severe damage or electrical hazard could result. Disconnect from power source before cleaning or servicing.



CAUTION

CAUTION Hood glass extended to the full upright position is stabilized through the use of gas struts designed for the full load bearing weight. These struts could weaken or fail due to wear, environmental conditions or aging. Operators should be aware of any decrease in effort to lift the hood and initiate an immediate gas strut safety check. **DO NOT LIFT THE HOOD IN THIS CONDITION.**



ED-48/P		
120/208-240 V.A.C. — 60 Hz, 1 ph		
At 208V: 2800 Watts, 16.6 Amps	NEMA L14-30P	
At 240V: 3400 Watts, 18.0 Amps	30A, 250V Plug	
— Plug provided for counter-top applications only.		
SYSTEM APPLICATIONS		BARE END — NO PLUG
220 V.A.C. — 50 Hz, 1 ph		
3000 Watts, 13.6 Amps		BARE END — NO PLUG
<hr/>		
ED-72/P; ED-72/PL; ED-72/PR		
120/208-240 V.A.C. — 60 Hz, 1 ph		
At 208V: 5140 Watts, 22.5 Amps	NEMA L14-30P	
At 240V: 5140 Watts, 22.5 Amps	30A, 250V Plug	
— Plug provided for counter-top applications only.		
SYSTEM APPLICATIONS		BARE END — NO PLUG
220 V.A.C. — 50 Hz, 1 ph		
4650 Watts, 21.1 Amps		BARE END — NO PLUG
<hr/>		
ED-96/PL; ED-96/PR		
120/208-240 V.A.C. — 60 Hz, 1 ph		
At 208V: 5100 Watts, 22.5 Amps	NEMA L14-30P	
At 240V: 6000 Watts, 24.7 Amps	30A, 250V Plug	
— Plug provided for counter-top applications only.		
SYSTEM APPLICATIONS		BARE END — NO PLUG
220 V.A.C. — 50 Hz, 1 ph		
5400 Watts, 24.5 Amps		BARE END — NO PLUG

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.

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 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 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.

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

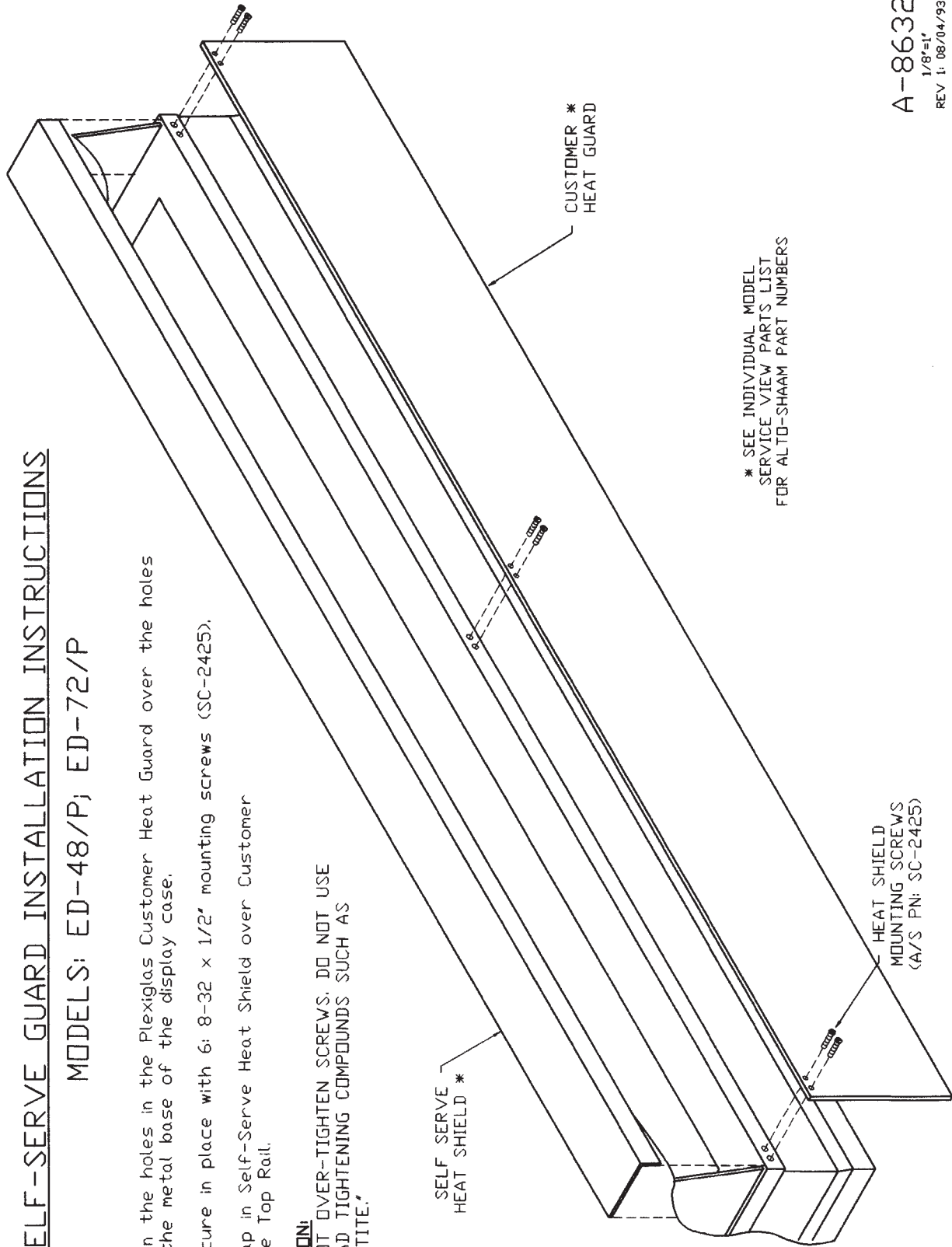
THE HOLDING TEMPERATURES LISTED ARE SUGGESTED GUIDELINES.

SELF-SERVE GUARD INSTALLATION INSTRUCTIONS

MODELS: ED-48/P; ED-72/P

- 1.) Align the holes in the Plexiglas Customer Heat Guard over the holes in the metal base of the display case.
- 2.) Secure in place with 6: 8-32 x 1/2" mounting screws (SC-2425).
- 3.) Snap in Self-Serve Heat Shield over Customer Side Top Rail.

CAUTION:
DO NOT OVER-TIGHTEN SCREWS. DO NOT USE
THREAD TIGHTENING COMPOUNDS SUCH AS
'LOCKTITE.'



* SEE INDIVIDUAL MODEL
SERVICE VIEW PARTS LIST
FOR ALTO-SHAAM PART NUMBERS

A-8632
1/8"=1"
REV. 08/04/93

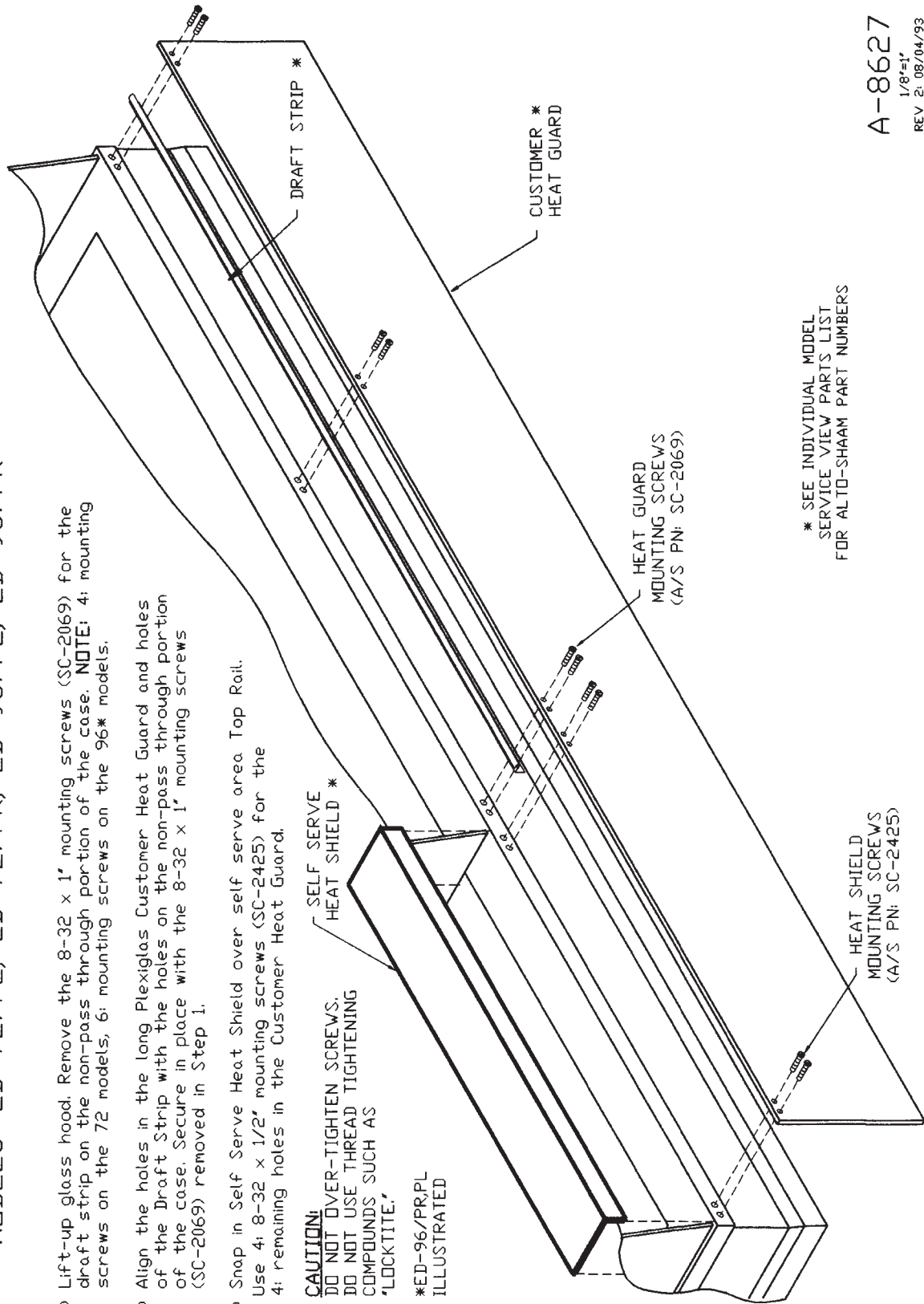
SELF-SERVE GUARD INSTALLATION INSTRUCTIONS

MODELS: ED-72/PL; ED-72/PR; ED-96/PL; ED-96/PR

- 1.) Lift-up glass hood. Remove the 8-32 x 1" mounting screws (SC-2069) for the draft strip on the non-pass through portion of the case. **NOTE:** 4; mounting screws on the 72 models, 6; mounting screws on the 96* models.
- 2.) Align the holes in the long Plexiglas Customer Heat Guard and holes of the Draft Strip with the holes on the non-pass through portion of the case. Secure in place with the 8-32 x 1" mounting screws (SC-2069) removed in Step 1.
- 3.) Snap in Self Serve Heat Shield over self serve area Top Rail. Use 4; 8-32 x 1/2" mounting screws (SC-2425) for the 4; remaining holes in the Customer Heat Guard.

CAUTION:
DO NOT OVER-TIGHTEN SCREWS.
DO NOT USE THREAD TIGHTENING COMPOUNDS SUCH AS 'LOCKTITE.'

*ED-96/PR/PL ILLUSTRATED



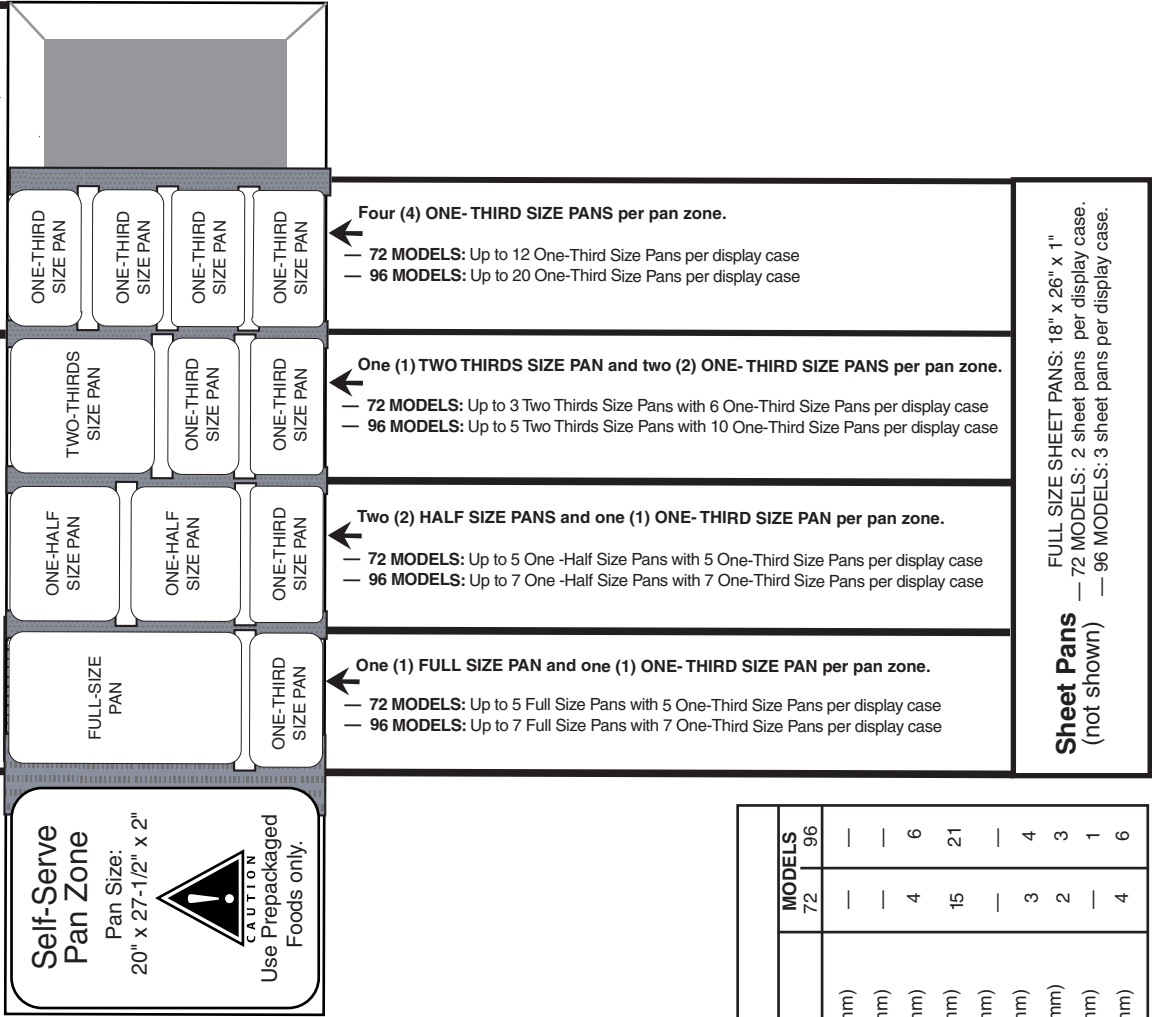
* SEE INDIVIDUAL MODEL SERVICE VIEW PARTS LIST FOR ALTO-SHAAM PART NUMBERS

A-8627
1/8"-1"
REV 2: 08/04/93

DELI CASE PAN LAYOUT DIAGRAM

STANDARD PAN SIZES

FULL-SIZE PAN 12" x 20" x 2-1/2" (325 mm x 530 mm x 65 mm) GN1/1
ONE-HALF SIZE PAN 12" x 10" x 2-1/2" (325 mm x 265 mm x 65 mm) GN1/2
TWO-THIRDS SIZE PAN 12" x 14" x 2-1/2" (325 mm x 362 mm x 65 mm) GN 2/3
ONE -THIRD SIZE PAN 12" x 6" x 2-1/2" (325 mm x 176 mm x 65 mm) GN1/3
FULL SIZE SHEET PAN 18" x 26" x 1" N/A



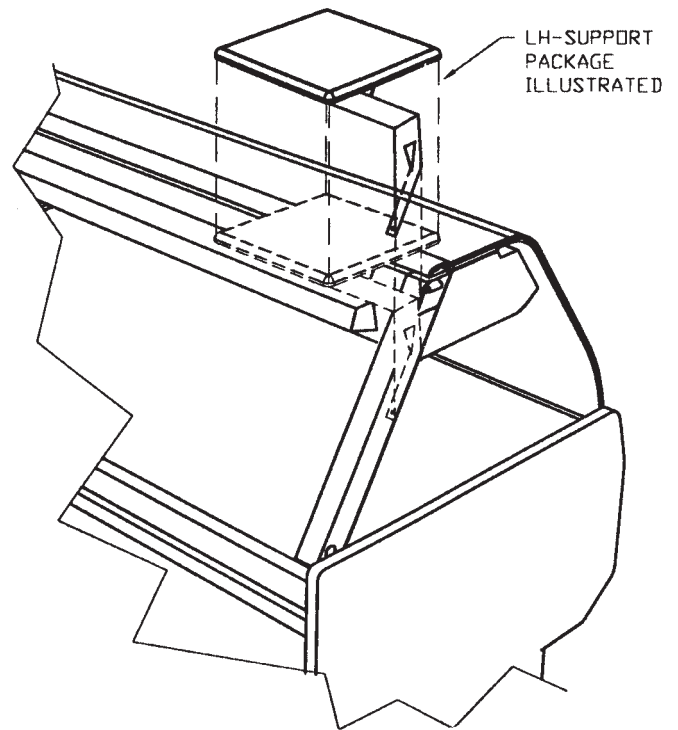
STANDARD PAN DIVIDER & SEPARATOR BARS

No. de réf.	DESCRIPTION	DIMENSIONS	MODELS	
			72	96
11046	SHEET PAN DIVIDER BAR	1-3/8" x 27-13/16"	—	—
11047	ONE-THIRD SIZE PAN	3-1/4" x 7"	—	—
11317	FULL, HALF AND THIRD SIZE-LONG	1" x 27-7/8"	4	6
11318	FULL, HALF AND THIRD SIZE-SHORT	1" x 12-3/4"	15	21
11319	SHEET PAN DIVIDER BAR	3-1/4" x 27-3/16"	—	—
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17-3/4"	3	4
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	2	3
11732	SHEET PAN FILLER	3-3/4" x 27-13/16"	—	1
1865	GASTRONORM DIVIDER (220V)	7/8" x 27-7/8"	4	6

Additional Pan Separator Bars May Be Required to Accomodate Maximum Capacities

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.
4. 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).
5. 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.



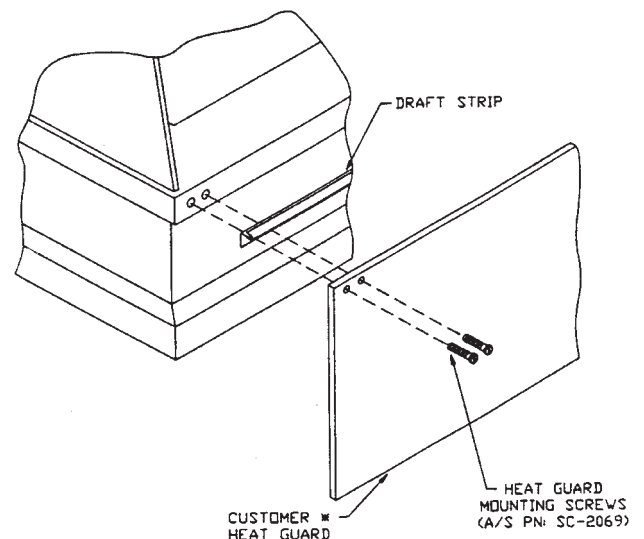
NOTE: These platforms are intended for use in the CLOSED position ONLY. They slide away from the unit for cleaning. Using scales with platforms in the OUT position may result in incorrect data on scales.



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.

INSTALLATION INSTRUCTIONS – CUSTOMER HEAT GUARD

1. Lift hood glass up. Remove the 6-32 x 1" screws for draft strip located on the lower front of the case.
2. Align the holes in the plexiglas heat guard with the holes of the draft strip. Secure in place with 6-32 x 1" screws provided. Tighten securely.



**DO NOT OVER TIGHTEN!
DO NOT USE THREAD
TIGHTENING COMPOUNDS SUCH
AS "LOCKTITE".**

* SEE INDIVIDUAL MODEL
SERVICE VIEW PARTS LIST
FOR ALTO-SHAAM PART NUMBERS

1/4" x 1" A-8617
REV 2: 7-27-92

**ED-48/P
Cable Kit**

Cable Heating Service Kit	4880
includes:	
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 High Temperature Tape Roll	30 feet
ST-2439 Stud, 10/32	4
NU-2215 Hex Nut	8

**ED-48/P
Options & Accessories**

Custom Panel Colors	Factory Quote
Dual Case	
— Trim Kit (FOR BU BASE)	4175
— Butt Clip (FOR ED BASE)	13027
Acrylic Divider	GL-2902
Hi-Temp. Holding	
Temp. Gauge	GU-33384
Lamp Bulb, 100W, 130V	LP-33253
Menu Board System (1)	MB-23092
Merchandise Platform	4987
Mirropane	
— Tempered Glass Doors	5979
— End Panels	4373
Outlet without Probe Kit	5940
Outlet with Probe Kit	5967
Pan Separator Bars	
— Sheet Pan (long bar)	11046
— One-Third Size Pan	11047
— Full-size (long)	11317
— Half-size/Third-size	11318
— Sheet Pan	11319
— Sheet Pan (short bar)	11320
— Gastronorm	1865
— Half-Size Sheet Pan	11805
Scale Platform Package	
— Right-hand	14101
— Left-hand	14546
Shelf Insert (for BU Base)	4062
Thermostat Guard Cover	4571

**ED-72/P, ED-72/PL, ED-72 /PR - ED-96/PL,
ED-96/PR Cable Kit**

Cable Heating Service Kit	4881
includes:	
CB-3045 Cable Heating Element	210 feet
CR-3226 Ring Connector	12
IN-3488 Insulation Corner	1 foot
BU-3105 Shoulder Bushing	12
BU-3106 Cup Bushing	12
SL-3063 Insulating Sleeve	12
TA-3540 High Temperature Tape Roll	30 feet
ST-2439 Stud, 10/32	12
NU-2215 Hex Nut	24

**ED-72/P, ED-72/PL, ED-72/PR
Options & Accessories**

Custom Panel Colors	Factory Quote
Dual Case	
— Trim Kit (FOR BU BASE)	4175
— Butt Clip (FOR ED BASE)	13027
Acrylic Divider	GL-2902
Hi-Temp. Holding	
Temp. Gauge	GU-33384
Lamp Bulb, 100W, 130V	LP-33253
Menu Board (1)	MB-23093
Merchandise Platform	4988
Mirropane	
— Tempered Glass Doors	5980
— End Panels	4373
Outlet without Probe Kit	5955
Outlet with Probe Kit	5983
Pan Separator Bars	
— Full-size (long)	11317
— Half-size/Third-size	11318
— Sheet Pan (short bar)	11320
— Sheet Pan (long bar)	11357
— Gastronorm	1865
— Half-Size Sheet Pan	1805
Scale Platform Package	
— Right-hand	14101
— Left-hand	14546
Shelf Insert (for BU Base)	4062
Thermostat Guard Cover	4571

**ED-96/PL, ED-96/PR
Options & Accessories**

Custom Panel Colors	Factory Quote
Dual Case Trim Kit (FOR BU BASE)	4175
Dual Case Butt Clip (FOR ED BASE)	13027
Acrylic Divider	GL-2902
Hi-Temp Holding	
Temp. Gauge	GU-33384
Lamp Bulb, 100W, 130V	LP-33253
Menu Board System (2)	MB-23092
Merchandise Platform	4989
Mirropane Glass Doors	5981
Mirropane End Panels	4373
Outlet with Probe Kit	5984
Outlet without Probe Kit	5957
Pocket Thermometer °F	TH-3300
Pocket Thermometer °C	TH-3412
Pan Separator Bars	
— Full-size (long)	11317
— Half-size/Third-size	11318
— Sheet Pan (short bar)	11320
— Sheet Pan (long bar)	11357
— Sheet Pan Filler Bar	11732
— Gastronorm Divider	1865
— Third-size (short)	11915
— Third-size (long)	11916
Scale Platform Package	
— Right-hand	14101
— Left-hand	14546
Shelf Insert (FOR BU BASE)	4294
Thermostat Guard Cover	4571

SAFETY ALERT




This unit's performance has been optimized using the factory provided lamps. These lamps should be replaced with an exact replacement or with a factory recommended replacement. These lamps have been treated to resist breakage and must be replaced with similarly treated lamps in order to maintain compliance with NSF standards.



CAUTION

Disconnect Unit from Power Source Before Cleaning or Servicing



CAUTION

ED-48/P PASS-THROUGH

04/27/01

Part Description	Qty.	Alto-Shaam Part No.	Part Description	Qty.	Alto-Shaam Part No.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3291	20. CAPILLARY COVER PLATE	2	11160
CORD, (220V), 7' (2134mm)	1	CD-3545	CAPILLARY PLATE MOUNTING SCREWS	16	SC-2459
CONNECTOR: 1/2" Cable	1	CR-33542	21. CUTTING BOARD ASSEMBLY	1	4016
PLUG (120/240V only)	1	PG-3267	22. CUTTING BOARD BRACKET BASE	2	11283
2. BOTTOM	1	11053	23. CUTTING BOARD BRACKET	2	BT-2342
3. BOTTOM MOUNTING SCREWS	12	SC-2425	24. BRACKET TO BRACKET MOUNTING SCREWS	6	SC-2070
4. INSULATION: 15" x 40" (381mm x 1016mm) PIECE	2	IN-22364	25. SELF-SERVE HEAT SHIELD	1	11112
5. CABLE CONNECTION HARDWARE:			26. PAN GRID [NOT SHOWN]	2	PN-22048
— SHOULDER BUSHING	8	BU-3105	PAN	1	11624
— CUP BUSHING	8	BU-3106	27. CUSTOMER HEAT GUARD	1	GD-2966
— HEX NUT	48	NU-2215	28. GAS STRUT	1	SU-22431
— RING CONNECTOR	8	CR-3226	29. 4" (102mm) LEGS	4	LG-2044
— STUD	8	ST-2439	30. [NOT SHOWN]		
6. HEATING CABLE, 132' (40234mm)	1	CB-3045	OUTLET WITHOUT PROBE RETROFIT KIT	1	5940
7. CONTROL PLATE	2	11167	OUTLET WITH PROBE RETROFIT KIT	1	5967
CONTROL PLATE MOUNTING SCREWS	8	SC-2459			
8. THERMOSTAT	2	TT-3498			
THERMOSTAT KNOB	2	KN-3473			
9. PILOT LIGHT	2	LI-3025			
10. LAMP SWITCH	2	SW-3616			
DIODE ASSEMBLY [120/240V only]	2	4775			
11. TOP	1	1437			
12. TOP MOUNTING SCREWS	8	SC-2425			
13. HEAT LAMPS (120/240V)	6	LP-33592			
HEAT LAMPS (220V)	6	LP-3384			
14. LAMP SOCKET (120/240V)	6	RP-3952			
LAMP SOCKET (220V)	6	RP-3955			
15. GLASS DOOR ASSEMBLY, Includes	1	DR-25022			
— LEFT HAND OUTER DOOR	1	DR-25023			
— RIGHT HAND INNER DOOR	1	DR-25024			
— OPTIONAL GLASS DOOR ASB.	1	DR-25025			
— OPTIONAL MIRRORED L.H. OUTER DOOR	1	DR-25026			
— OPTIONAL MIRRORED R.H. INNER DOOR	1	DR-25027			
— TOP TRACK	1	13008			
— GUIDES #44049	4	DR-22480F			
— DOOR BUMPER ASB.	1	DR-22480G			
— GUIDES	4	GI-2367			
16. DOOR RETAINERS	2	11279			
DOOR RETAINER MOUNTING SCREWS	4	SC-2459			
17. GLASS, END	2	GL-2901			
18. GLASS, FRONT	1	GL-2960			
19. LIGHT GUARD	1	4869			

DECOR PANELS:

Galvanized Steel

DECOR CUSTOM PANEL (SPECIFY COLOR)	1	11480
DECOR END PANEL (SPECIFY COLOR)	2	11483

Stainless Steel

DECOR CUSTOM PANEL	1	11479
DECOR END PANEL	2	11482

White Vinyl

DECOR CUSTOM PANEL	1	12711
DECOR END PANEL	2	12713

Red Vinyl

DECOR CUSTOM PANEL	1	12712
DECOR END PANEL	2	12714

SERVICE VIEW ■ ED-48/P — PAGE 10

SAFETY ALERT

This units performance has been optimized using the factory provided lamps. These lamps should be replaced with an exact replacement or with a factory recommended replacement. These lamps have been treated to resist breakage and must be replaced with similarly treated lamps in order to maintain compliance with NSF standards.

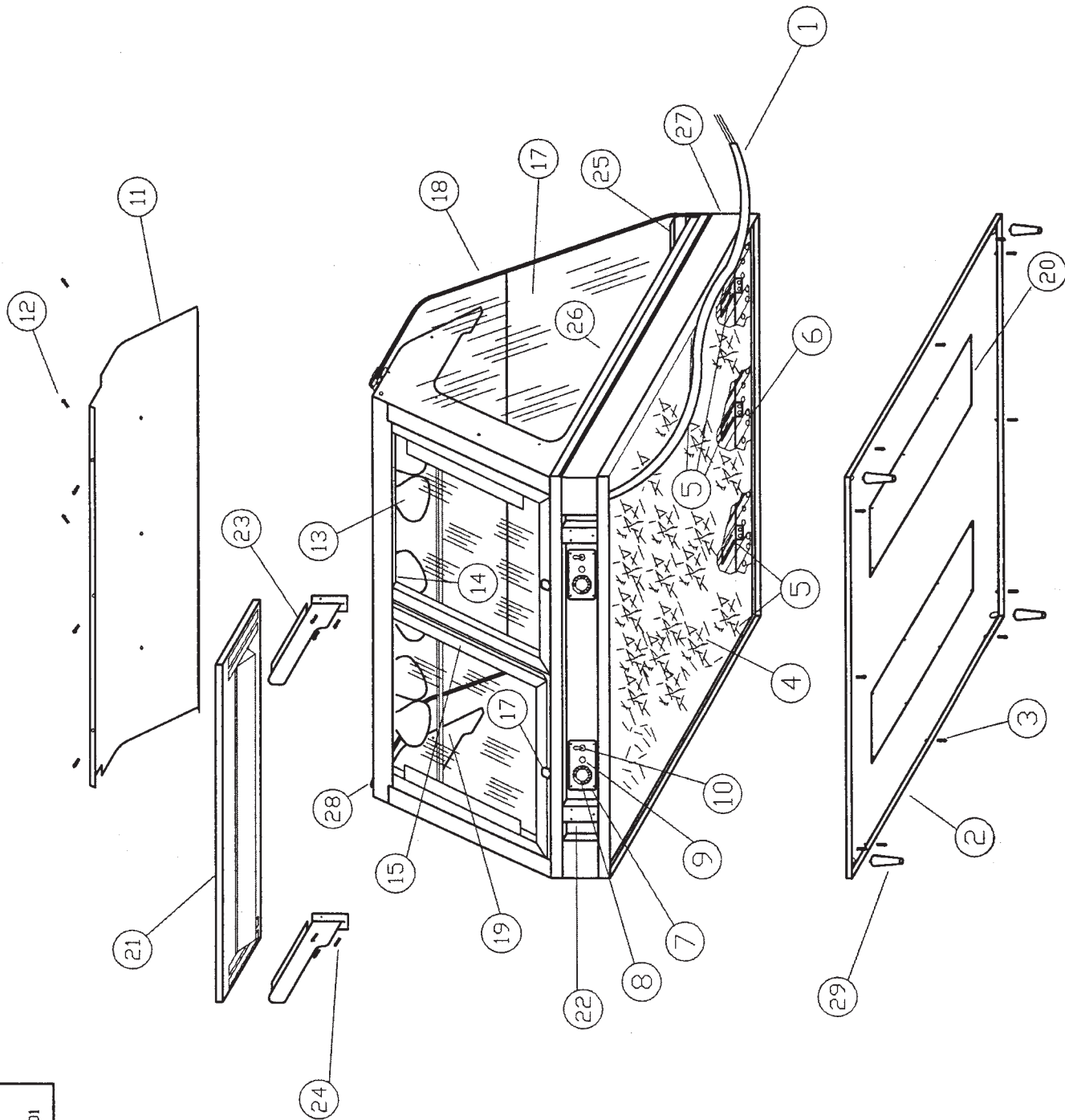


CAUTION

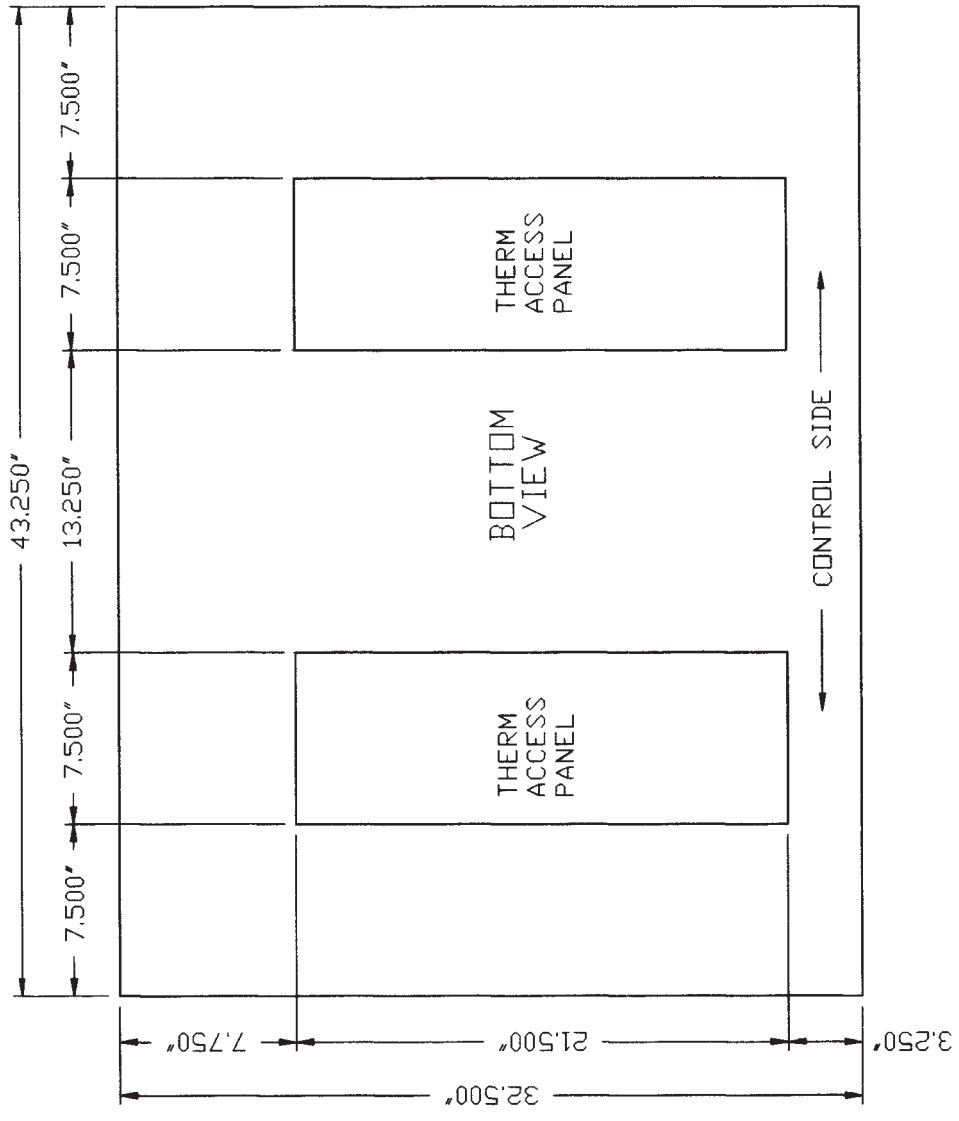


CAUTION

ED-48/P
SERVICE VIEW
10-1-92 REV: 04/27/01



ED-48



THERM ACCESS PANEL LOCATION

A-8674

03/23/93 RS

ED-72/P PASS-THROUGH

Part Description	Qty.	Alto-Shaam Part No.	Part Description	Qty.	Alto-Shaam Part No.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557	19. GLASS, FRONT	1	GL-2962
CORD, (220V), 7' (2134mm)	1	CD-3607	20. LIGHT GUARD	1	4832
CONNECTOR: 3/4" CABLE (120-240V)	1	CR-3293	21. CAPILLARY COVER PLATE	2	11160
CONNECTOR: 1/2" CABLE (220V)	1	CR-33542	CAPILLARY COVER PLATE MTG. SCREWS	16	SC-2459
PLUG (120/240V only)	1	PG-3267	22. CUTTING BOARD ASSEMBLY	1	4017
2. BOTTOM	1	1898	23. CUTTING BOARD BRACKET BASE	2	11283
3. BOTTOM MOUNTING SCREWS	16	SC-2425	24. CUTTING BOARD BRACKET	2	BT-2342
4. INSULATION: 15" x 65" (381mm x 1651mm) PIECE	2	IN-22364	25. BRACKET TO BRACKET MTG. SCREWS	6	SC-2070
5. CABLE CONNECTION HARDWARE:			26. SELF-SERVE HEAT SHIELD	1	11112
— SHOULDER BUSHING	12	BU-3105	27. PAN GRID [NOT SHOWN]	3	PN-22048
— CUP BUSHING	12	BU-3106	PAN	1	11626
— HEX NUT	72	NU-2215	28. CUSTOMER HEAT GUARD	1	GD-2967
— RING CONNECTOR	12	CR-3226	29. GAS STRUT	2	SU-22431
— STUD	12	ST-2439	30. [NOT SHOWN]		
6. HEATING CABLE, 199' (60655mm)	1	CB-3045	OUTLET WITHOUT PROBE RETROFIT KIT	1	5955
7. CONTROL PLATE	2	11167	OUTLET WITH PROBE RETROFIT KIT	1	5983
CENTER CONTROL PLATE	1	11770	31. 4" (102mm) LEGS	6	LG-2044
CONTROL PLATE MOUNTING SCREWS	12	SC-2459			
8. THERMOSTAT	2	TT-3498			
THERMOSTAT KNOB	2	KN-3473			
9. PILOT LIGHT (120/240V)	2	LI-3027			
PILOT LIGHT (220V)	2	LI-3025			
10. LAMP SWITCH	3	SW-3616			
DIODE ASSEMBLY (120/240V only)	3	4775			
11. FUSE HOLDER (120V UNITS)	2	FU-33041			
INCLUDES:					
FUSE HOLDER BRACKET	1	12251			
FUSE, 15 AMP	2	FU-3775			
FUSE HOLDER MTG. SCREWS	4	SC-2425			
FUSE HOLDER BRACKET MTG. SCREWS	4	SC-2459			
12. TOP	1	1433			
13. TOP MOUNTING SCREWS	13	SC-2425			
14. HEAT LAMPS (120/240V)	10	LP-33592			
HEAT LAMPS (220V)	10	LP-3384			
15. LAMP SOCKET (120/240V)	10	RP-3952			
LAMP SOCKET (220V)	10	RP-3955			
16. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25028			
— L.H. INNER DOOR	1	DR-25031			
— L.H. OUTER DOOR	1	DR-25029			
— R.H. OUTER DOOR	1	DR-25030			
— R.H. INNER DOOR	1	DR-25032			
— OPTIONAL MIRRORRED GLASS DOOR ASB.	1	DR-25033			
— L.H. INNER MIRRORRED DOOR	1	DR-25036			
— L.H. OUTER MIRRORRED DOOR	1	DR-25034			
— R.H. OUTER MIRRORRED DOOR	1	DR-25035			
— R.H. INNER MIRRORRED DOOR	1	DR-25037			
— TOP TRACK	1	13009			
— GUIDES #44049	8	DR-22480F			
— DOOR BUMPER ASB.	2	DR-22480G			
— GUIDES	8	GI-2367			
17. DOOR RETAINER	4	11279			
DOOR RETAINER MOUNTING SCREWS	8	SC-2459			
18. GLASS, END	2	GL-2901			

DECOR PANELS:

Galvanized Steel

DECOR CUSTOM PANEL (specify color)	1	11508
DECOR END PANEL (specify color)	2	11483

Stainless Steel

DECOR CUSTOM PANEL	1	11485
DECOR END PANEL	2	11482

White Vinyl

DECOR CUSTOM PANEL	1	12715
DECOR END PANEL	2	12713

Red Vinyl

DECOR CUSTOM PANEL	1	12716
DECOR END PANEL	2	12714

SERVICE VIEW ■ ED-72/P — PAGE 13

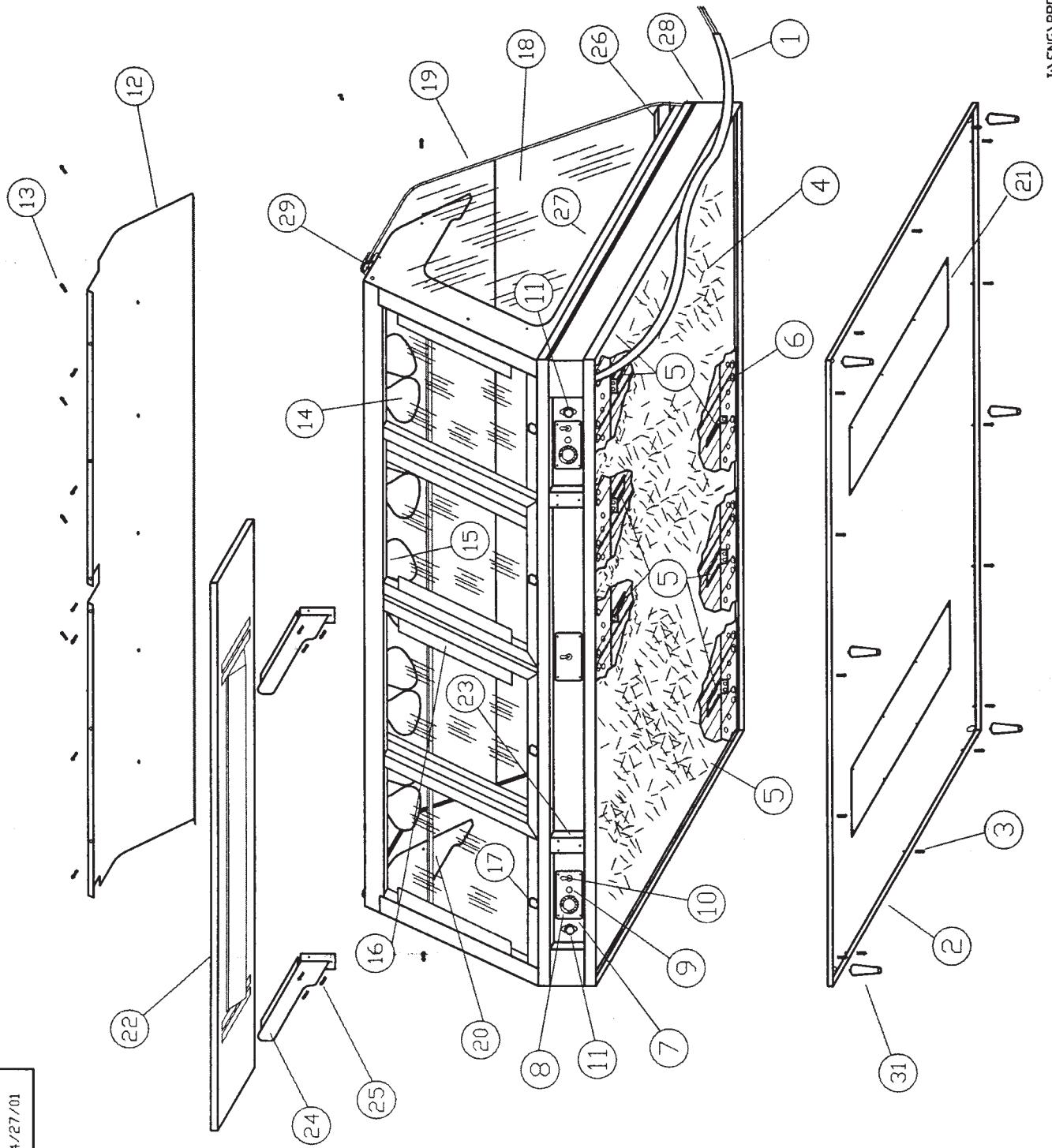
CAUTION

Hood glass extended to the full upright position is stabilized through the use of gas struts designed for the full load bearing weight. These struts could weaken or fail due to wear, environmental conditions or aging.

Operators should be aware of any decrease in effort to lift the hood and initiate an immediate gas strut safety check.


DO NOT LIFT THE HOOD IN THIS CONDITION.

ED-72/P
SERVICE VIEW
7-20-94 REV. 04/27/01

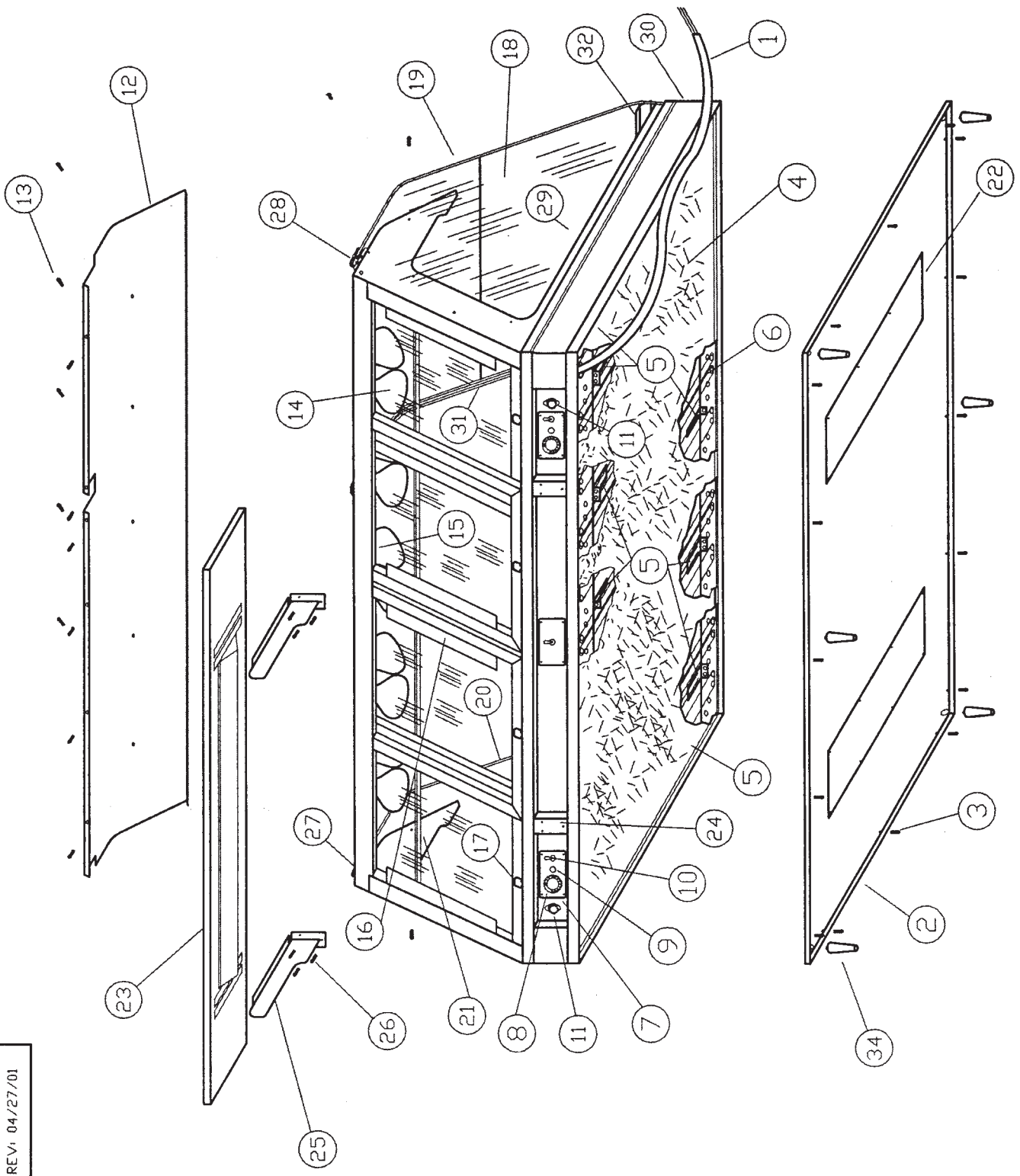


ED-72/PL PASS-THROUGH — LEFT SIDE

04/27/01

Part Description	Qty.	Alto-Shaam Part No.	Part Description	Qty.	Alto-Shaam Part No.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557	22. CAPILLARY COVER PLATE	2	11160
CORD, (220V), 7' (2134mm)	1	CD-3607	CAPILLARY PLATE MTG. SCREWS	16	SC-2459
CONNECTOR: 3/4" CABLE (120-240V)	1	CR-3293	23. CUTTING BOARD ASSEMBLY	1	4017
CONNECTOR: 1/2" CABLE (220V)	1	CR-33542	24. CUTTING BOARD BRACKET BASE	2	11283
PLUG (120/240V only)	1	PG-3267	25. CUTTING BOARD BRACKET	2	BT-2342
2. BOTTOM	1	1898	26. BRACKET TO BRACKET MTG. SCREWS	6	SC-2070
3. BOTTOM MOUNTING SCREWS	16	SC-2425	27. GAS STRUT (FRONT GLASS)	1	SU-2870
4. INSULATION: 15" x 65" (381mm x 1651mm) PIECE	2	IN-22364	28. GAS STRUT (SELF-SERVE GLASS)	1	SU-22431
5. CABLE CONNECTION HARDWARE:			29. [NOT SHOWN]		
— SHOULDER BUSHING	12	BU-3105	FULL-SIZE PAN DIVIDER [LONG]	4	11317
— CUP BUSHING	12	BU-3106	ONE-HALF/ONE-THIRD PAN DIVIDER [SHORT]	15	11318
— HEX NUT	72	NU-2215	SHEET PAN DIVIDER [short]	3	11320
— RING CONNECTOR	12	CR-3226	SHEET PAN DIVIDER [long]	2	11357
— STUD	12	ST-2439	GASTRONORM PAN DIVIDER (220V only)	4	1865
6. HEATING CABLE, 199' (60655mm)	1	CB-3045	SELF-SERVE PAN GRID	1	PN-22048
7. CONTROL PLATE	2	11167	SELF-SERVE PAN	1	11628
CENTER CONTROL PLATE	1	11770	30. CUSTOMER HEAT GUARD	1	GD-2966
CONTROL PLATE MOUNTING SCREWS	12	SC-2459	DRAFT STRIP	1	1246
8. THERMOSTAT	2	TT-3498	DRAFT STRIP GASKET: 3.5' (1067mm)	1	GS-22441
THERMOSTAT KNOB	2	KN-3473	31. CENTER GLASS DIVIDER	1	GL-22049
9. PILOT LIGHT (120/240V)	2	LI-3027	32. SELF-SERVE HEAT SHIELD	1	11112
PILOT LIGHT (220V)	2	LI-3025	33. [NOT SHOWN]		
10. LAMP SWITCH	3	SW-3616	OUTLET WITHOUT PROBE RETROFIT KIT	1	5955
DIODE ASSEMBLY (120/240V only)	3	4775	OUTLET WITH PROBE RETROFIT KIT	1	5983
11. FUSE HOLDER (120V UNITS)	2	FU-33041	34. 4" (102mm) LEGS	6	LG-2044
INCLUDES:					
FUSE HOLDER BRACKET	2	12251	DECOR PANELS:		
FUSE, 15 AMP	2	FU-3775	Galvanized Steel		
FUSE HOLDER MTG. SCREWS	4	SC-2425	DECOR CUSTOM PANEL (SPECIFY COLOR)	1	11508
FUSE HOLDER BRACKET MTG. SCREWS	4	SC-2459	DECOR END PANEL (SPECIFY COLOR)	2	11483
12. TOP	1	11636	Stainless Steel		
13. TOP MOUNTING SCREWS	13	SC-2425	DECOR CUSTOM PANEL	1	11485
14. HEAT LAMPS (120/240V)	10	LP-33592	DECOR END PANEL	2	11482
HEAT LAMPS (220V)	10	LP-3384	White Vinyl		
15. LAMP SOCKET (120/240V)	10	RP-3952	DECOR CUSTOM PANEL	1	12715
LAMP SOCKET (220V)	10	RP-3955	DECOR END PANEL	2	12713
16. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25028	Red Vinyl		
— L.H. INNER DOOR	1	DR-25031	DECOR CUSTOM PANEL	1	12716
— L.H. OUTER DOOR	1	DR-25029	DECOR END PANEL	2	12714
— R.H. OUTER DOOR	1	DR-25030	SERVICE VIEW ■ ED-72/PL — PAGE 15		
— R.H. INNER DOOR	1	DR-25032	<div style="display: flex; align-items: center; justify-content: center;">  <div> <p><i>At no time should the unit be steam cleaned, flooded with water or liquid solution. Severe damage or electrical hazard could result.</i></p> <p>CAUTION</p> </div> </div>		
— OPTIONAL MIRRORED GLASS DOOR ASB.	1	DR-25033			
— L.H. INNER MIRRORED DOOR	1	DR-25036			
— L.H. OUTER MIRRORED DOOR	1	DR-25034			
— R.H. OUTER MIRRORED DOOR	1	DR-25035			
— R.H. INNER MIRRORED DOOR	1	DR-25037			
— TOP TRACK	1	13009			
— GUIDES #44049	8	DR-22480F			
— DOOR BUMPER ASB.	2	DR-22480G			
— GUIDES	8	GI-2367			
17. DOOR RETAINER	4	11279			
DOOR RETAINER MOUNTING SCREWS	8	SC-2459			
18. GLASS END	2	GL-2901			
19. SELF-SERVE GLASS	1	GL-22047			
20. GLASS, FRONT	1	GL-2798			
21. LIGHT GUARD	1	4832			

ED-72/PL
SERVICE VIEW
7-20-94 REV: 04/27/01



ED-72/PR PASS-THROUGH — RIGHT SIDE

04/27/01

		Alto-Shaam Part No.			Alto-Shaam Part No.
Part Description	Qty.		Part Description	Qty.	
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557	22. CAPILLARY COVER PLATE	2	11160
CORD, (220V), 7' (2134mm)	1	CD-3607	CAPILLARY PLATE MTG. SCREWS	16	SC-2459
CONNECTOR: 3/4" CABLE (120/240V)	1	CR-3293	23. CUTTING BOARD ASSEMBLY	1	4017
CONNECTOR: 1/2" CABLE (220V)	1	CR-33542	24. CUTTING BOARD BRACKET BASE	2	11283
PLUG (120/240V only)	1	PG-3267	25. CUTTING BOARD BRACKET	2	BT-2342
2. BOTTOM	1	1898	26. BRACKET TO BRACKET MTG. SCREWS	6	SC-2070
3. BOTTOM MOUNTING SCREWS	16	SC-2425	27. GAS STRUT (FRONT GLASS)	1	SU-2870
4. INSULATION: 15" X 65" (381mm x 1651mm) PIECE	2	IN-22364	28. GAS STRUT (SELF-SERVE GLASS)	1	SU-22431
5. CABLE CONNECTION HARDWARE:			29. [NOT SHOWN]		
— SHOULDER BUSHING	12	BU-3105	FULL-SIZE PAN DIVIDER [LONG]	4	11317
— CUP BUSHING	12	BU-3106	ONE-HALF/ONE-THIRD PAN DIVIDER [SHORT]	15	11318
— HEX NUT	72	NU-2215	SHEET PAN DIVIDER [SHORT]	3	11320
— RING CONNECTOR	12	CR-3226	SHEET PAN DIVIDER [LONG]	2	11357
— STUD	12	ST-2439	GASTRONORM PAN DIVIDER (220V only)	4	1865
6. HEATING CABLE, 199' (60655mm)	1	CB-3045	SELF-SERVE PAN GRID	1	PN-22048
7. CONTROL PLATE	2	11167	SELF-SERVE PAN	1	11628
CENTER CONTROL PLATE	1	11770	30. CUSTOMER HEAT GUARD	1	GD-2966
CONTROL PLATE MOUNTING SCREWS	12	SC-2459	DRAFT STRIP	1	1246
8. THERMOSTAT	2	TT-3498	DRAFT STRIP GASKET: 3.5" (1067mm)	1	GS-22441
THERMOSTAT KNOB	2	KN-3473	31. CENTER GLASS DIVIDER	1	GL-22049
9. PILOT LIGHT (120/240V)	2	LI-3027	32. SELF-SERVE HEAT SHIELD	1	11112
PILOT LIGHT (220V)	2	LI-3025	33. [NOT SHOWN]		
10. LAMP SWITCH	3	SW-3616	OUTLET WITHOUT PROBE RETROFIT KIT	1	5955
DIODE ASSEMBLY (120/240V only)	3	4775	OUTLET WITH PROBE RETROFIT KIT	1	5983
11. FUSE HOLDER (120V UNITS)	2	FU-33041	34. 4" (102mm) LEGS	6	LG-2044
INCLUDES:					
FUSE HOLDER BRACKET	2	12251			
FUSE, 15 AMP	2	FU-3775			
FUSE HOLDER MTG. SCREWS	4	SC-2425			
FUSE HOLDER BRACKET MTG. SCREWS	4	SC-2459			
12. TOP	1	11632			
13. TOP MOUNTING SCREWS	13	SC-2425			
14. HEAT LAMPS (120/240V)	10	LP-33592			
HEAT LAMPS (220V)	10	LP-3384			
15. LAMP SOCKET (120/240V)	10	RP-3952			
LAMP SOCKET (220V)	10	RP-3955			
16. GLASS DOOR ASSEMBLY: INCLUDES	1	DR-25028			
— L.H. INNER DOOR	1	DR-25031			
— L.H. OUTER DOOR	1	DR-25029			
— R.H. OUTER DOOR	1	DR-25030			
— R.H. INNER DOOR	1	DR-25032			
— OPTIONAL MIRRORED GLASS DOOR ASB.	1	DR-25033			
— L.H. INNER MIRRORED DOOR	1	DR-25036			
— L.H. OUTER MIRRORED DOOR	1	DR-25034			
— R.H. OUTER MIRRORED DOOR	1	DR-25035			
— R.H. INNER MIRRORED DOOR	1	DR-25037			
— TOP TRACK	1	13009			
— GUIDES #44049	8	DR-22480F			
— DOOR BUMPER ASB.	2	DR-224480G			
— GUIDES	8	GI-2367			
17. DOOR RETAINER	4	11279			
DOOR RETAINER MOUNTING SCREWS	8	SC-2459			
18. GLASS END	2	GL-2901			
19. GLASS, FRONT	1	GL-22047			
20. GLASS, LIFT-UP	1	GL-2798			
21. LIGHT GUARD	1	4832			

DECOR PANELS:

Galvanized Steel

DECOR CUSTOM PANEL (SPECIFY COLOR)	1	11508
DECOR END PANEL (SPECIFY COLOR)	2	11483

Stainless Steel

DECOR CUSTOM PANEL	1	11485
DECOR END PANEL	2	11482

White Vinyl

DECOR CUSTOM PANEL	1	12715
DECOR END PANEL	2	12713

Red Vinyl

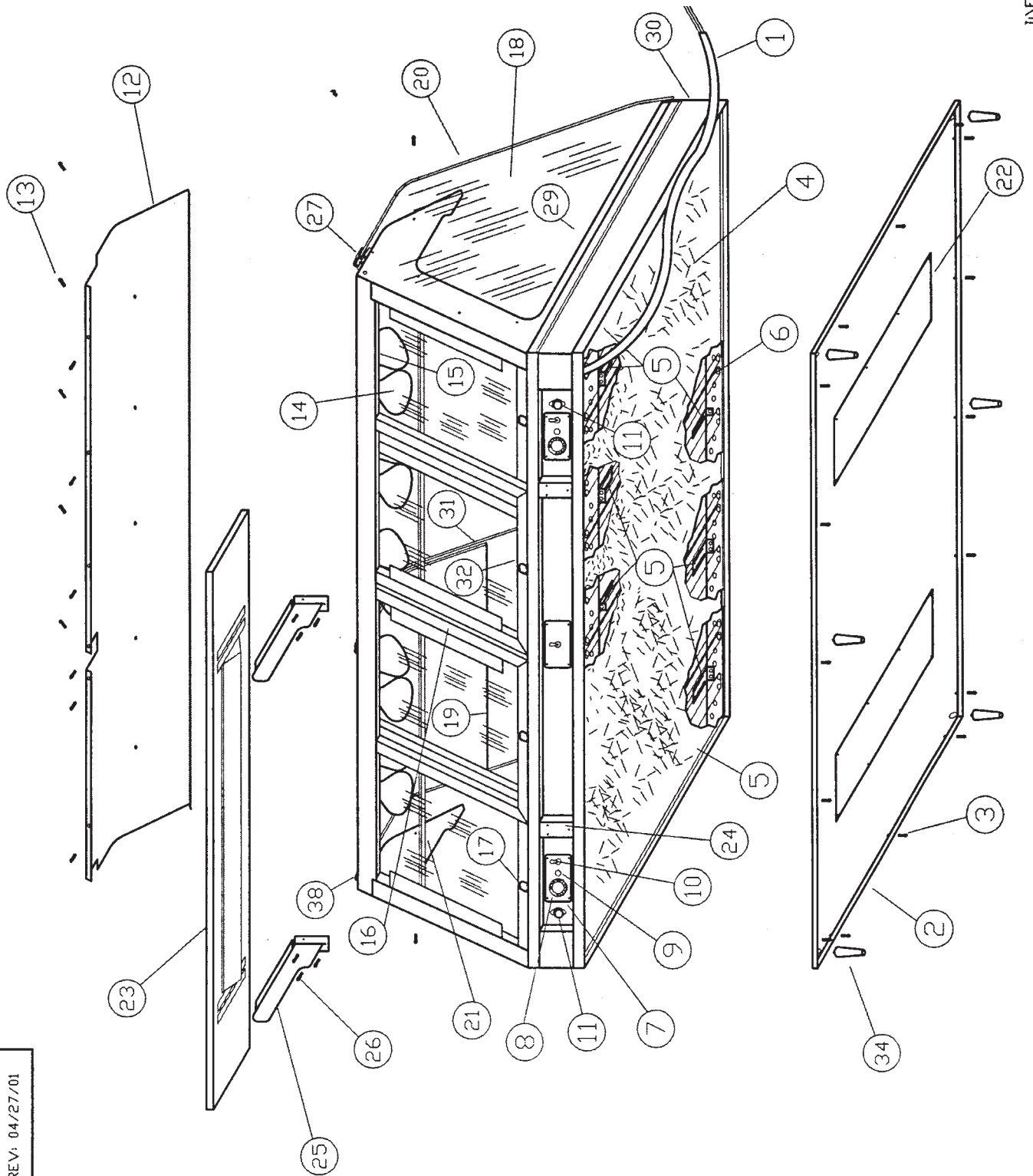
DECOR CUSTOM PANEL	1	12716
DECOR END PANEL	2	12714

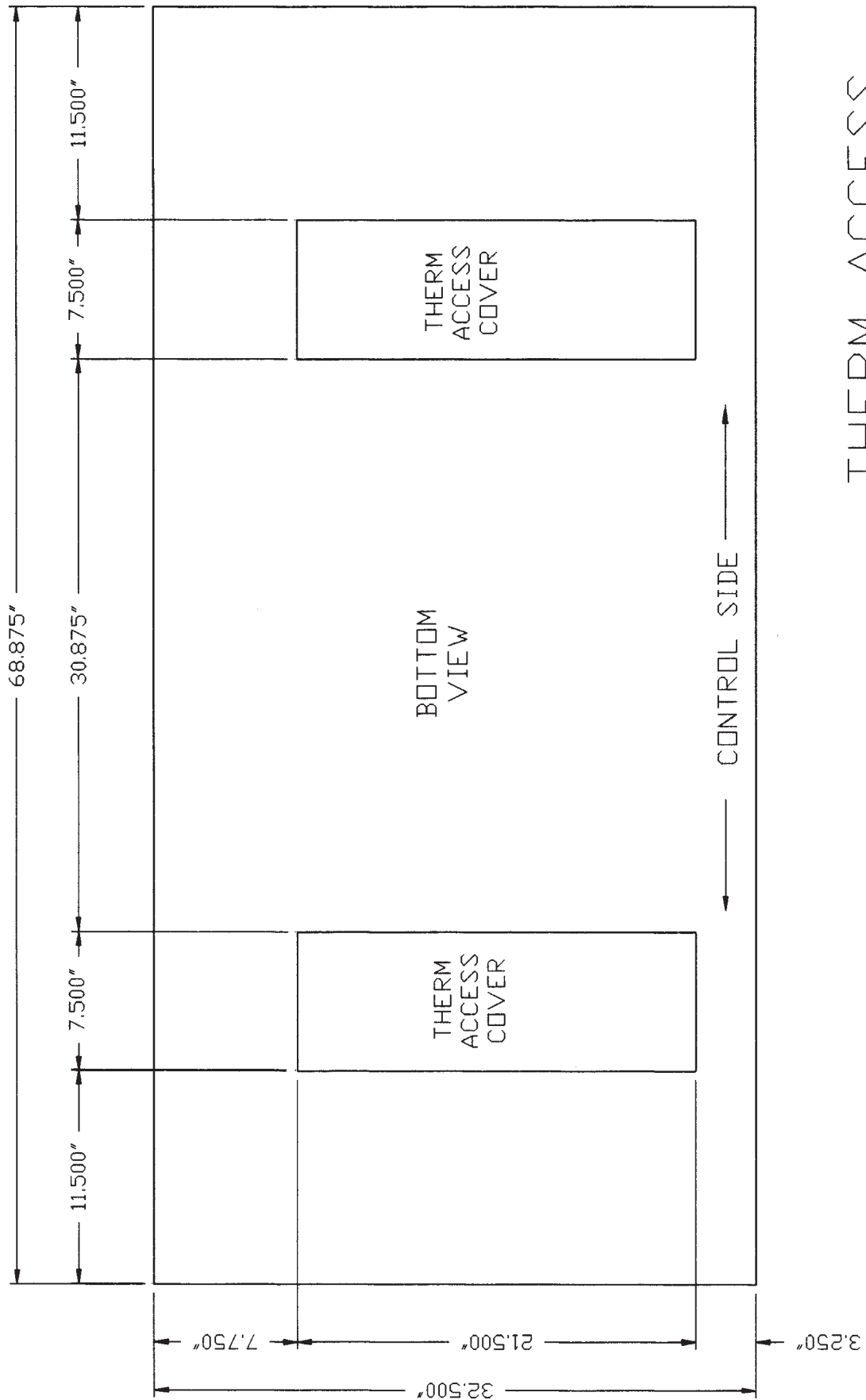
SERVICE VIEW ■ ED-72/PR — PAGE 17



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

ED-72/PR
 SERVICE VIEW
 7-20-94 REV. 04/27/01





THERM ACCESS
 PANEL LOCATION

A-8675

ED-72

3-24-93 RS

ED-96/PL PASS-THROUGH — LEFT SIDE

04/27/01					
Part Description	Qty.	Alto-Shaam Part No.	Part Description	Qty.	Alto-Shaam Part No.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557	24. CUTTING BOARD ASSEMBLY	1	4016
CORD, (220V), 7' (2134mm)	1	CD-3304	25. CUTTING BOARD BRACKET BASE	4	11283
CONNECTOR: 3/4" CABLE (120/240V)	1	CR-3293	26. CUTTING BOARD BRACKET	4	BT-2342
CONNECTOR: 1/2" CABLE (220V)	1	CR-33542	27. BRACKET TO BRACKET MTG. SCREWS	12	SC-2070
PLUG (120/240V only)	1	PG-3267	28. GAS STRUT (FRONT GLASS)	1	SU-2870
2. BOTTOM	1	11249	29. GAS STRUT (SELF-SERVE GLASS)	1	SU-22431
3. BOTTOM MOUNTING SCREWS	18	SC-2425	30. [NOT SHOWN]		
4. INSULATION:			FULL-SIZE PAN DIVIDER [LONG]	6	11317
15" x 96" (381mm x 2438mm) pieces	2	IN-22364	ONE-HALF/ONE-THIRD PAN DIVIDER [SHORT]	21	11318
5. CABLE CONNECTION HARDWARE:			SHEET PAN DIVIDER [SHORT]	4	11320
— SHOULDER BUSHING	6	BU-3105	SHEET PAN DIVIDER [LONG]	3	11357
— CUP BUSHING	6	BU-3106	GASTRONORM PAN DIVIDER (220V only)	6	1865
— HEX NUT	36	NU-2215	SELF-SERVE PAN GRID	1	PN-22048
— RING CONNECTOR	6	CR-3226	SELF-SERVE PAN	1	11628
— STUD	6	ST-2439	SHEET PAN FILLER — 3-3/4" (95mm)	1	11732
6. HEATING CABLE, 183' (55778mm)	1	CB-3045	31. CUSTOMER HEAT GUARD	1	GD-2967
7. CONTROL PLATE	3	11167	DRAFT STRIP	1	1247
8. CONTROL PLATE MOUNTING SCREWS	12	SC-2459	DRAFT STRIP GASKET: 5.6' (1707mm)	1	GS-22441
9. THERMOSTAT	3	TT-3498	32. CENTER GLASS DIVIDER	1	GL-22049
THERMOSTAT KNOB	3	KN-3473	33. SELF-SERVE HEAT SHIELD	1	11112
10. PILOT LIGHT (120/240V)	3	LI-3025	34. [not shown]		
11. LAMP SWITCH	3	SW-3616	OUTLET WITHOUT PROBE RETROFIT KIT	1	5955
DIODE ASSEMBLY [120/240V only]	3	4775	OUTLET WITH PROBE RETROFIT KIT	1	5983
12. FUSE HOLDER (120V UNITS)	1	FU-33041	35. 4" (102mm) LEGS	6	LG-2044
INCLUDES:					
FUSE HOLDER BRACKET	1	12251			
FUSE, 20 AMP	1	FU-33042			
FUSE HOLDER MTG. SCREWS	2	SC-2425			
FUSE HOLDER BRACKET MTG. SCREWS	2	SC-2459			
13. TOP	1	11643			
14. TOP MOUNTING SCREWS	17	SC-2425			
15. HEAT LAMPS (120/240V)	14	LP-33592			
HEAT LAMPS (220V)	14	LP-3384			
16. LAMP SOCKET (120/240V)	14	RP-3952			
LAMP SOCKET (220V)	14	RP-3955			
17. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25038			
— L.H. INNER DOOR	1	DR-25041			
— L.H. OUTER DOOR	1	DR-25039			
— R.H. OUTER DOOR	1	DR-25040			
— R.H. INNER DOOR	1	DR-25042			
— OPTIONAL MIRRORED GLASS DOOR ASB.	1	DR-25043			
— L.H. INNER MIRRORED DOOR	1	DR-25046			
— L.H. OUTER MIRRORED DOOR	1	DR-25044			
— R.H. OUTER MIRRORED DOOR	1	DR-25045			
— R.H. INNER MIRRORED DOOR	1	DR-25047			
— TOP TRACK	1	13010			
— GUIDES #44049	8	DR-22480F			
— DOOR BUMPER ASB.	2	DR-22480G			
— GUIDES	8	GI-2367			
18. DOOR RETAINERS	4	11279			
DOOR RETAINER MOUNTING SCREWS	8	SC-2459			
19. GLASS, END	2	GL-2901			
20. SELF-SERVE GLASS	1	GL-2961			
21. GLASS, FRONT	1	GL-2799			
22. LIGHT GUARD	1	4885			
23. CAPILLARY COVER PLATE	3	11160			
CAPILLARY PLATE MTG. SCREWS	24	SC-2459			

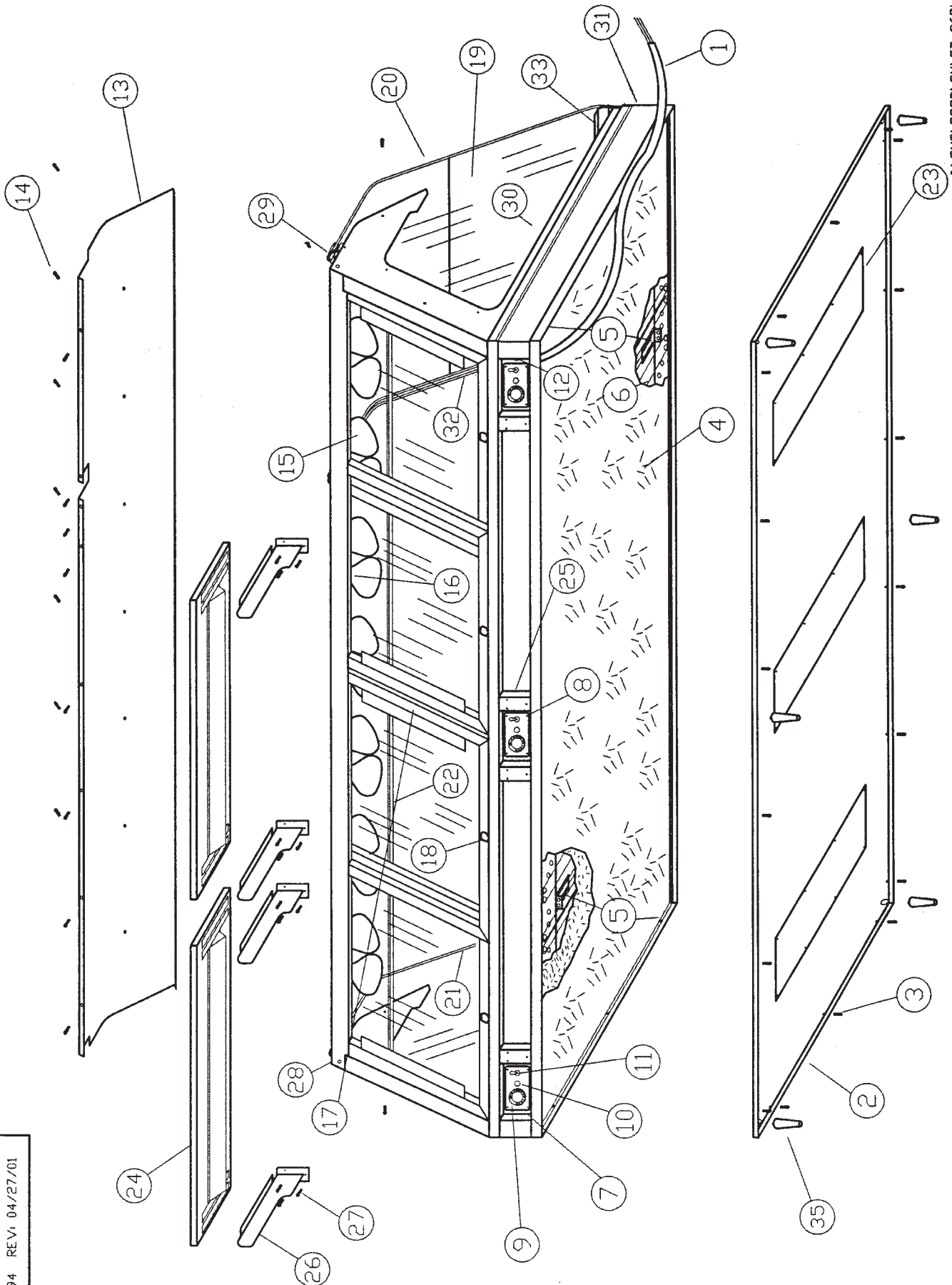
DECOR PANELS:		
Galvanized Steel		
DECOR CUSTOM PANEL (SPECIFY COLOR)	1	11601
DECOR END PANEL (SPECIFY COLOR)	2	11483
Stainless Steel		
DECOR CUSTOM PANEL	1	11600
DECOR END PANEL	2	11482
White Vinyl		
DECOR CUSTOM PANEL	1	12717
DECOR END PANEL	2	12713
Red Vinyl		
DECOR CUSTOM PANEL	1	12718
DECOR END PANEL	2	12714

SERVICE VIEW ■ ED-96/PL — PAGE 20



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

ED-96/PL
SERVICE VIEW
7-20-94 REV: 04/27/01



J:\ENGIN\PRODD\SM\ED-96PL.DWG

ED-96/PR PASS-THROUGH — RIGHT SIDE

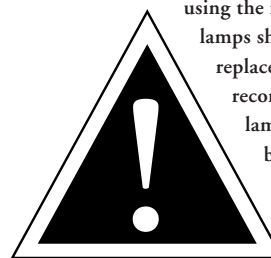
04/27/01

		Alto-Shaam Part No.			Alto-Shaam Part No.
Part Description	Qty.		Part Description	Qty.	
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557	25. CUTTING BOARD BRACKET BASE	4	11283
CORD, (220V), 7' (2134mm)	1	CD-3304	26. CUTTING BOARD BRACKET	4	BT-2342
CONNECTOR: 3/4" CABLE	1	CR-3293	27. BRACKET TO BRACKET MTG. SCREWS	12	SC-2070
CONNECTOR: 1/2" CABLE	1	CR-33542	28. GAS STRUT (FRONT GLASS)	1	SU-2870
PLUG (120/240V only)	1	PG-3267	29. GAS STRUT (SELF-SERVE GLASS)	1	SU-22431
2. BOTTOM	1	11249	30. [NOT SHOWN]		
3. BOTTOM MOUNTING SCREWS	18	SC-2425	FULL-SIZE PAN DIVIDER [LONG]	6	11317
4. INSULATION:			ONE-HALF/ONE-THIRD PAN DIVIDER [SHORT]	21	11318
15" x 96" (381mm x 2438mm) pieces	2	IN-22364	SHEET PAN DIVIDER [SHORT]	4	11320
5. CABLE CONNECTION HARDWARE:			SHEET PAN DIVIDER [LONG]	3	11357
— SHOULDER BUSHING	6	BU-3105	GASTRONORM PAN DIVIDER (220V only)	6	1865
— CUP BUSHING	6	BU-3106	SELF-SERVE PAN GRID	1	PN-22048
— HEX NUT	36	NU-2215	SELF-SERVE PAN	1	11628
— RING CONNECTOR	6	CR-3226	SHEET PAN FILLER — 3-3/4" (95mm)	1	11732
— STUD	6	ST-2439	31. CUSTOMER HEAT GUARD	1	GD-2967
6. HEATING CABLE, 183' (55778mm)	1	CB-3045	DRAFT STRIP	1	1247
7. CONTROL PLATE	3	11167	DRAFT STRIP GASKET: 5.6' (1707mm)	1	GS-22441
8. CONTROL PLATE MOUNTING SCREWS	12	SC-2459	32. CENTER GLASS DIVIDER	1	GL-22049
9. THERMOSTAT	3	TT-3498	33. SELF-SERVE HEAT SHIELD	1	11112
THERMOSTAT KNOB	3	KN-3473	34. [NOT SHOWN]		
10. PILOT LIGHT (120/240V)	3	LI-3025	OUTLET WITHOUT PROBE RETROFIT KIT	1	5955
11. LAMP SWITCH	3	SW-3616	OUTLET WITH PROBE RETROFIT KIT	1	5983
DIODE ASSEMBLY [120/240V only]	3	4775	35. 4" (102mm) LEGS	6	LG-2044
12. FUSE HOLDER (120V UNITS)	1	FU-33041			
INCLUDES:			DECOR PANELS:		
FUSE HOLDER BRACKET	1	12251	Galvanized Steel		
FUSE, 20 AMP	1	FU-33042	DECOR CUSTOM PANEL (SPECIFY COLOR)	1	11601
FUSE HOLDER MTG. SCREWS	2	SC-2425	DECOR END PANEL (SPECIFY COLOR)	2	11483
FUSE HOLDER BRACKET MTG. SCREWS	2	SC-2459	Stainless Steel		
13. TOP	1	11637	DECOR CUSTOM PANEL	1	11600
14. TOP MOUNTING SCREWS	17	SC-2425	DECOR END PANEL	2	11482
15. HEAT LAMPS (120/240V)	14	LP-33592	White Vinyl		
HEAT LAMPS (220V)	14	LP-3384	DECOR CUSTOM PANEL	1	12717
16. LAMP SOCKET (120/240V)	14	RP-3952	DECOR END PANEL	2	12713
LAMP SOCKET (220V)	14	RP-3955	Red Vinyl		
17. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25038	DECOR CUSTOM PANEL	1	12718
— L.H. INNER DOOR	1	DR-25041	DECOR END PANEL	2	12714
— L.H. OUTER DOOR	1	DR-25039			
— R.H. OUTER DOOR	1	DR-25040			
— R.H. INNER DOOR	1	DR-25042			
— OPTIONAL MIRRORED GLASS DOR ASB.	1	DR-25043			
— L.H. INNER MIRRORED DOOR	1	DR-25046			
— L.H. OUTER MIRRORED DOOR	1	DR-25044			
— R.H. OUTER MIRRORED DOOR	1	DR-25045			
— R.H. INNER MIRRORED DOOR	1	DR-25047			
— TOP TRACK	1	13010			
— GUIDES #44049	8	DR-22480F			
— DOOR BUMPER ASB.	2	DR-22480G			
— GUIDES	8	GI-2367			
18. DOOR RETAINERS	4	11279			
DOOR RETAINER MOUNTING SCREWS	8	SC-2459			
19. GLASS, END	2	GL-2901			
20. SELF-SERVE GLASS	1	GL-2961			
21. GLASS FRONT	1	GL-2799			
22. LIGHT GUARD	1	4885			
23. CAPILLARY COVER PLATE	3	11160			
CAPILLARY PLATE MTG. SCREWS	24	SC-2459			
24. CUTTING BOARD ASSEMBLY	1	4016			

SERVICE VIEW ■ ED-96/PR — PAGE 22

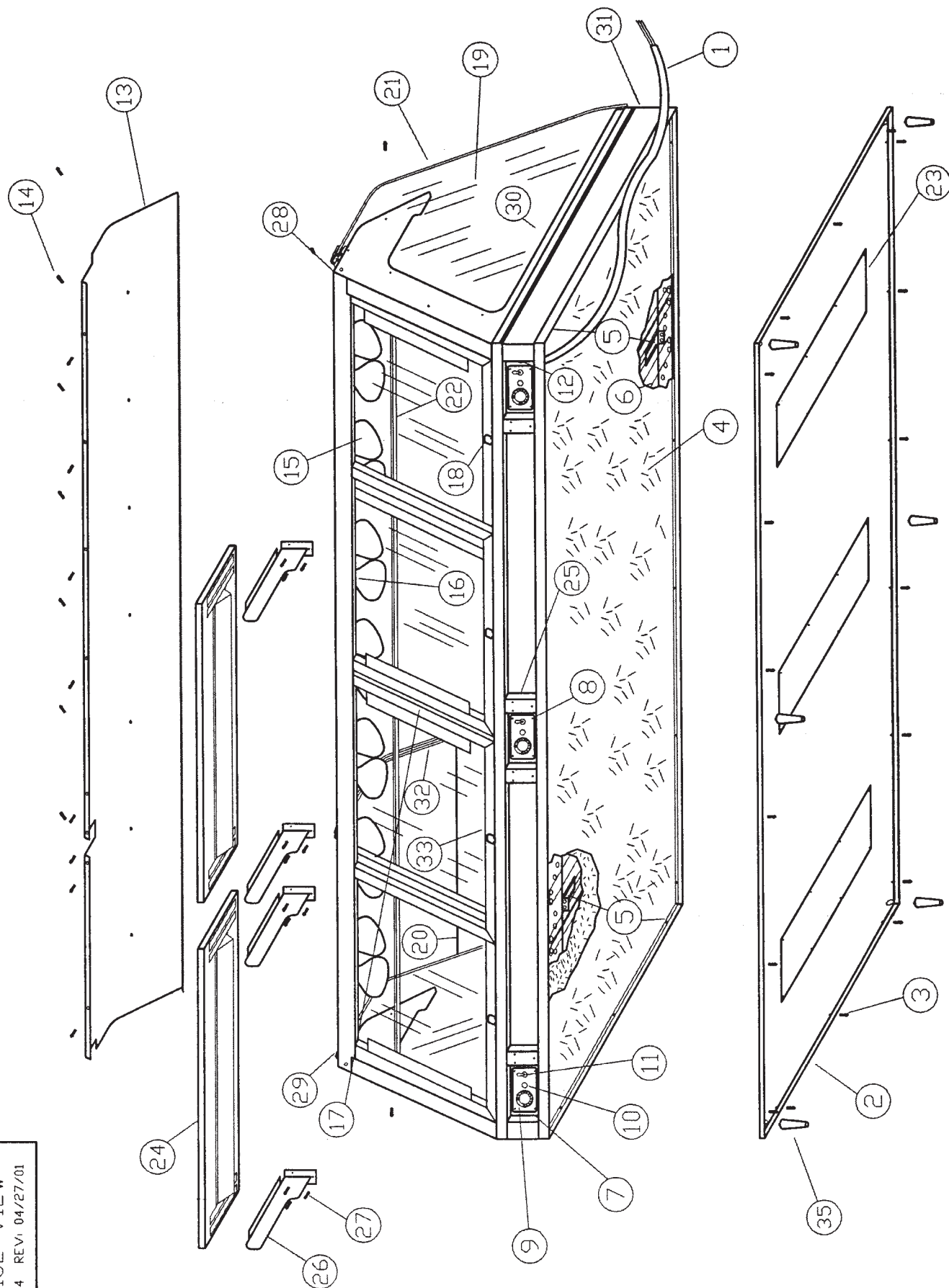
SAFETY ALERT

This units performance has been optimized using the factory provided lamps. These lamps should be replaced with an exact replacement or with a factory recommended replacement. These lamps have been treated to resist breakage and must be replaced with similarly treated lamps in order to maintain compliance with NSF standards.



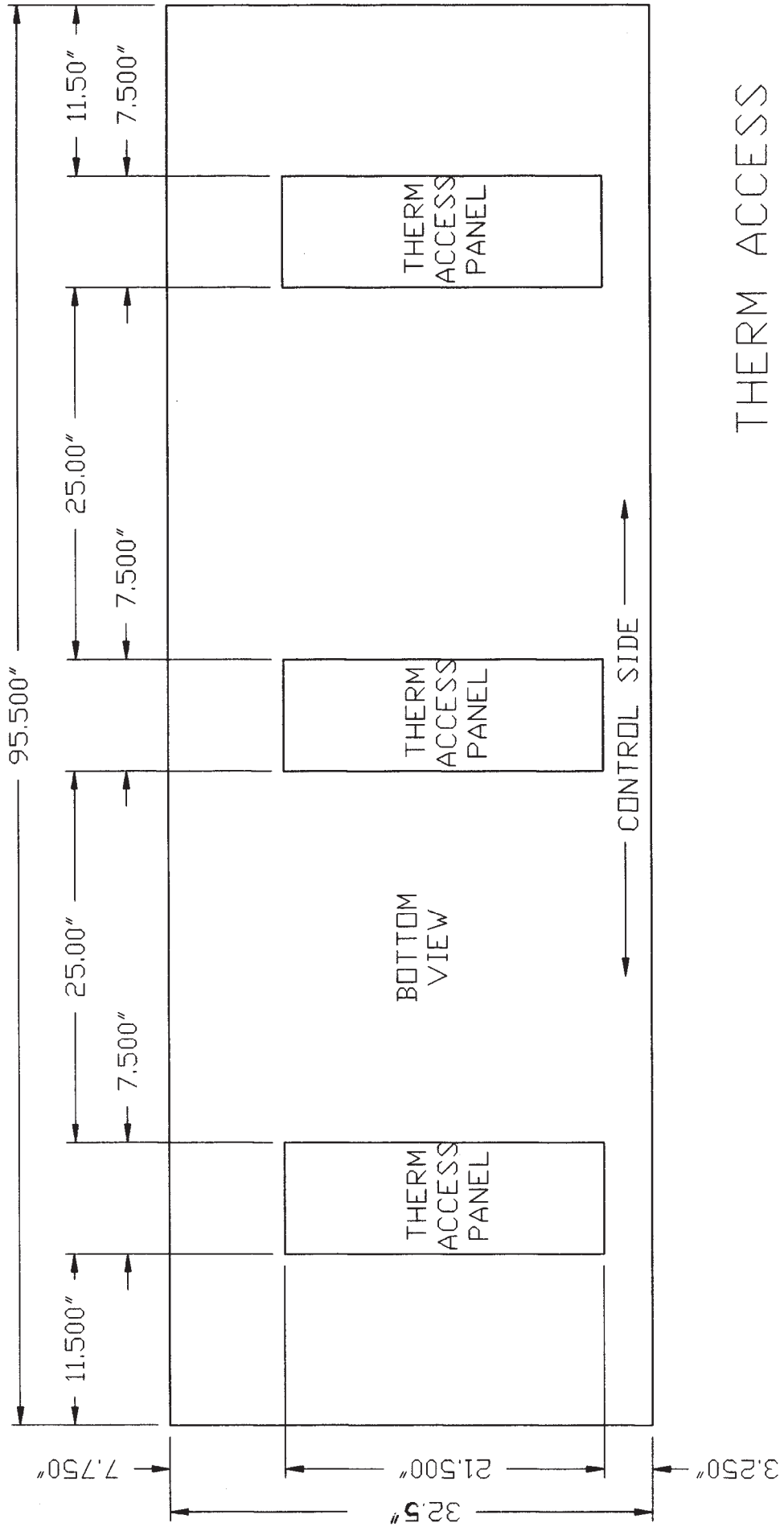
CAUTION

ED-96/PR
 SERVICE VIEW
 7-20-94 REV. 04/27/01



IN ENG PROD W SH ED-96 PR DWG

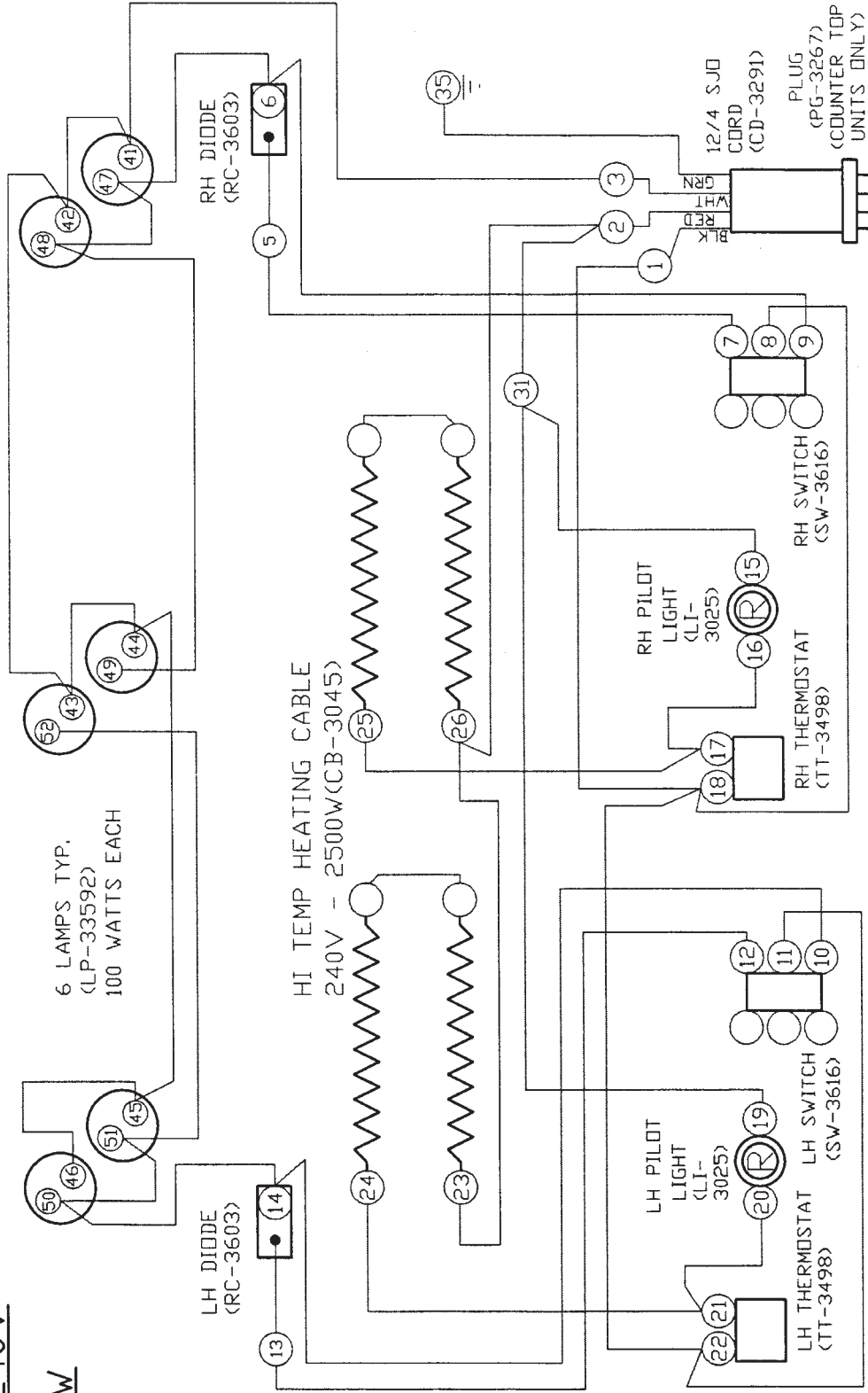
ED-96



THERM ACCESS
PANEL LOCATION

A-8676

120/240V
60HZ
3400W
18.0A



WIRING DIAGRAM

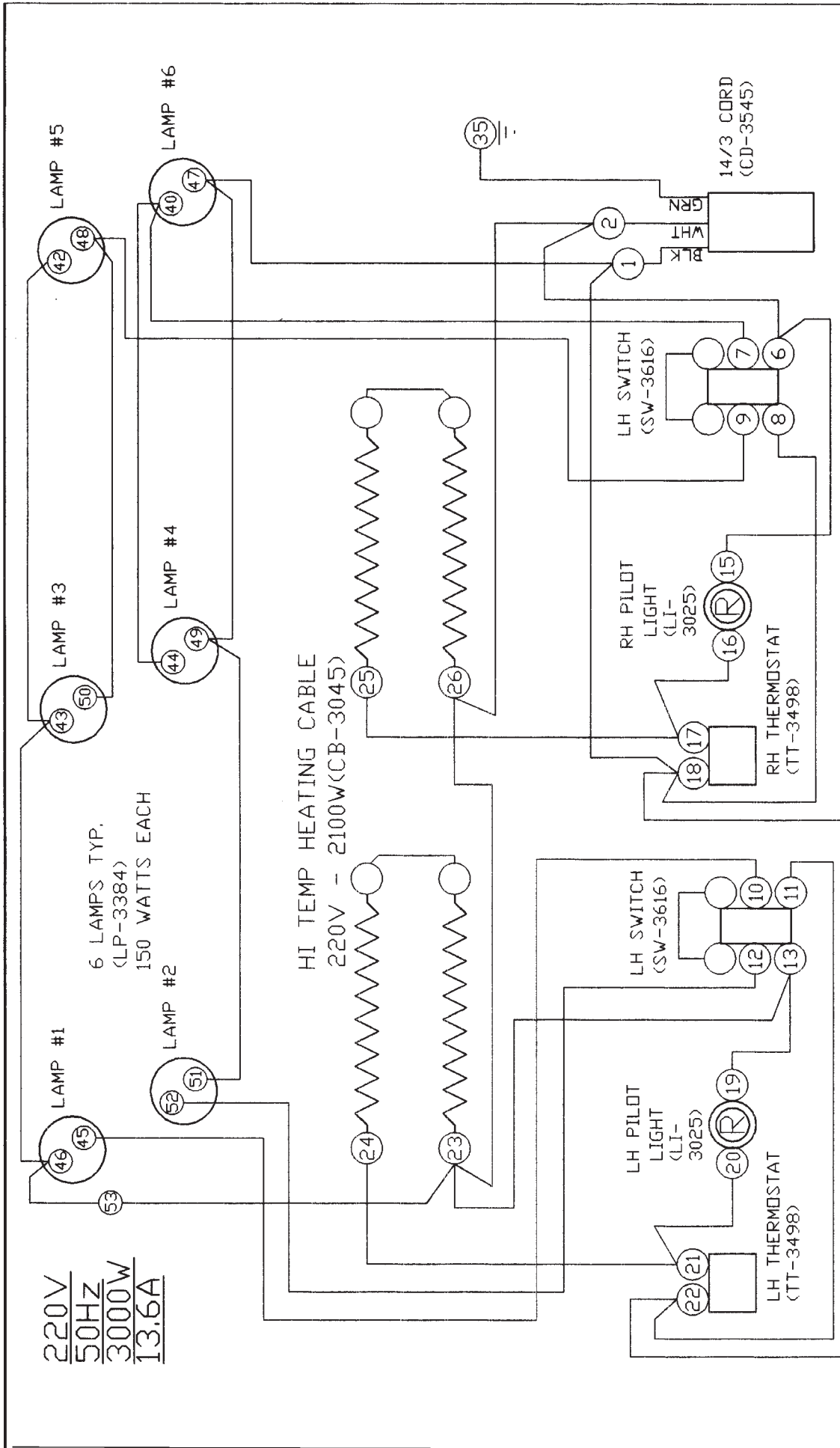
MODELS: ED-48, ED-48/P 120-240V

ALTO-SHAAM®
 MENOMONEE FALLS, WISC. 53052-450

BY: ALD SCALE: NONE DWG: A-7277
 APP'D: DAR DATE: 11/13/86

NO.	REVISION	BY
1	03/23/87	ALD
2	09/06/88	ALD
3	08/29/90	ALD
4	03/01/93	LRV
5	01/15/01	NW

NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NO'S
 NOTE #2: SEE DRW. #B-8571 FOR WIRE ASSEMBLIES



220V
50HZ
3000W
13.6A

6 LAMPS TYP.
(LP-3384)
150 WATTS EACH

HI TEMP HEATING CABLE
220V - 2100W(CB-3045)

14/3 CORD
(CD-3545)

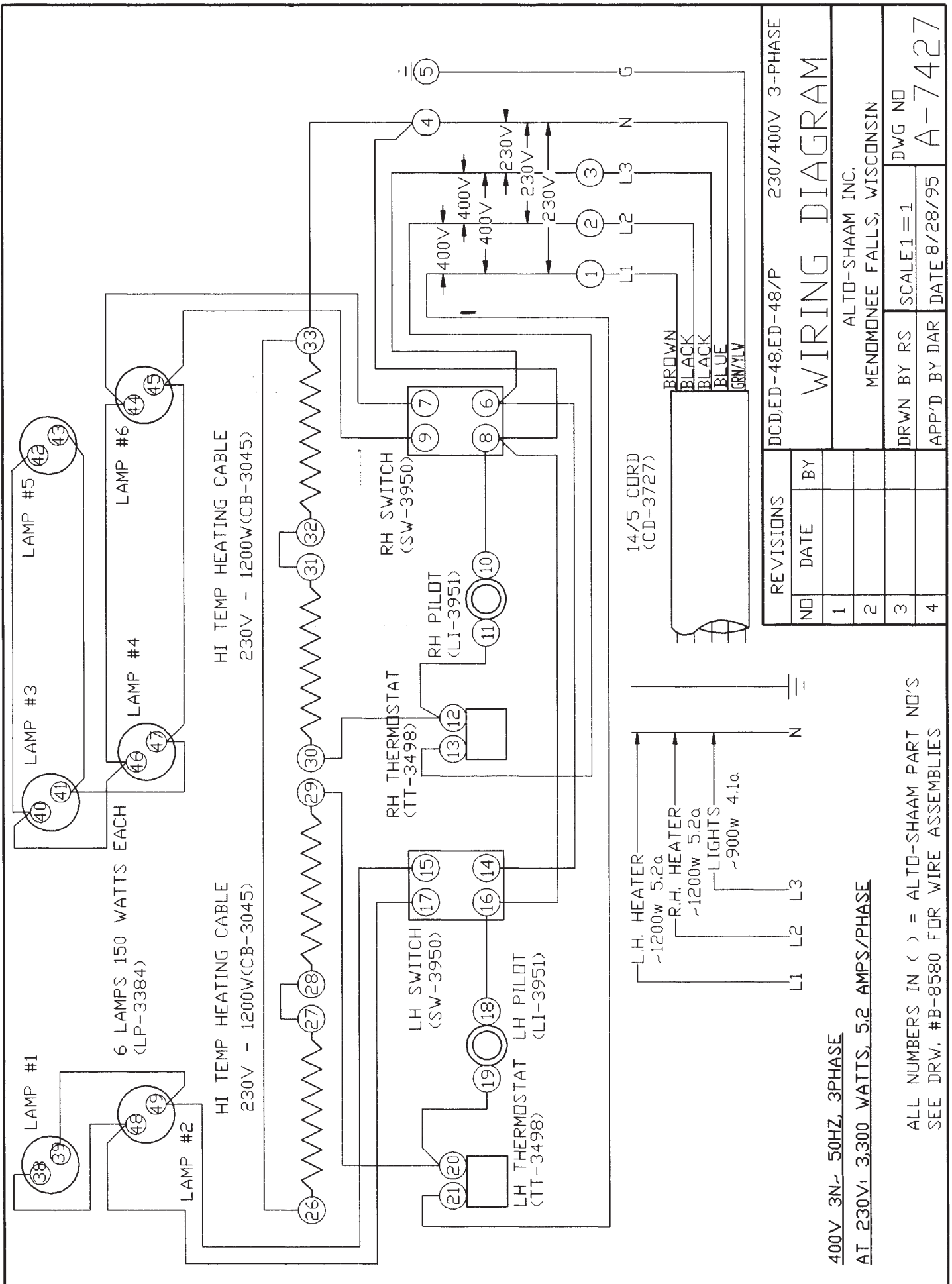
REVISIONS		DCD,ED-48,ED-48/P		220V	
NO	DATE	BY		SCALE	DWG NO
1	06-23-88	ALD		1=1	A-7288
2	09-06-88	ALD			
3	02-23-95	RS			
4					

WIRING DIAGRAM
ALTO-SHAAM INC.
MENDONNEE FALLS, WISCONSIN

DRWN BY ALD
APP'D BY [Signature]
DATE 3-23-87

NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NO'S

NOTE #2: SEE DRW. #B-8580 FOR WIRE ASSEMBLIES



REVISIONS		DCD,ED-48,ED-48/P	230/400V 3-PHASE
NO	DATE	BY	
1			
2			
3			
4			

WIRING DIAGRAM

ALTO-SHAAM INC.

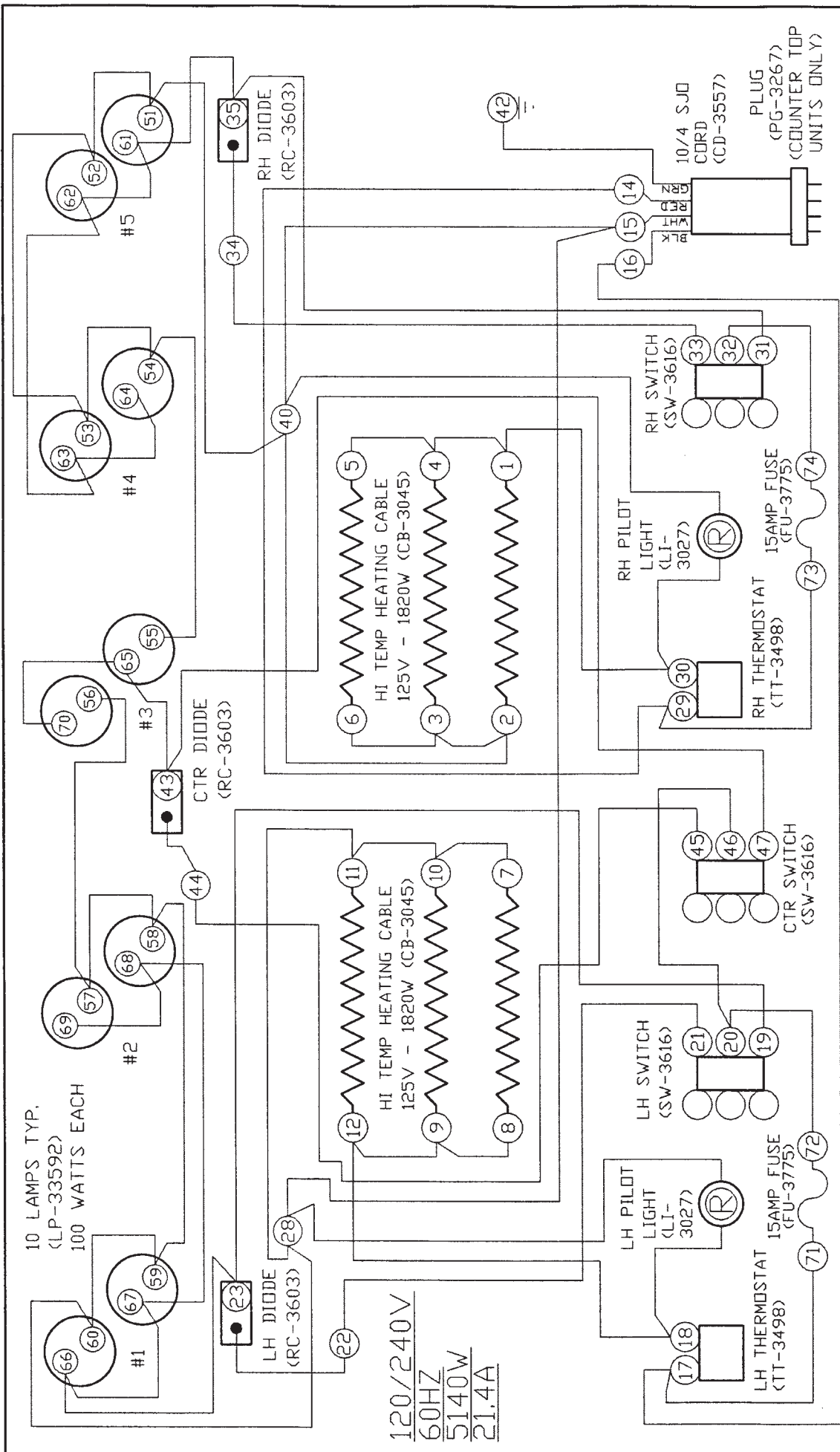
MENOMONEE FALLS, WISCONSIN

DRWN BY RS	SCALE 1=1	DWG NO
APP'D BY DAR	DATE 8/28/95	A-7427

400V 3N~ 50HZ, 3PHASE

AT 230V, 3,300 WATTS, 5.2 AMPS/PHASE

ALL NUMBERS IN () = ALTO-SHAAM PART NO'S
SEE DRW. #B-8580 FOR WIRE ASSEMBLIES



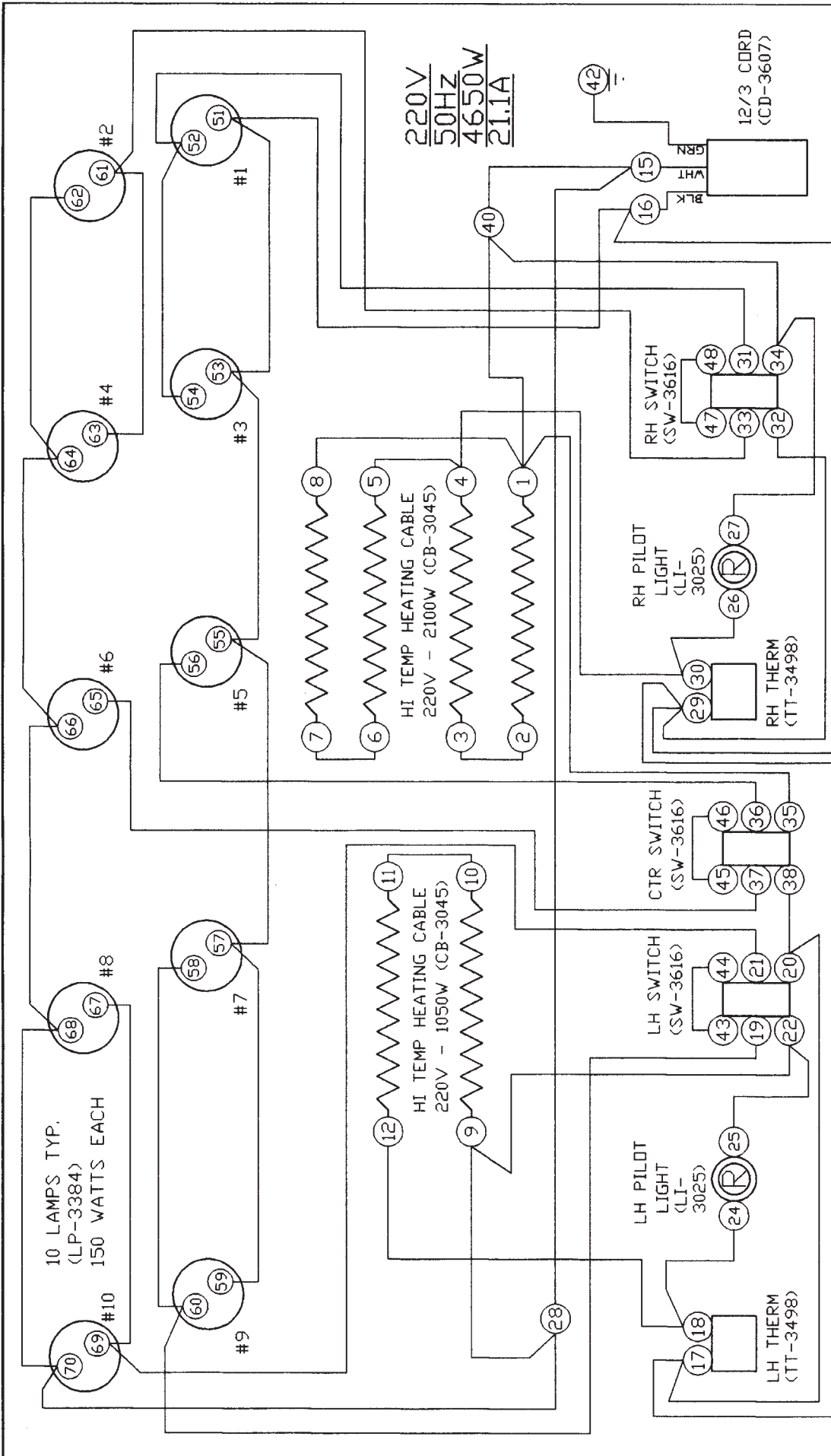
REVISIONS		ED-72,ED-72/P,/PR,/PL		120/240V	
NO	DATE	BY			
5	03-01-93	LRW			
6	07-19-94	RS			
7	01-13-98	RS	DRWN BY ALO	SCALE 1=1	DWG NO
8	01-15-01	NW	APP'D BY DAR	DATE 11-13-86	A-7281

WIRING DIAGRAM

ALTO-SHAAM INC.
MENDONNEE FALLS, WISCONSIN

NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NO'S

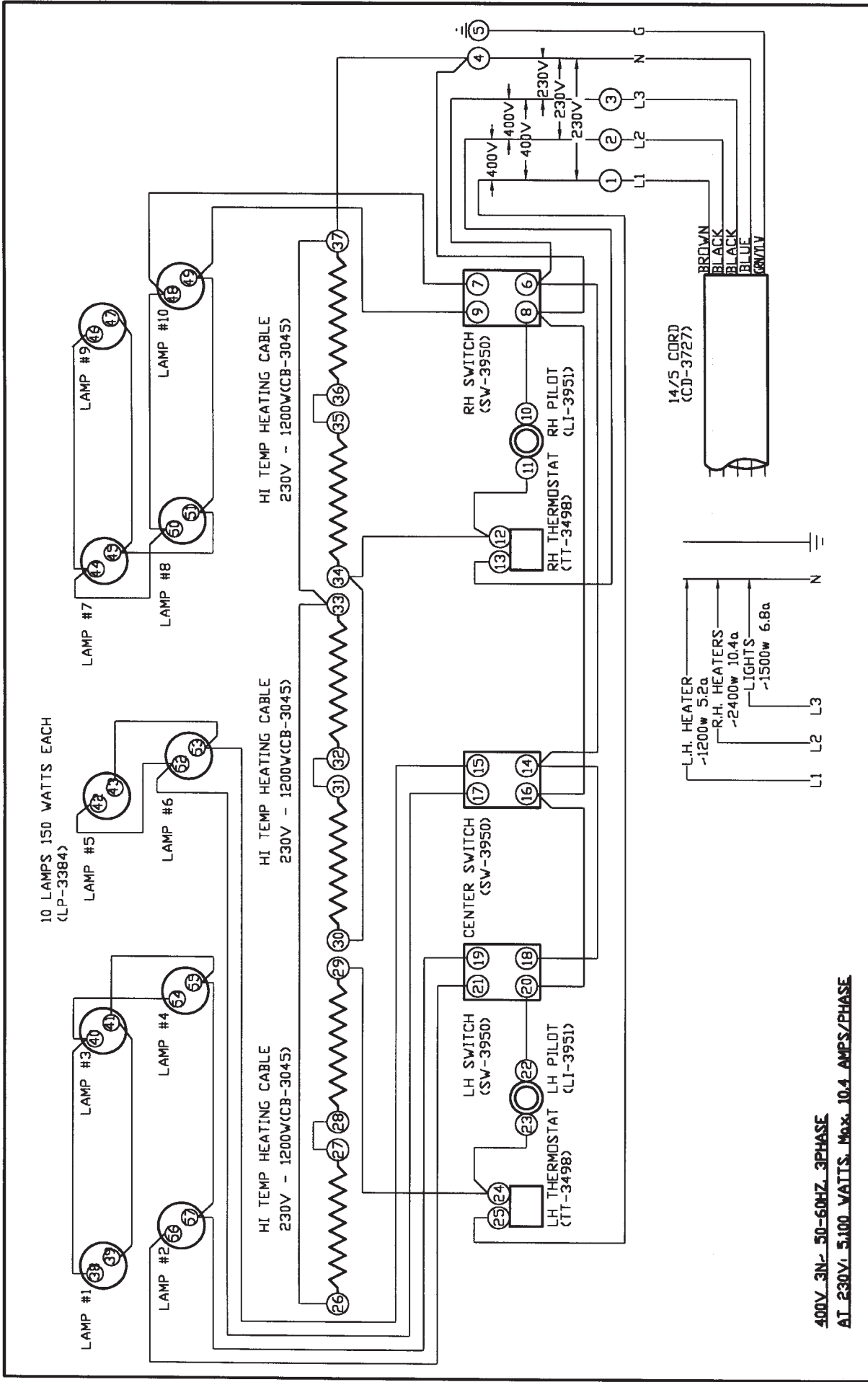
NOTE #2: SEE DRW. #B-8574 FOR WIRE ASSEMBLIES



REVISIONS		DCD,ED-72,ED-72/P,/PR,/PL		220V	
NO	DATE	BY			
1	6-23-88	ALD			
2	9-6-88	ALD			
3	10-1-92	LRW	DRWN BY ALD	SCALE 1=1	DWG NO
4			APP'D BY <i>LRW</i>	DATE 3-25-87	A-7289

WIRING DIAGRAM
 ALTO-SHAAM INC.
 MENOMONEE FALLS, WISCONSIN

NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NO'S
 NOTE #2: SEE DRW. #B-8581 FOR WIRE ASSEMBLIES



REVISIONS	
NO.	DATE BY
1	
2	
3	
4	
5	

DCD,ED-72,ED-72/P,PL,PR 230V/400V 3-PHASE

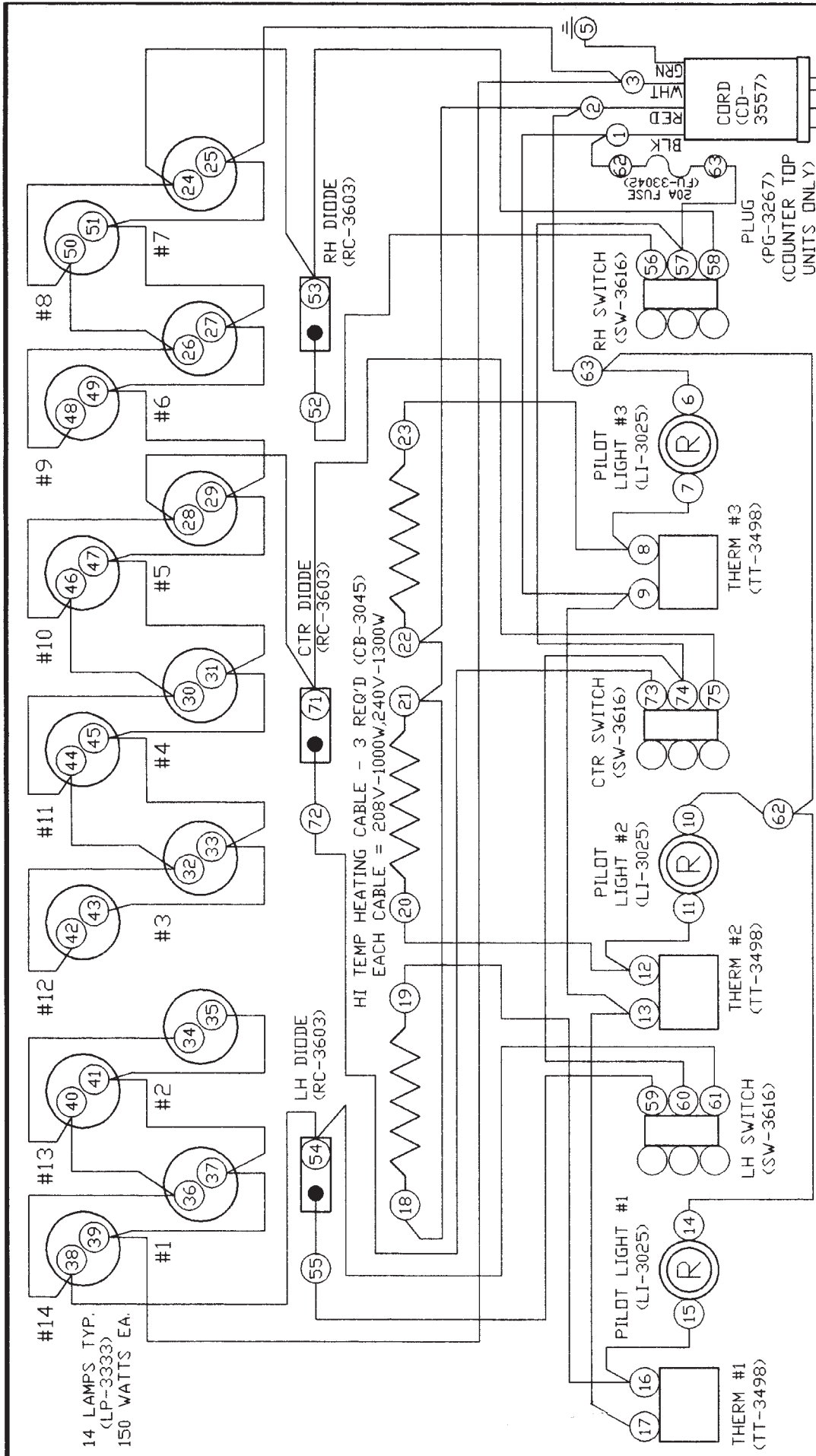
WIRING DIAGRAM

ALTO-SHAAM INC.
MENDONCE FALLS, WISCONSIN

DRAWN BY RS SCALE 1"=1" DWG. NO. A-7428
APP'D DAR DATE 8/28/95

**400V 3N-50-60HZ 3PHASE
AT 230V 5.100 WATTS Max. 10.4 AMPS/PHASE**

ALL NUMBERS IN () = ALTO-SHAAM PART NO'S
SEE DRV. #B-8581 FOR WIRE ASSEMBLIES



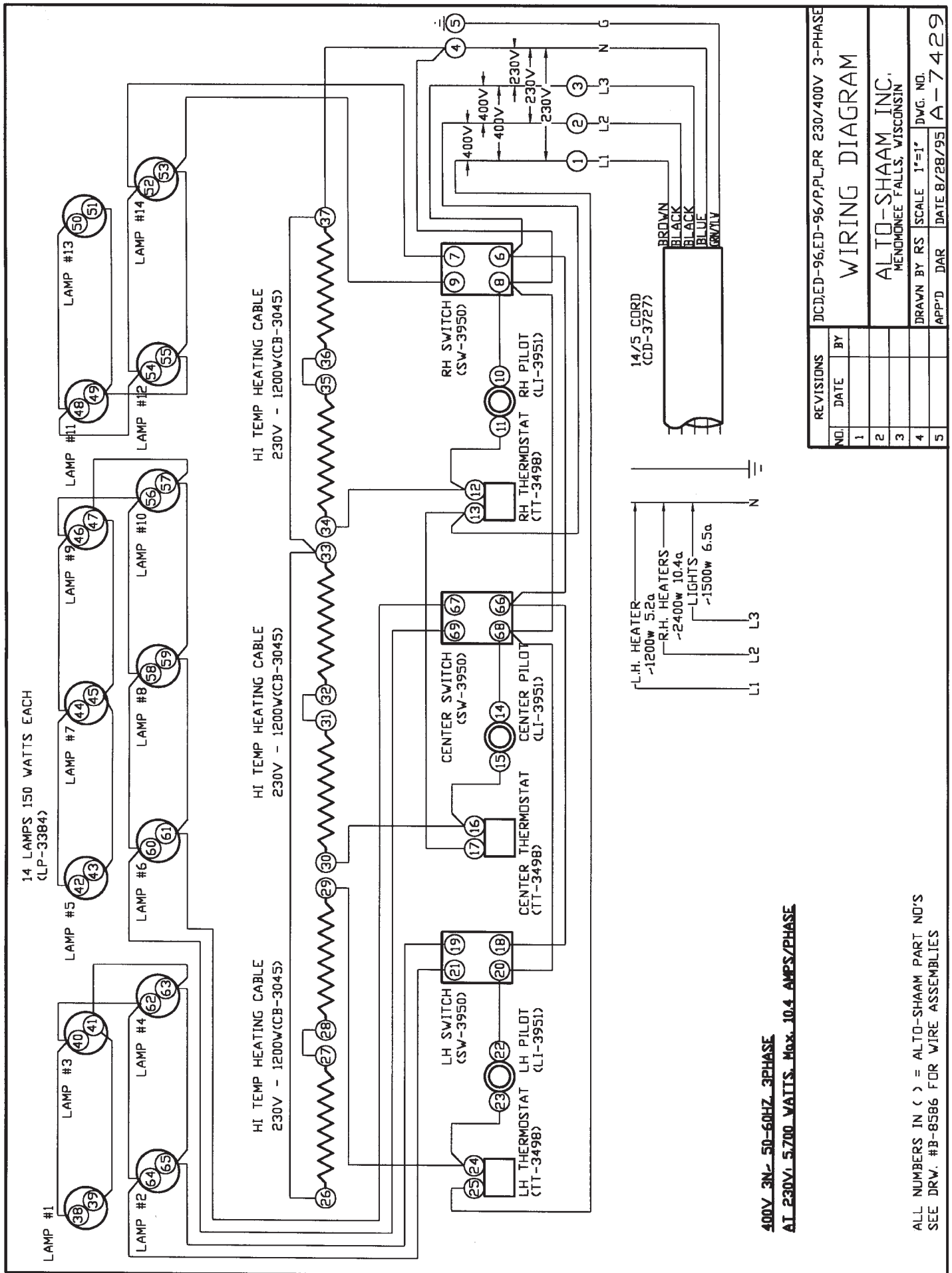
DCD, ED-96, ED-96/PR, PL		120/240V	
WIRING DIAGRAM			
ALTO-SHAAM INC. MENOMONEE FALLS, WISCONSIN			
DRAWN BY LRW		SCALE 3/4"=1" DWG. NO.	
APP'D <i>lee</i>		DATE 03/03/93 A-7260	
REVISIONS			
NO.	DATE	BY	
5	03-03-93	LRW	
6	07-19-94	RS	
7			
8			
9			

120/208V OR 120/240V
60HZ
5100W
22.5A

60HZ
6000W
24.7A

NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NO'S

NOTE #2: SEE DRW. #B-8525 FOR WIRE ASSEMBLIES



REVISIONS		DRAWING INFORMATION	
NO.	DATE	BY	
1			
2			
3			
4			
5			

DCD,ED-96,ED-96/P,PL,PR 230/400V 3-PHASE

WIRING DIAGRAM

ALTO-SHAAM INC.
MENDONEE FALLS, WISCONSIN

DRAWN BY RS SCALE 1"=1" DWG. NO. A-7429

APP'D DAR DATE 8/28/95

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: _____

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 (800)558-8744 U.S.A./CANADA • FAX: (262)251-7067 (800)329-8744 U.S.A./CANADA • www.alto-shaam.com

PRINTED IN U.S.A.