ALTO SHAAM®

OPERATION and CARE MANUAL

EDSYS-48

Hot Display Case

MODELS: ED-48   EDSYS-48
ED-72   EDSYS-72
ED-96   EDSYS-96

24•7
Your Service Hotline
1-800-558-8744

HALO HEAT® **COOK/HOLD/SERVE SYSTEMS**

ALTO·SHAAM® HOT DISPLAY CASES

UNPACKING and SET-UP

The Alto-Shaam Display Case has been thoroughly tested, checked for calibration, and inspected to insure only the highest quality cabinet 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.

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 number and serial number of the cabinet.

ELECTRICAL INSTALLATION

EXAMPLE

SERIAL NUMBER AND WARRANTY CODE
IDENTIFICATION MODEL NUMBER
MAXIMUM RATED WATTAGE

MODEL	xxx-xx		
SERIAL NO.	xxxx-xx	WATTS	xxxx
VOLTS	xxx AC	1 PH	xx HZ

ALTO-SHAAM INC. MILW. WI. PAT. NO. 3521030

MAXIMUM RATED VOLTAGE   MAXIMUM RATED FREQUENCY

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

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

OPERATIONAL PROCEDURES

1. *DO NOT ADD WATER TO THE DELI 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.

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, 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 DELI 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), or a Combitherm oven/steamer, to bring the product within the correct temperature range. While in the display case, 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.
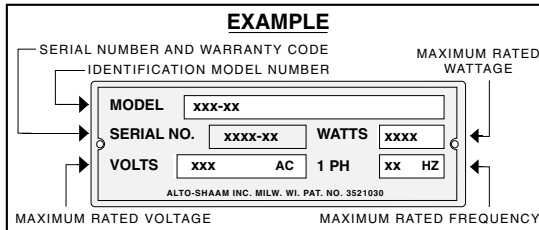
5. *RESET THERMOSTAT AS NEEDED*
After all products are loaded into the display case and the doors are closed, reset the thermostat(s) to the number "8" setting. *This will not necessarily be the final setting.* Since proper temperature range depends on the type of products and the quantities being held, 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 140° and 160°F (60° and 71°C). Normally, this will require a thermostat setting of between number "6" and "8," although a higher or lower setting may sometimes be required.

6. *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 deli case doors closed after serving. Wipe spills immediately to assure maximum eye appeal.

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.

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

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.

THOROUGHLY CLEAN THE DISPLAY CASE DAILY

A. Turn lights and adjustable thermostat(s) to the "**OFF**" position, and disconnect the unit from the power source.

B. Remove, cover or wrap, and store unused products under refrigeration. Let unit cool.

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 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 the 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 case be steam cleaned, flooded with water or liquid solution.
Do Not Use Water Jet to Clean.
Severe damage or electrical hazard could result.

C A U T I O N

C A U T I O N

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.

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

C A U T I O N

SAFETY ALERT

This units performance has been optimized using the factory provided bulbs. These bulbs 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. Be careful not to overtighten the bulbs in their receptacles.

C A U T I O N

C A U T I O N

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.

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

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

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

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.

PAN CONFIGURATIONS • HOT DELI DISPLAY CASES

ED-96

ED-72

ED-48

3 PAN ZONES • **5 PAN ZONES** • **7 PAN ZONES**

FULL-SIZE PAN

ONE-HALF SIZE PAN

ONE-HALF SIZE PAN

TWO-THIRDS SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

One (1) FULL SIZE PAN and one (1) ONE-THIRD SIZE PAN per pan zone.
48 MODELS: Up to 3 Full Size Pans with 3 One-Third Size Pans per display case
72 MODELS: Up to 5 Full Size Pans with 5 One-Third Size Pans per display case
96 MODELS: Up to 7 Full Size Pans with 7 One-Third Size Pans per display case

One (1) FULL SIZE PAN and one (1) ONE-THIRD SIZE PAN per pan zone.
48 MODELS: Up to 6 One-Half Size Pans with 3 One-Third Size Pans per display case
72 MODELS: Up to 5 One-Half Size Pans with 5 One-Third Size Pans per display case
96 MODELS: Up to 7 One-Half Size Pans with 7 One-Third Size Pans per display case

One (1) TWO-THIRDS SIZE PAN and one (1) ONE-THIRD SIZE PAN per pan zone.
48 MODELS: Up to 3 Two Thirds Size Pans with 6 One-Third Size Pans per display case
72 MODELS: Up to 5 Two Thirds Size Pans with 10 One-Third Size Pans per display case
96 MODELS: Up to 7 Two Thirds Size Pans with 14 One-Third Size Pans per display case

Four (4) ONE-THIRD SIZE PAN and two (2) ONE-THIRD SIZE PANS per pan zone.
48 MODELS: Up to 12 One-Third Size Pans per display case
72 MODELS: Up to 20 One-Third Size Pans per display case
96 MODELS: Up to 28 One-Third Size Pans per display case

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

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 352 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

No de réf.	DESCRIPTION	DIMENSIONS		48	72	96
			STANDARD PAN DIVIDER & SEPARATOR BARS	**MODELS**		
11046	SHEET PAN DIVIDER BAR	1-3/8"x 27-13/16"	(35 mm x 706 mm)	1	—	—
11047	ONE-THIRD SIZE PAN	3-1/4" x 7"	(83 mm x 178 mm)	1	—	—
11317	FULL, HALF AND THIRD SIZE-LONG	1" x 27-7/8"	(25 mm x 708 mm)	2	4	6
11318	FULL, HALF AND THIRD SIZE-SHORT	1" x 12-3/4"	(25 mm x 324 mm)	9	15	21
11319	SHEET PAN DIVIDER BAR	3-1/4" x 27-3/16"	(83 mm x 706 mm)	1	—	—
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17- 3/4"	(45 mm x 451 mm)	2	3	4
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	(150 mm x 706 mm)	—	2	3
11732	SHEET PAN FILLER	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)	2	4	6

SHEET PAN CONFIGURATIONS • HOT DELI DISPLAY CASES

ED-96

ED-72

ED-48

2 SHEET PAN ZONES

3 SHEET PAN ZONES

4 SHEET PAN ZONES

ONE-THIRD SIZE PAN

ONE-HALF SIZE PAN

FULL SIZE SHEET PAN

ONE-HALF SIZE PAN

ONE-THIRD SIZE PAN

ONE-THIRD SIZE PAN

48 MODELS
2 Full-Size Sheet Pans per Display Case
Or
1 Full-Size Sheet Pan
2 One-Half Size Pans
3 One-Third Size Pans

72 MODELS
3 Full-Size Sheet Pans per Display Case

96 MODELS
4 Full-Size Sheet Pans per Display Case
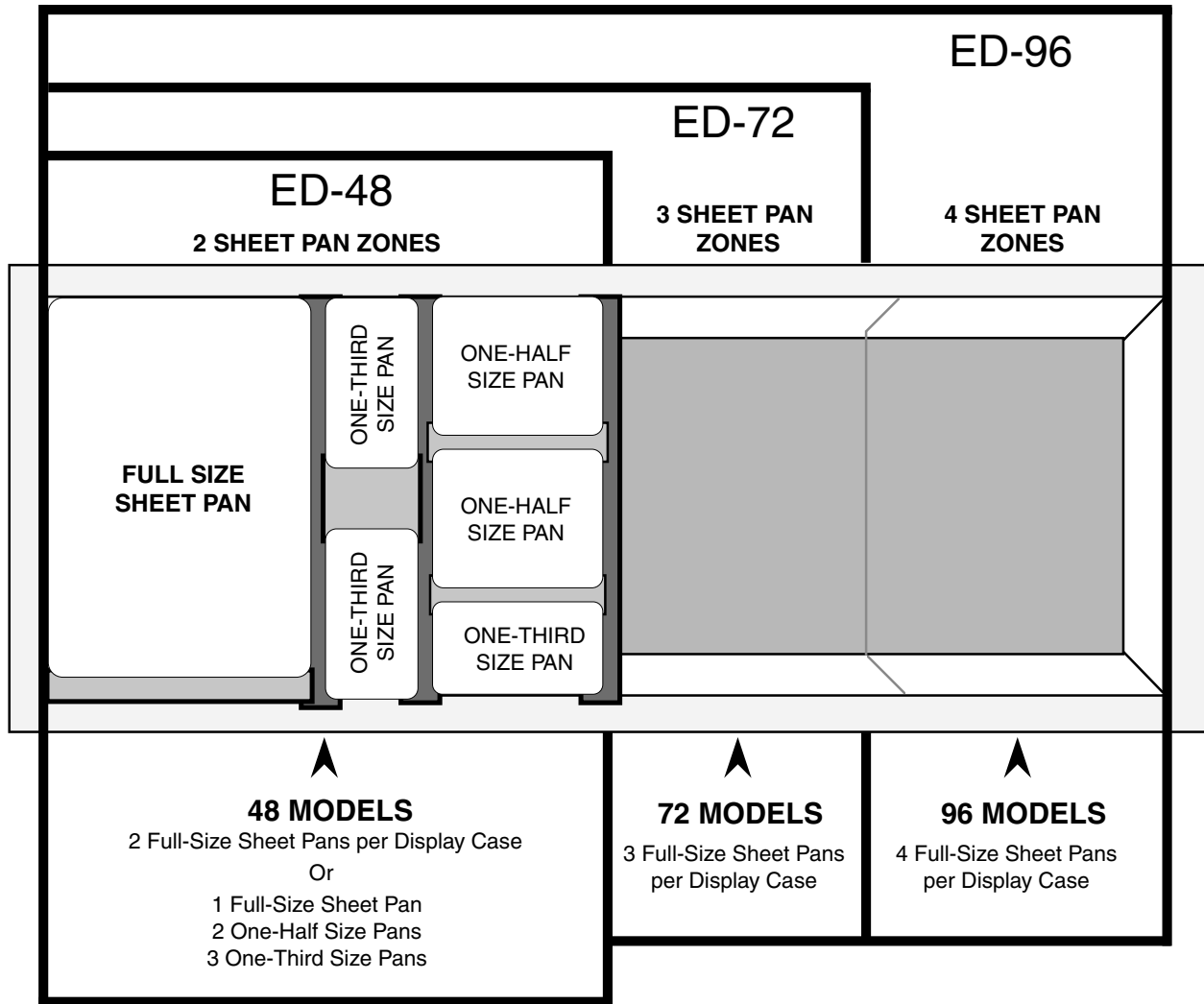
	STANDARD PAN DIVIDER & SEPARATOR BARS			MODELS		
	DESCRIPTION	DIMENSIONS		48	72	96
11046	SHEET PAN DIVIDER BAR	1-3/8" x 27-13/16"	(35-mm x 706-mm)	1	—	—
11047	ONE-THIRD SIZE PAN	3-1/4" x 7"	(83-mm x 178-mm)	1	—	—
11317	FULL, HALF & THIRD SIZE - LONG	1" x 27-7/8"	(25-mm x 708-mm)	2	4	6
11318	FULL, HALF & THIRD SIZE - SHORT	1" x 12-3/4"	(25-mm x 324-mm)	9	15	21
11319	SHEET PAN DIVIDER BAR	3-1/4" x 27-3/16"	(83-mm x 706-mm)	1	—	—
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17-3/4"	(45-mm x 451-mm)	2	3	4
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	(150-mm x 706-mm)	—	2	3
11732	SHEET PAN FILLER	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)	2	4	6

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 . . . . 1 roll
ST-2439   Stud, 10-32. 4
NU-2215   Hex Nut. 8

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 . . . . 1 roll
ST-2439   Stud, 10-32. 12
NU-2215   Hex Nut. 24

Custom Panel Colors . . . . *Factory Quote*
Dual Case
— Trim Kit (FOR BU base) 4175
— Butt Clip (FOR ED base) 13027
— Acrylic Divider GL-2902
Interior Ambient
  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

Custom Panel Colors . . . . *Factory Quote*
Dual Case
— Trim Kit (FOR BU base) 4175
— Butt Clip (FOR ED base) 13027
— Acrylic Divider GL-2902
Interior Ambient 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

SAFETY ALERT

⚠ **CAUTION**

This units performance has been optimized using the factory provided bulbs. These bulbs 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. Be careful not to overtighten the bulbs in their receptacles. ⚠ **CAUTION**

Disconnect Unit from Power Source Before Cleaning or Servicing. ⚠

CAUTION

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
Interior Ambient 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

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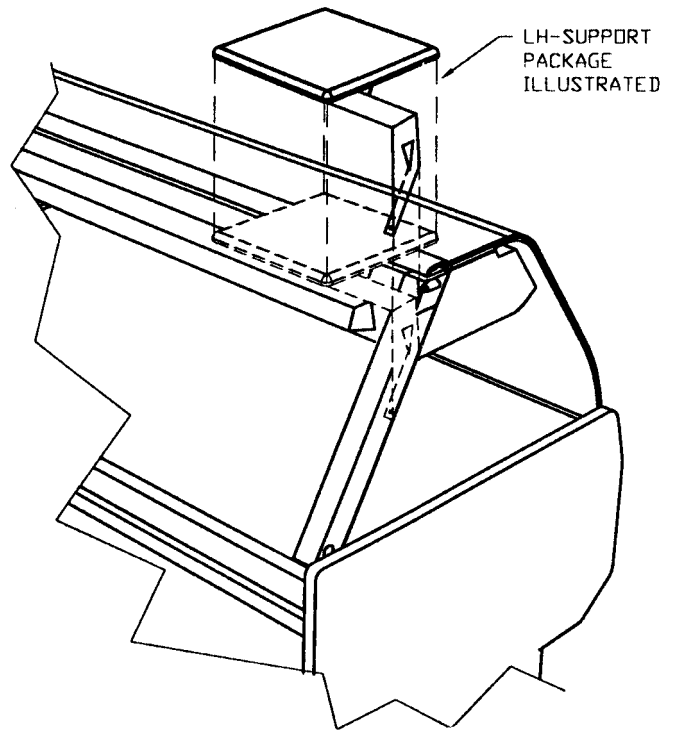
NOTE: These platforms are intended for use in the CLOSED position ONLY. They slide away from the unit for cleaning. *Using scales with platforms in the OUT position may result in incorrect data on scales.*

⚠ **CAUTION** *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.*

LH–SUPPORT PACKAGE ILLUSTRATED

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".

DRAFT STRIP ⁑

HEAT GUARD MOUNTING SCREWS (A/S PN: SC-2069)

CUSTOMER ⁑ HEAT GUARD
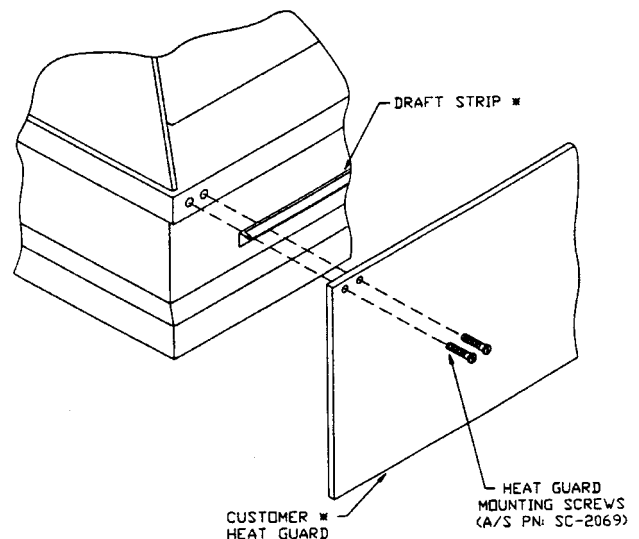
⁑ SEE INDIVIDUAL MODEL SERVICE VIEW PARTS LIST FOR ALTO-SHAAM PART NUMBERS

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

SERVICE VIEW PARTS LISTS

ED-48 DISPLAY CASE

12/22/00

PART DESCRIPTION	QTY	A/S PT NO.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3291
CORD, (220V), 7' (2134mm)	1	CD-3545
CONNECTOR, 1/2" (13mm) CABLE	1	CR-33542
PLUG (120V only)	1	PG-3267
2. BOTTOM	1	11053
3. BOTTOM MOUNTING SCREWS	12	SC-2425
4. INSULATION:		
SIZE: 15" x 40" (381mm x 1016mm)	2	IN-22364
5. CABLE CONNECTION HARDWARE		
6. HEATING CABLE (length): 132' (40234mm)	1	CB-3045
7. CONTROL PLATE	2	11167
CONTROL PLATE MOUNTING SCREWS	8	SC-2459
8. THERMOSTAT	2	TT-3498
THERMOSTAT KNOB	2	KN-3473
9. HEAT INDICATOR LIGHT	2	LI-3025
10. LAMP SWITCH	2	SW-3616
DIODE ASSEMBLY [120V only]	2	4775
11. TOP	1	1437
12. TOP MOUNTING SCREWS	8	SC-2425
13. LAMP BULB (130V)	6	LP-33592
LAMP BULB (220V)	6	LP-3384
14. LAMP SOCKET (120V)	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 GLSSS DOOR ASS'Y	1	DR-25025
-OPTONAL MIRRORED LEFT HAND OUTER DOOR	1	DR-25026
-OPTIONAL MIRRORED RIGHT HAND INNER DOOR	1	DR-25027
-TOP TRACK	1	13008
-GUIDES #44049	4	DR-22480F
DOOR BUMPER ASS'Y	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-2798
19. LIGHT GUARD	1	4869
20. CAPILLARY COVER PLATE	2	11160
CAPILLARY COVER PLATE MTG. SCREWS	16	SC-2459
21. CUTTING BOARD ASSEMBLY	1	4016
22. CUTTING BOARD BRACKET BASE	2	11283
23. CUTTING BOARD BRACKET	2	BT-2342
24. BRACKET TO BRACKET MTG. SCREWS	6	SC-2070
25. GAS STRUT	1	SU-2870

PART DESCRIPTION	QTY	A/S PT NO.
26. PAN DIVIDER BARS [NOT SHOWN]		
—SHEET PAN, 1-3/8" x 27-13/16" (35mm x 706mm)	1	11046
—THIRD SIZE PAN 3-1/4" x 7" (83mm x 178mm)	1	11047
— FULL, HALF & THIRD SIZE (LONG BAR)		
1" x 27-7/8" (25.4mm x 708mm)	2	11317
— FULL, HALF & THIRD SIZE (SHORT BAR)		
1" x 12-3/4" (25.4mm x 324mm)	9	11318
—SHEET PAN, 3-1/4" x 27-13/16" (83mm x 706mm)	1	11319
—SHEET PAN, 1-3/4" x 17-3/4" (45mm x 451mm)	2	11320
—GASTRONORM DIVIDER (220V only)	2	1865
27. CUSTOMER HEAT GUARD	1	GD-2966
DRAFT STRIP	1	1246
DRAFT STRIP GASKET: 3.5' (1067mm)	1	GS-22441
28. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5940
OUTLET W/PROBE RETROFIT KIT (NOT SHOWN)	1	5967
DECOR CUSTOMER PANEL (SPECIFY COLOR)	1	11480
DECOR END PANEL (SPECIFY COLOR)	2	11483
DECOR CUSTOMER PANEL (STAINLESS STEEL)	1	11479
DECOR END PANEL (STAINLESS STEEL)	2	11482
DECOR CUSTOMER PANEL (WHITE VINYL)	1	12711
DECOR END PANEL (WHITE VINYL)	2	12713
DECOR CUSTOMER PANEL (RED VINYL)	1	12712
DECOR END PANEL (RED VINYL)	2	12714
29. 4" LEGS	4	LG-2044

EDSYS-48 SYSTEM

PART DESCRIPTION	QTY	A/S PT NO.
1. ED-48 HOT DELI DISPLAY CASE	1	_____
2. END TRIM CAP (left-hand)	1	1154
END TRIM CAP (left-hand) MOUNTING SCREWS	3	SC-2425
3. END TRIM CAP (right-hand)	1	1562
END TRIM CAP (right-hand) MOUNTING SCREWS	3	SC-2425
4. TRIM LOCK CHANNEL	1	1701
5. MULLION COVER	1	4865
MULLION COVER MOUNTING SCREWS	1	SC-2459
6. LEVELING BOLT	4	SC-2242
7. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5940
OUTLET W/PROBE RETROFIT KIT	1	5967
DECOR PANELS:		
CUSTOMER PANEL — STAINLESS STEEL	1	11604
END PANEL — S/S (right-hand)	1	11607
END PANEL — S/S (left-hand)	1	11610
CUSTOMER PANEL — PAINTED (SPECIFY COLOR)	1	11069
END PANEL — PAINTED (right-hand) (SPECIFY COLOR)	1	1340
END PANEL — PAINTED (left-hand) (SPECIFY COLOR)	1	1442
CUSTOMER PANEL — WHITE VINYL	1	12719
END PANEL — WHITE VINYL (right-hand)	1	12721
END PANEL — WHITE VINYL (left-hand)	1	12723
CUSTOMER PANEL — RED VINYL	1	12720
END PANEL — RED VINYL (right-hand)	1	12722
END PANEL — RED VINYL (left-hand)	1	12724
DECOR PANELS — 51" HIGH SYSTEM:		
CUSTOMER PANEL PAINTED	1	12137
END PANEL — PAINTED (RH)	1	12135
END PANEL — PAINTED (LH)	1	12136
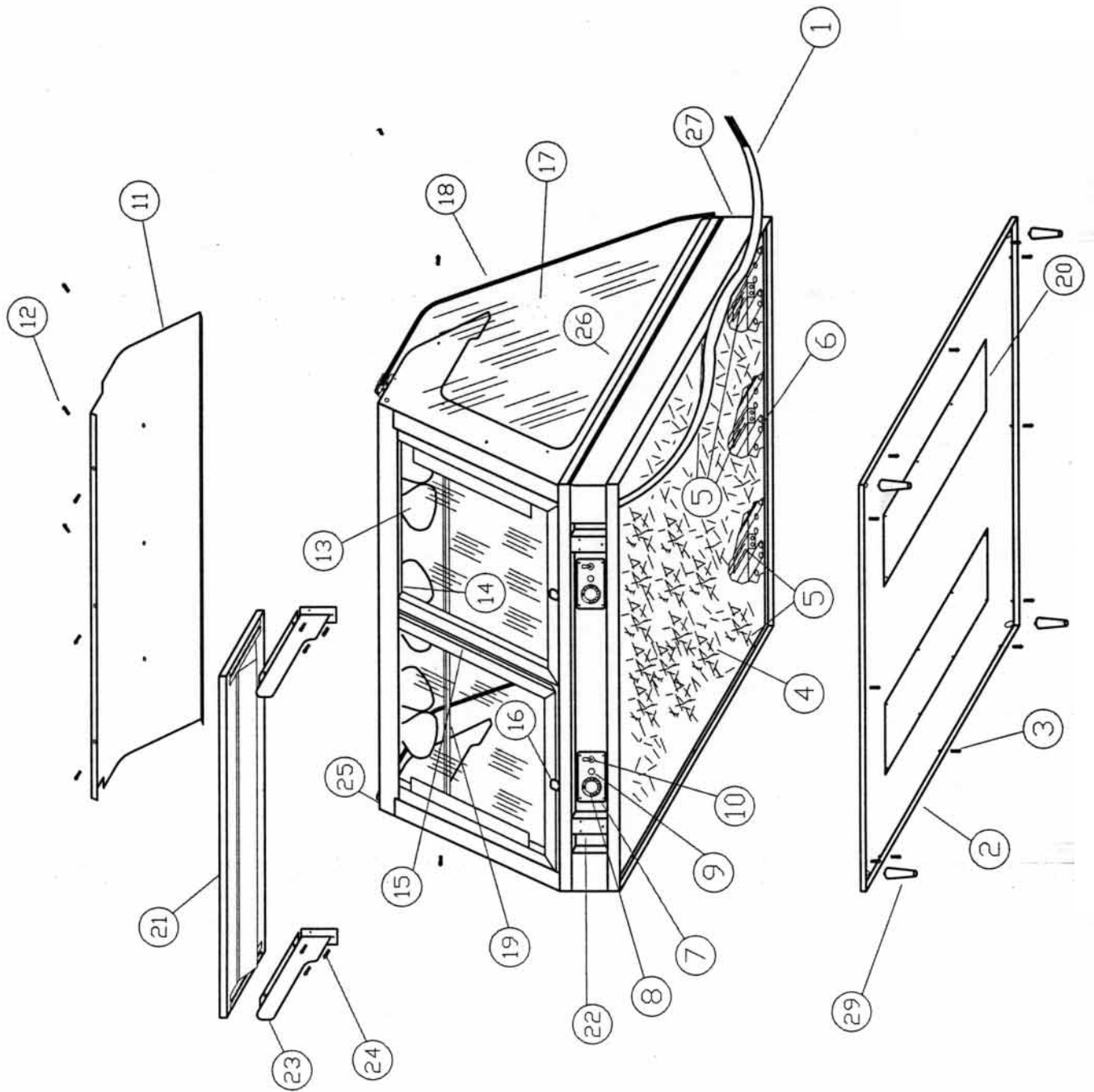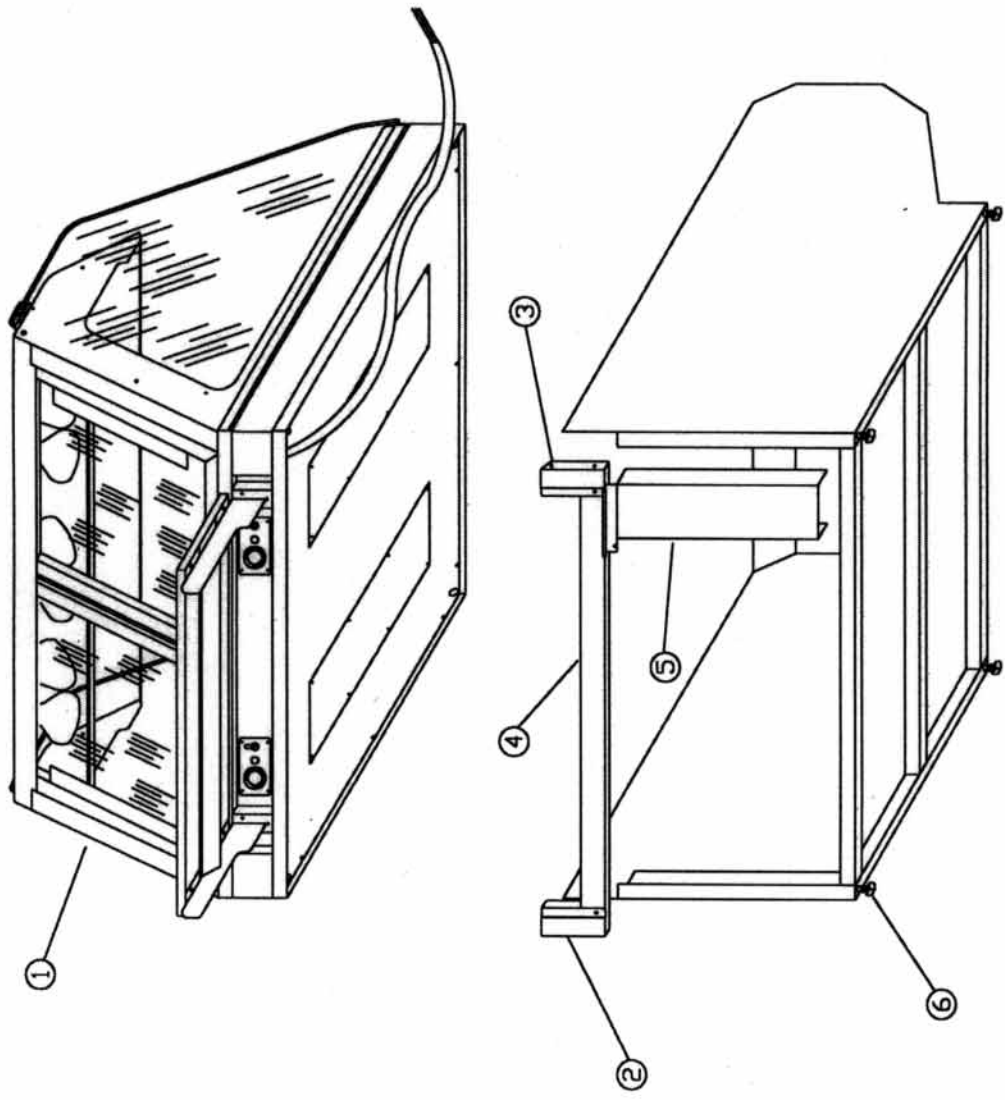
12/20/00

PART DESCRIPTION	QTY	A/S PT NO.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557
CORD, (220V), 7' (2134mm)	1	CD-3607
CONNECTOR, 1/2" (13mm) CABLE	1	CR-33542
PLUG (120/240 V only)	1	PG-3267
2. BOTTOM	1	1898
3. BOTTOM MOUNTING SCREWS	16	SC-2425
4. INSULATION: 15" x 65" (381mm x 1651mm) PIECE	2	IN-22364
5. CABLE CONNECTION HARDWARE		
6. HEATING CABLE (length): 199' (60655mm)	1	CB-3045
7. CONTROL PLATE	2	11167
CENTER CONTROL PLATE	1	11770
CONTROL PLATE MOUNTING SCREWS	12	SC-2459
8. THERMOSTAT	2	TT-3498
THERMOSTAT KNOB	2	KN-3473
9. HEAT INDICATOR LIGHT (120V)	2	LI-3027
HEAT INDICATOR LIGHT (220V)	2	LI-3025
10. LAMP SWITCH	3	SW-3616
DIODE ASSEMBLY (120V only)	3	4775
11. FUSEHOLDER (120V UNITS)	2	FU-33041
FUSEHOLDER MOUNTING SCREWS	4	SC-2425
FUSEHOLDER MOUNTING BRACKET	2	12251
FUSEHOLDER BRACKET MOUNTING SCREWS	4	SC-2459
FUSE, 15 AMP	2	FU-3775
12. TOP	1	1433
13. TOP MOUNTING SCREWS	13	SC-2425
14. LAMPS BULBS (130V)	10	LP-33592
LAMP BULBS (220V)	10	LP-3384
15. LAMP SOCKET (120V)	10	RP-3952
LAMP SOCKET (220V)	10	RP-3955
16. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25028
— LEFT HAND INNER DOOR	1	DR-25031
— LEFT HAND OUTER DOOR	1	DR-25029
— RIGHT HAND OUTER DOOR	1	DR-25030
— RIGHT HAND INNER DOOR	1	DR-25032
— OPTIONAL MIRRORED GLASS DOOR ASB	1	DR-25033
— LEFT HAND INNER MIRRORED DOOR	1	DR-25036
— LEFT HAND OUTER MIRRORED DOOR	1	DR-25034
— RIGHT HAND OUTER MIRRORED DOOR	1	DR-25035
— RIGHT HAND INNER MIRRORED DOOR	1	DR-25037
— TOP TRACK	1	13009
— GUIDES #44049	8	DR-22480F
— POOR BUMPER ASS'Y	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. GLASS, FRONT	1	GL-2799
20. LIGHT GUARD	1	4832
21. CAPILLARY COVER PLATE	2	11160
CAPILLARY COVER PLATE MOUNTING SCREWS	16	SC-2459
22. CUTTING BOARD ASSEMBLY	1	4017
23. CUTTING BOARD BRACKET BASE	2	11283
24. CUTTING BOARD BRACKET	2	BT-2342
25. BRACKET TO BRACKET MOUNTING SCREWS	6	SC-2070
26. GAS STRUT	2	SU-2870

PART DESCRIPTION	QTY	A/S PT NO.
27. PAN DIVIDER BARS [not shown]		
— FULL, HALF & THIRD SIZE (LONG BAR)		
1" x 27-7/8" (25.4mm x 708mm)	4	11317
— FULL, HALF & THIRD SIZE (SHORT BAR)		
1" x 12-3/4" (25.4mm x 324mm)	15	11318
—SHEET PAN, 1-3/4" x 17-3/4" (45mm x 451mm)	3	11320
—SHEET PAN, 5-29/32" x 27-13/16" (150mm x 706mm)	2	11357
—GASTRONORM DIVIDER (220V only)	4	1865
28. CUSTOMER HEAT GUARD	1	GD-2967
DRAFT STRIP	1	1247
DRAFT STRIP GASKET: 5.6' (1077mm)	1	GS-22441
29. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5955
OUTLET W/PROBE RETROFIT KIT (NOT SHOWN)	1	5983
DECOR CUSTOMER PANEL (SPECIFY COLOR)	1	11508
DECOR END PANEL (SPECIFY COLOR)	2	11483
DECOR CUSTOMER PANEL (STAINLESS STEEL)	1	11485
DECOR END PANEL (STAINLESS STEEL)	2	11482
DECOR CUSTOMER PANEL (WHITE VINYL)	1	12715
DECOR END PANEL (WHITE VINYL)	2	12713
DECOR CUSTOMER PANEL (RED VINYL)	1	12716
DECOR END PANEL (RED VINYL)	2	12714
30. 4" LEGS	6	LG-2044

SERVICE VIEW • ED-72 — PAGE 12

EDSYS-72 SYSTEM

PART DESCRIPTION	QTY	A/S PT NO.
1. ED-72 HOT DELI DISPLAY CASE	1	_____
2. END TRIM CAP (left-hand)	1	1154
END TRIM CAP (left-hand) MOUNTING SCREWS	3	SC-2425
3. END TRIM CAP (right-hand)	1	1562
END TRIM CAP (right-hand) MOUNTING SCREWS	3	SC-2425
4. TRIM LOCK CHANNEL	1	1557
5. MULLION COVER	1	4865
MULLION COVER MOUNTING SCREWS	1	SC-2459
6. LEVELING BOLT	4	SC-2242
7. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5955
OUTLET W/PROBE RETROFIT KIT	1	5983
DECOR PANELS:		
CUSTOMER PANEL — STAINLESS STEEL	1	11613
END PANEL — S/S (right-hand)	1	11607
END PANEL — S/S (left-hand)	1	11610
CUSTOMER PANEL — PAINTED (SPECIFY COLOR)	1	11072
END PANEL — PAINTED (right-hand) (SPECIFY COLOR)	1	1340
END PANEL — PAINTED (left-hand) (SPECIFY COLOR)	1	1442
CUSTOMER PANEL — WHITE VINYL	1	12725
END PANEL — WHITE VINYL (right-hand)	1	12721
END PANEL — WHITE VINYL (left-hand)	1	12723
CUSTOMER PANEL — RED VINYL	1	12726
END PANEL — RED VINYL (right-hand)	1	12722
END PANEL — RED VINYL (left-hand)	1	12724
DECOR PANELS — 51" HIGH SYSTEM:		
CUSTOMER PANEL — PAINTED	1	12141
END PANEL — PAINTED (RH)	1	12135
END PANEL — PAINTED (LH)	1	12136

SERVICE VIEW • EDSYS-72 — PAGE 13

ED/SYS-72
SERVICE VIEW
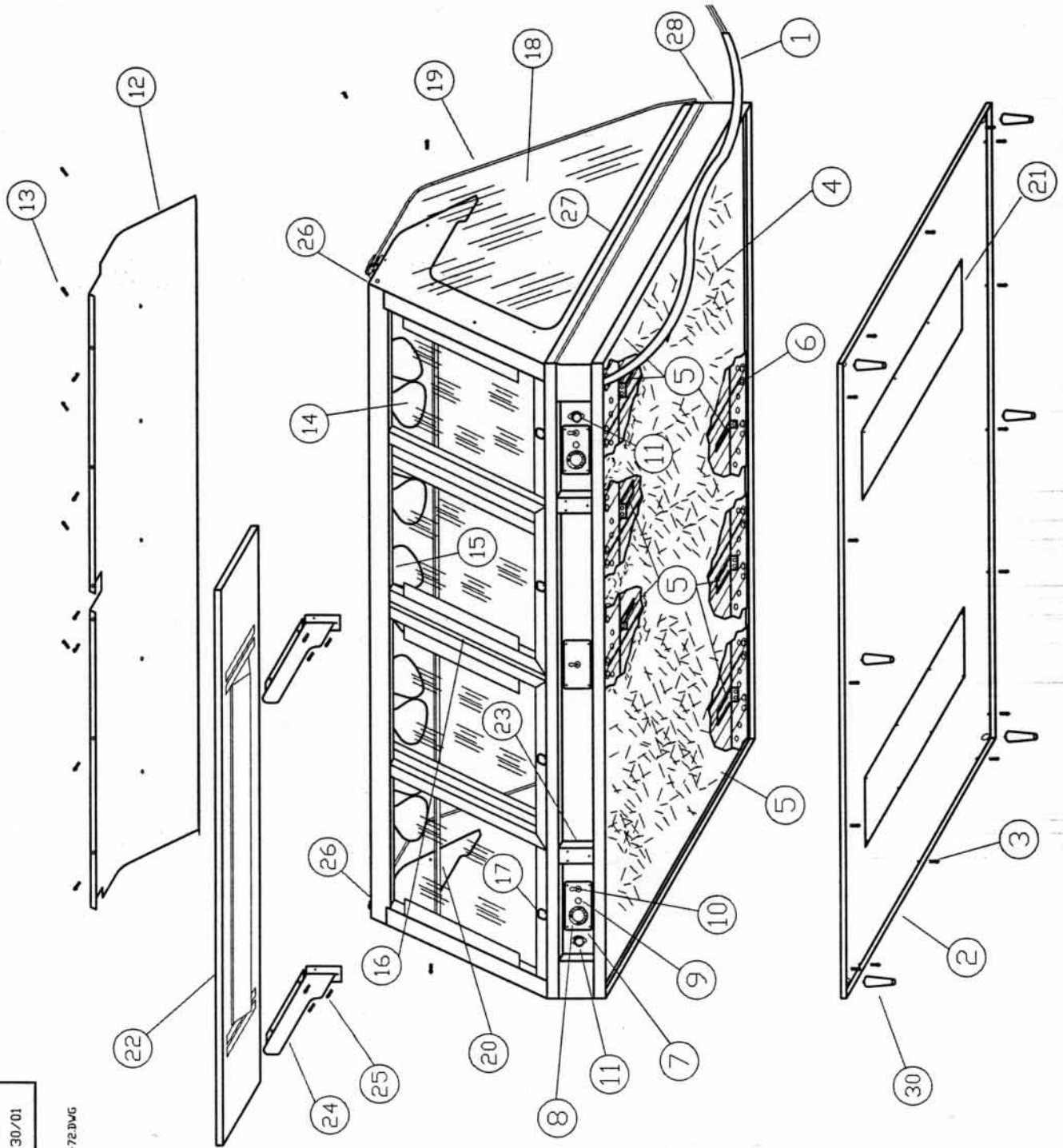
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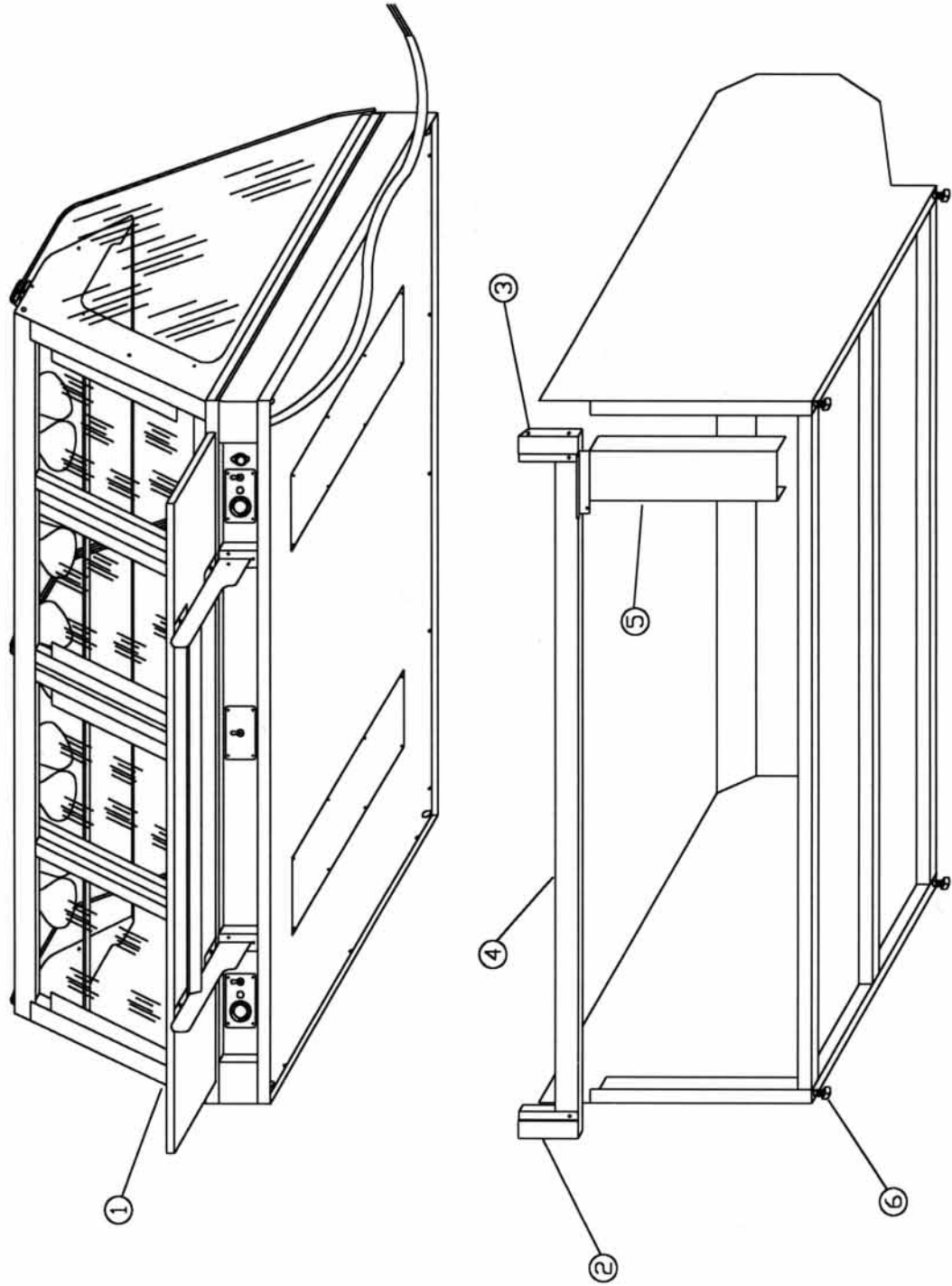
12/22/00

PART DESCRIPTION	QTY	A/S PT NO.
1. CORD, (120/240V), 7' (2134mm)	1	CD-3557
CORD, (220V), 7' (2134mm)	1	CD-3304
CONNECTOR, 1/2" (13mm) CABLE	1	CR-33542
PLUG (120/240V only)	1	PG-3267
2. BOTTOM	1	11249
3. BOTTOM MOUNTING SCREWS	18	SC-2425
4. INSULATION: 15" x 96" (381mm x 2438mm) piece	2	IN-22364
5. CABLE CONNECTION HARDWARE		
6. HEATING CABLE (length): 183' (55778mm)	1	CB-3045
7. CONTROL PLATE	3	11167
8. CONTROL PLATE MOUNTING SCREWS	12	SC-2459
9. THERMOSTAT	3	TT-3498
THERMOSTAT KNOB	3	KN-3473
10. HEAT INDICATOR LIGHT (120V)	3	LI-3025
11. LAMP SWITCH	3	SW-3616
DIODE ASSEMBLY [120V only]	3	4775
12. FUSEHOLDER (120V UNITS)	1	FU-33041
FUSEHOLDER MOUNTING SCREWS	2	SC-2425
FUSEHOLDER MOUNTING BRACKET	1	12251
FUSEHOLDER BRACKET MOUNTING SCREWS	2	SC-2459
FUSE, 20 AMP	1	FU-33042
13. TOP	1	11166
14. TOP MOUNTING SCREWS	17	SC-2425
15. LAMPS BULBS (120V)	14	LP-3333
LAMP BULBS (220V)	14	LP-3384
16. LAMP SOCKET (120V)	14	RP-3952
LAMP SOCKET (220V)	14	RP-3955
17. GLASS DOOR ASSEMBLY, INCLUDES	1	DR-25038
-LEFT HAND INNER DOOR	1	DR-25041
-LEFT HAND OUTER DOOR	1	DR-25039
-RIGHT HAND OUTER DOOR	1	DR-25040
-RIGHT HAND INNER DOOR	1	DR-25042
-OPTIONAL MIRRORED GLASS DOOR ASS'Y	1	DR-25043
-LEFT HAND INNER MIRRORED DOOR	1	DR-25046
-LEFT HAND OUTER MIRRORED DOOR	1	DR-25044
-RIGHT HAND OUTER MIRRORED DOOR	1	DR-25045
-RIGHT HAND INNER MIRRORED DOOR	1	DR-25047
-TOP TRACK	1	13010
-GUIDES #44049	8	DR-22480F
-DOOR BUMPER ASS'Y	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. GLASS, FRONT	2	GL-2800
21. LIGHT GUARD	2	4885
22. CAPILLARY COVER PLATE	3	11160
CAPILLARY PLATE MOUNTING SCREWS	24	SC-2459
23. CUTTING BOARD ASSEMBLY	2	4016
24. CUTTING BOARD BRACKET BASE	4	11283
25. CUTTING BOARD BRACKET	4	BT-2342
26. BRACKET TO BRACKET MTG. SCREWS	12	SC-2070
27. GAS STRUT	1	SU-2870

PART DESCRIPTION	QTY	A/S PT NO.
28. PAN DIVIDER BARS [not shown]		
— FULL, HALF & THIRD SIZE (LONG BAR)		
1" x 27-7/8" (25.4mm x 708mm)	6	11317
— FULL, HALF & THIRD SIZE (SHORT BAR)		
1" x 12-3/4" (25.4mm x 324mm)	21	11318
—SHEET PAN, 1-3/4" x 17-3/4" (45mm x 451mm)	4	11320
—SHEET PAN,		
5-29/32" x 27-13/16" (150mm x 706mm)	3	11357
3-3/4" X 27-13/16" (95mm x 706mm)	1	11732
—GASTRONORM DIVIDER (220V only)	6	1865
29. CUSTOMER HEAT GUARD	1	GD-2968
DRAFT STRIP	1	1258
DRAFT STRIP GASKET: 7.8' (2377mm)	1	GS-22441
30. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5957
OUTLET W/PROBE RETROFIT KIT (NOT SHOWN)	1	5984
DECOR CUSTOMER PANEL (SPECIFY COLOR)	1	11601
DECOR END PANEL (SPECIFY COLOR)	2	11483
DECOR CUSTOMER PANEL (STAINLESS STEEL)	2	11600
DECOR END PANEL (STAINLESS STEEL)	2	11482
DECOR CUSTOMER PANEL (WHITE VINYL)	2	12717
DECOR END PANEL (WHITE VINYL)	2	12713
DECOR CUSTOMER PANEL (RED VINYL)	2	12718
DECOR END PANEL (RED VINYL)	2	12714
31. 4" LEGS	6	LG-2044

SERVICE VIEW • ED-96 — PAGE 15

PART DESCRIPTION	QTY	A/S PT NO.
1. ED-96 HOT DELI DISPLAY CASE	1	_____
2. END TRIM CAP (left-hand)	1	1154
END TRIM CAP (left-hand) MOUNTING SCREWS	3	SC-2425
3. END TRIM CAP (right-hand)	1	1562
END TRIM CAP (right-hand) MOUNTING SCREWS	3	SC-2425
4. TRIM LOCK CHANNEL	1	1683
5. MULLION COVER	1	4865
MULLION COVER MOUNTING SCREWS	1	SC-2459
6. LEVELING BOLT	4	SC-2242
7. OUTLET W/O PROBE RETROFIT KIT (NOT SHOWN)	1	5957
OUTLET W/PROBE RETROFIT KIT	1	5984
DECOR PANELS:		
CUSTOMER PANEL — STAINLESS STEEL	1	11616
END PANEL — S/S (right-hand)	1	11607
END PANEL — S/S (left-hand)	1	11610
CUSTOMER PANEL — PAINTED (SPECIFY COLOR)	1	1542
END PANEL — PAINTED (right-hand) (SPECIFY COLOR)	1	1340
END PANEL — PAINTED (left-hand) (SPECIFY COLOR)	1	1442
CUSTOMER PANEL — WHITE VINYL	1	12727
END PANEL — WHITE VINYL (right-hand)	1	12721
END PANEL — WHITE VINYL (left-hand)	1	12723
CUSTOMER PANEL — RED VINYL	1	12728
END PANEL — RED VINYL (right-hand)	1	12722
END PANEL — RED VINYL (left-hand)	1	12724
DECOR PANELS — 51" HIGH SYSTEM:		
CUSTOMER PANEL — PAINTED	1	12144
END PANEL — PAINTED (RH)	1	12135
END PANEL — PAINTED (LH)	1	12136

SERVICE VIEW • EDSYS-96 SYSTEM— PAGE 16
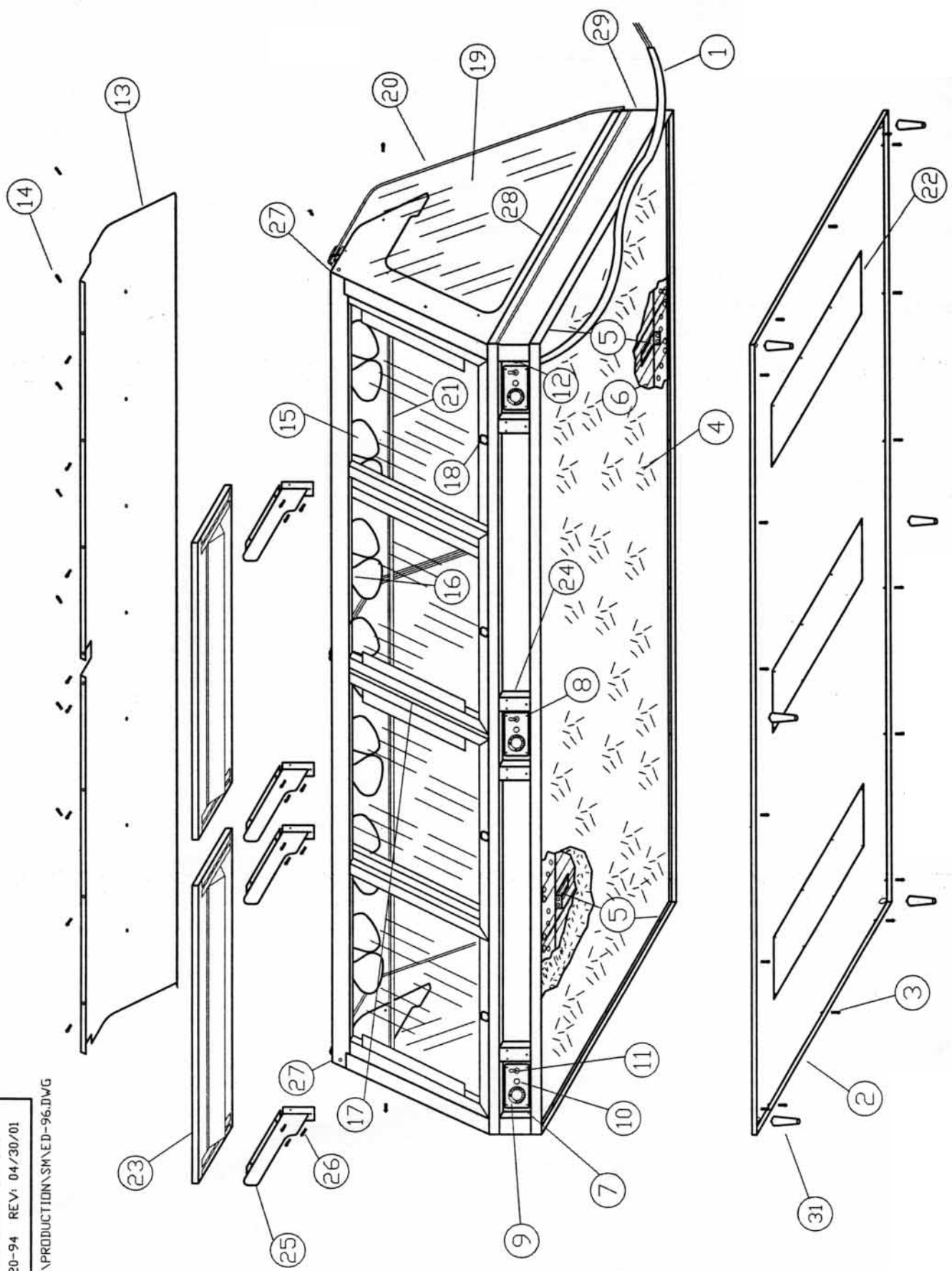
LAMP #5

LAMP #6

LAMP #3

LAMP #4

LAMP #1

LAMP #2
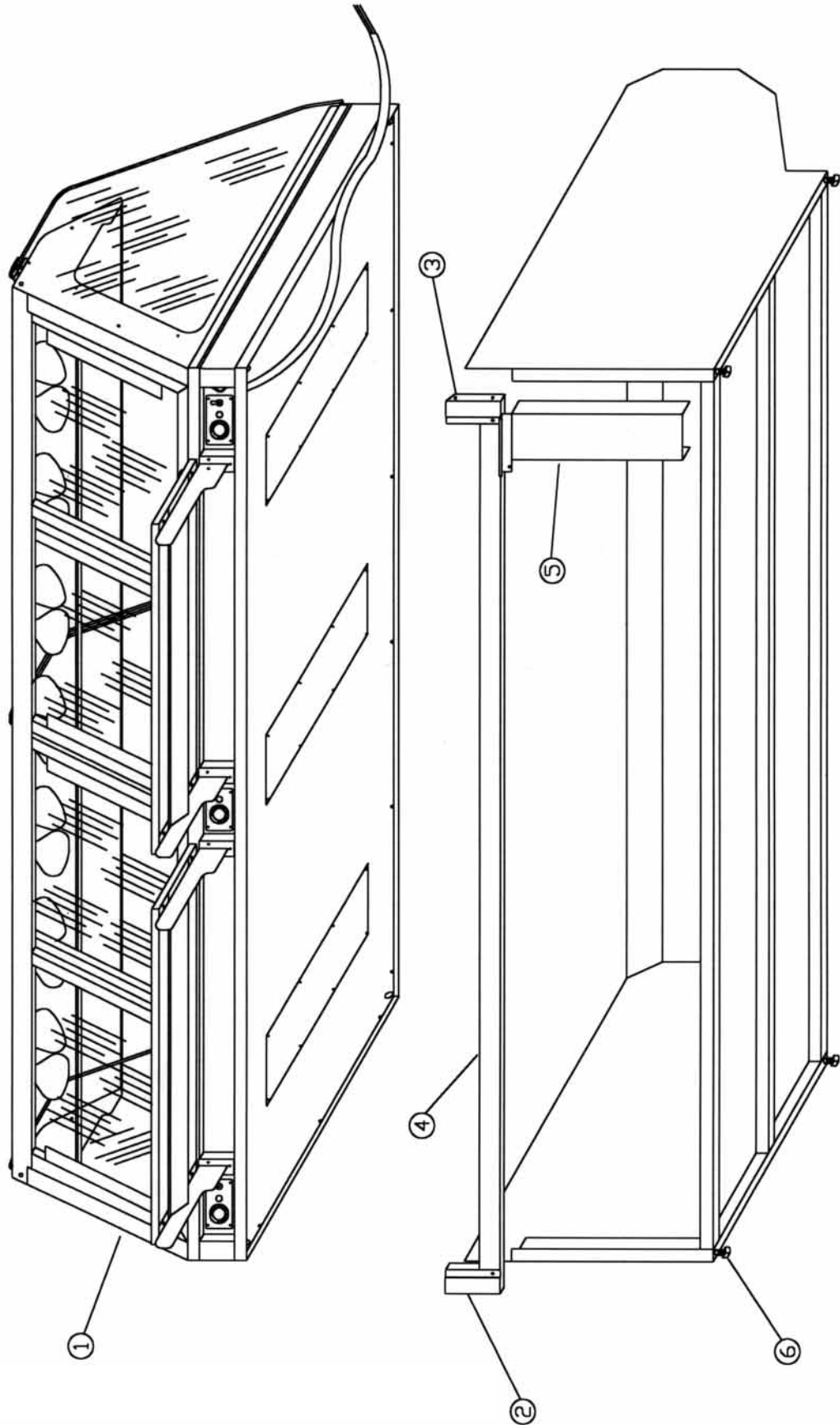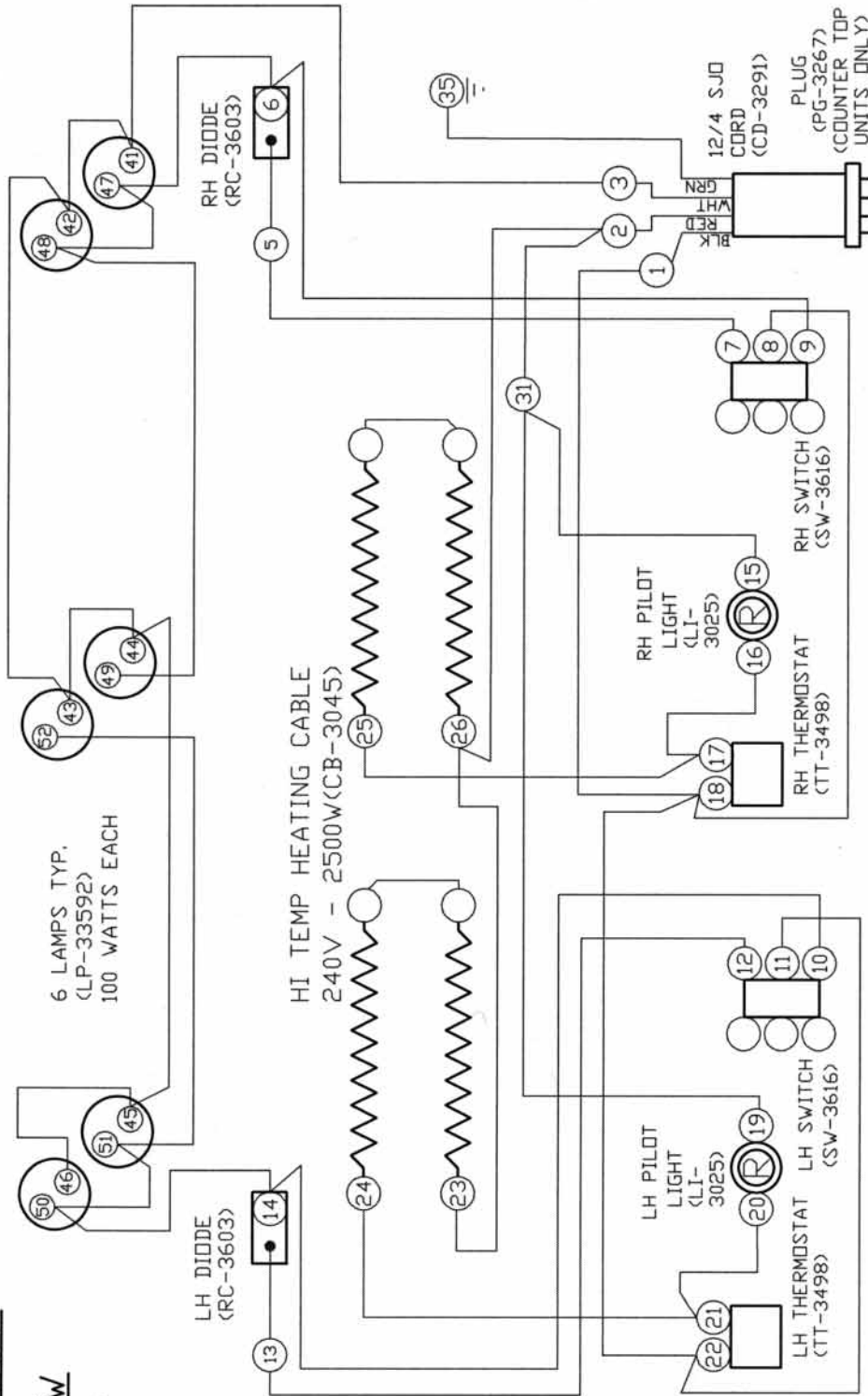
6 LAMPS TYP.
(LP-3384)
100 WATTS EACH

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

220V
50HZ
3000W
13.6A

LH SWITCH
(SW-3616)

LH SWITCH
(SW-3616)

RH PILOT
LIGHT
(LI-3025)

LH PILOT
LIGHT
(LI-3025)

RH THERMOSTAT
(TT-3498)

LH THERMOSTAT
(TT-3498)

14/3 CORD
(CD-3545)

GRN
WHT
BLK

REVISIONS
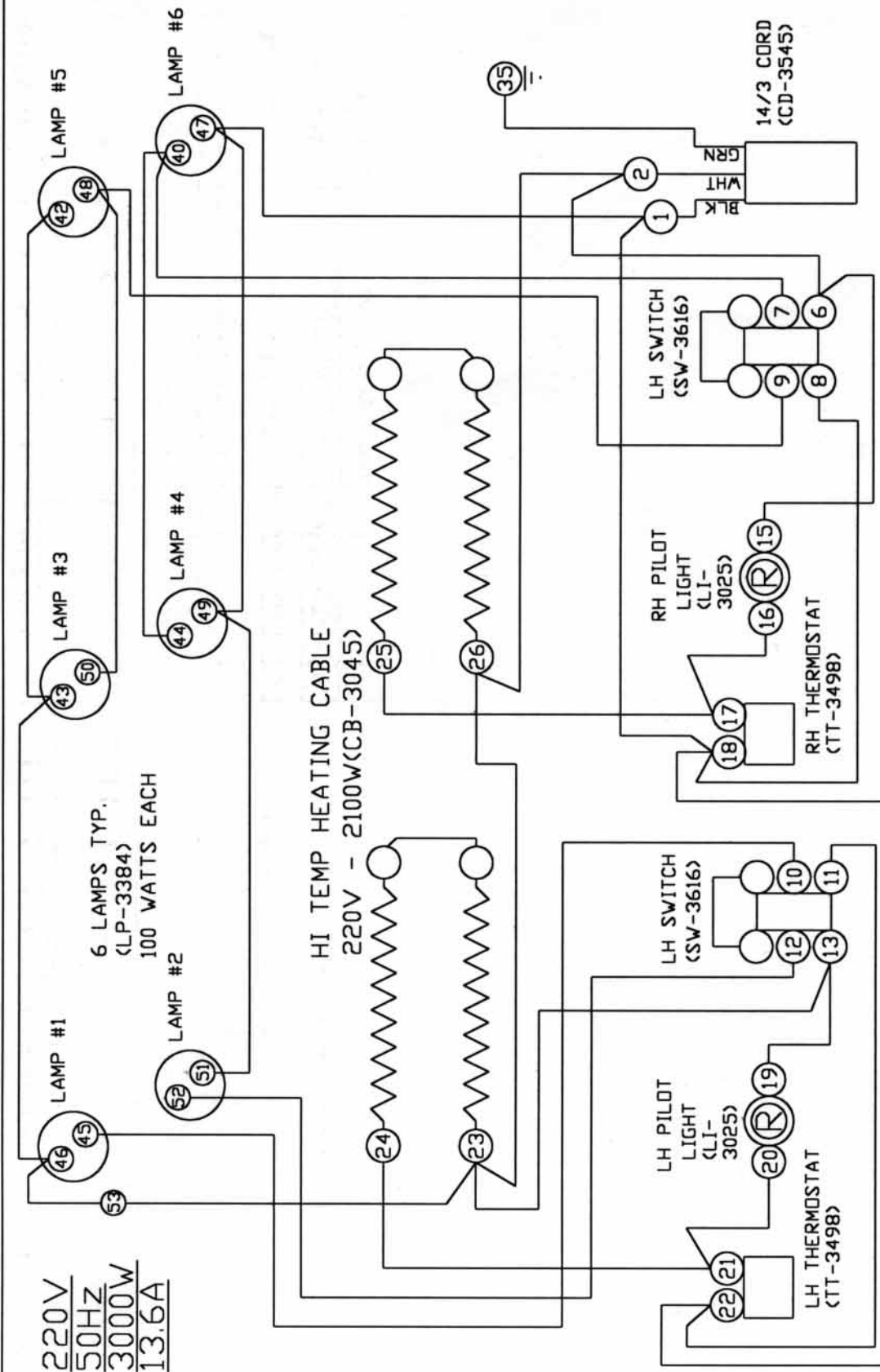
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2	09-06-88	ALO
3	02-23-95 RS	
4		

DCD,ED-48,ED-48/P   220V

WIRING DIAGRAM
ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

DRWN BY ALO   SCALE 1=1
APP'D BY DAR   DATE 3-23-87

DWG NO
A-7288

NOTE #1: ALL NUMBERS IN < > = ALTO-SHAAM PART NO'S
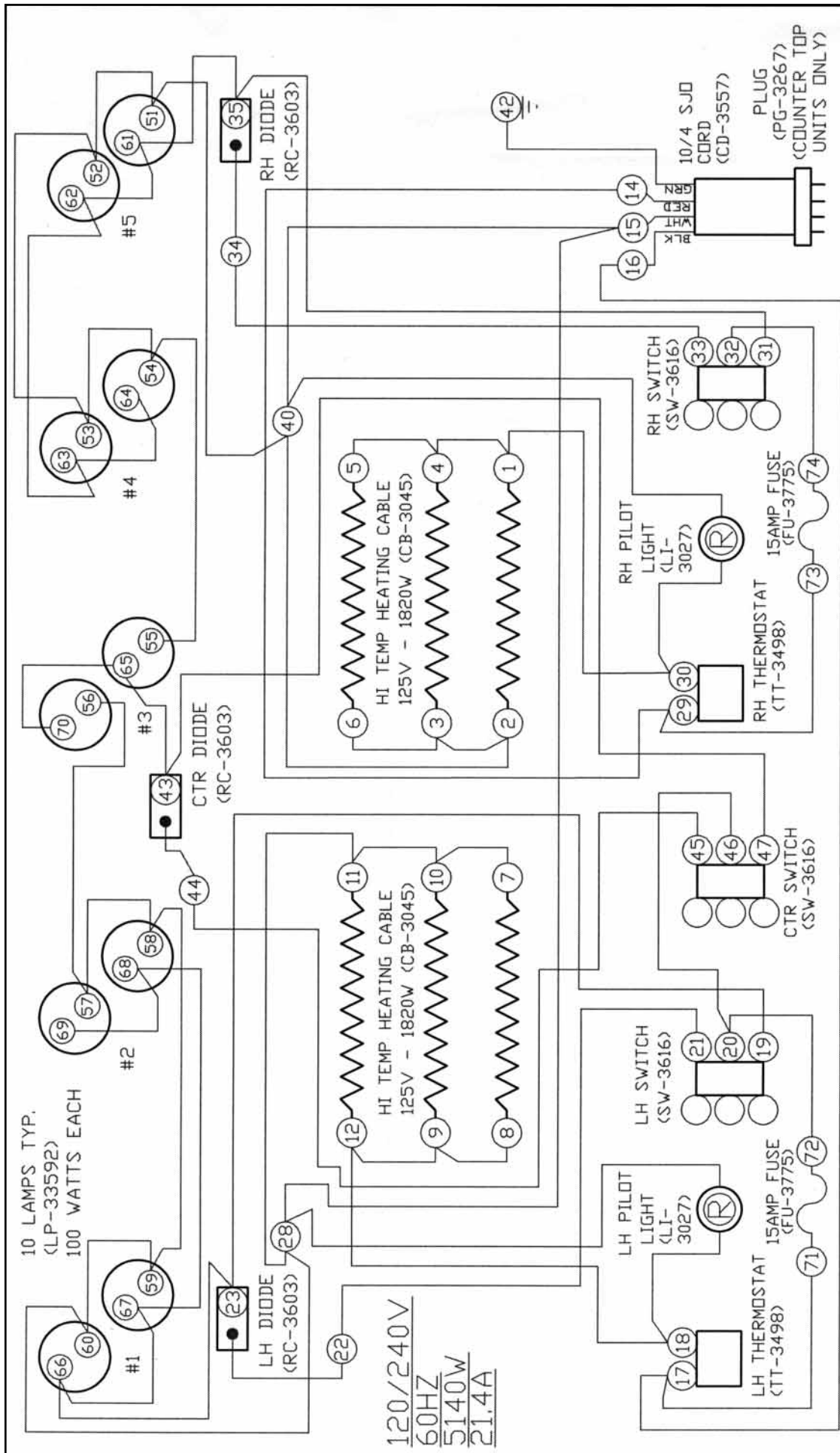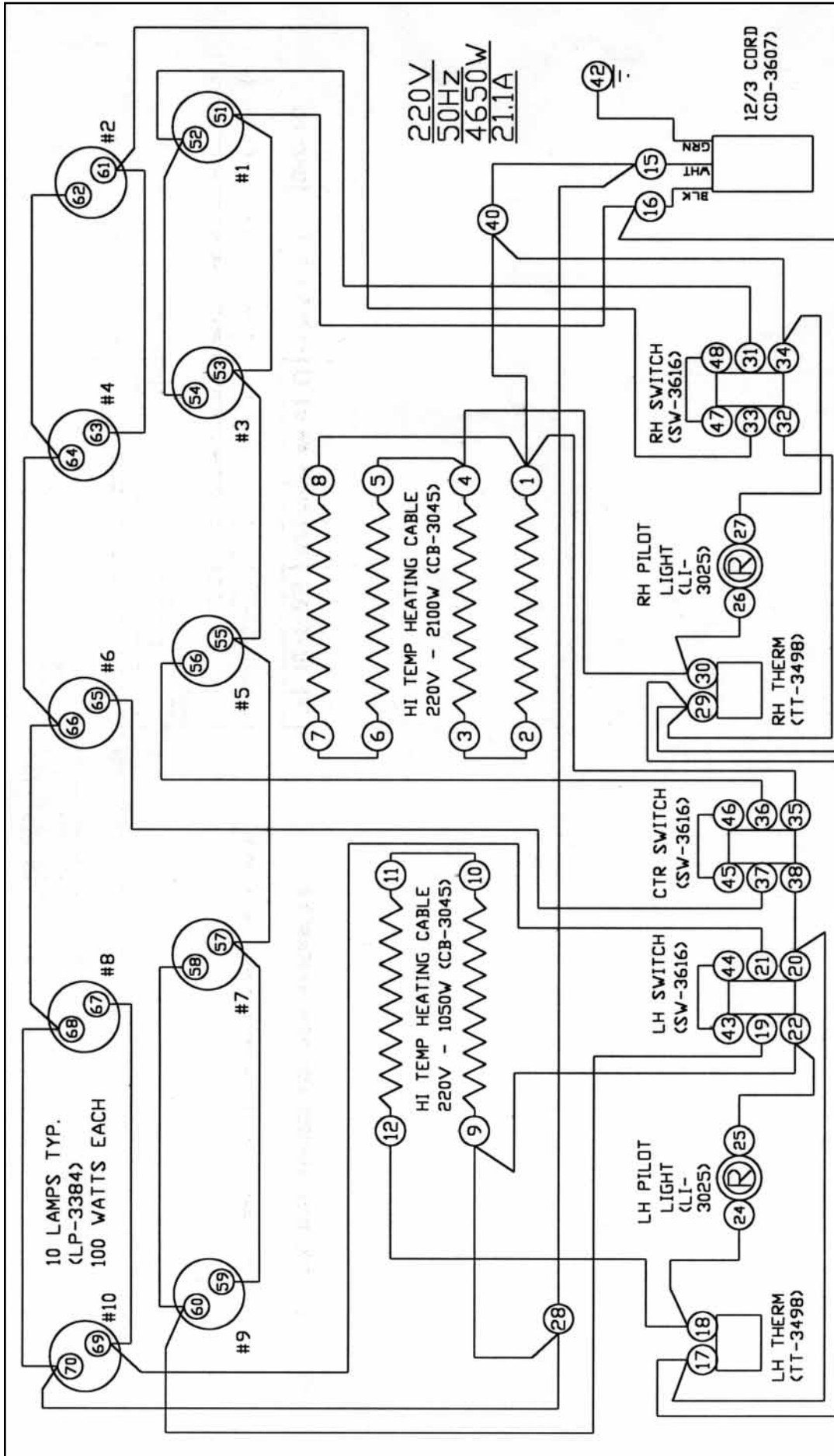
NOTE #2: SEE DRW. #B-8580 FOR WIRE ASSEMBLIES
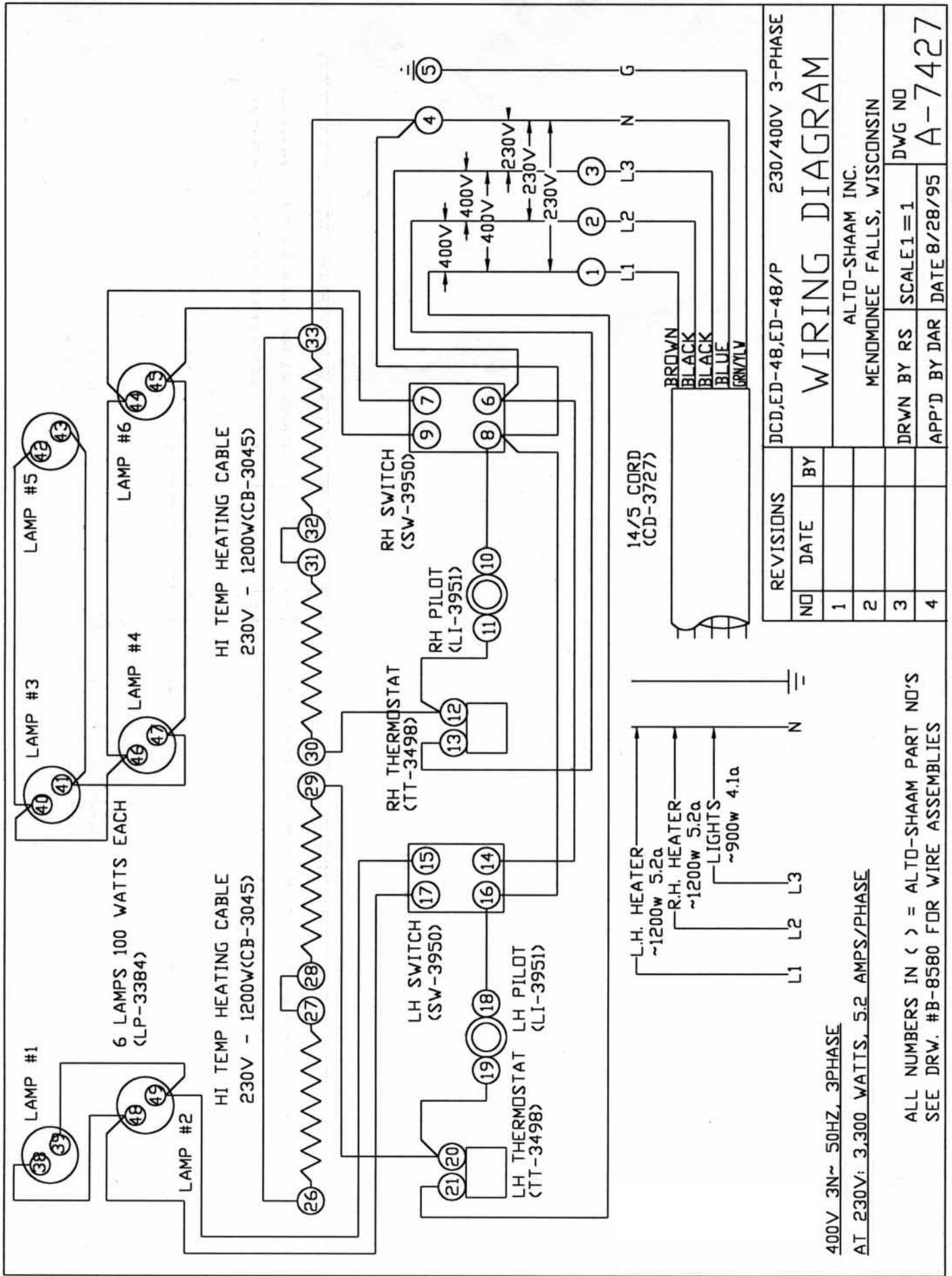
WIRING DIAGRAM

DCD,ED-48,ED-48/P   230/400V 3-PHASE

ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

REVISIONS			DWG NO
NO	DATE	BY	A-7427
1			
2			
3			DRWN BY RS SCALE1=1
4			APP'D BY DAR DATE 8/28/95

LAMP #1
LAMP #2
LAMP #3
LAMP #4
LAMP #5
LAMP #6

6 LAMPS 100 WATTS EACH
(LP-3384)

HI TEMP HEATING CABLE
230V - 1200W(CB-3045)

HI TEMP HEATING CABLE
230V - 1200W(CB-3045)

RH SWITCH
(SW-3950)

RH PILOT
(LI-3951)

RH THERMOSTAT
(TT-3498)

LH SWITCH
(SW-3950)

LH PILOT
(LI-3951)

LH THERMOSTAT
(TT-3498)

14/5 CORD
(CD-3727)

BROWN
BLACK
BLACK
BLUE
GRN/YLV

L.H. HEATER
~1200w 5.2a
R.H. HEATER
~1200w 5.2a
LIGHTS
~900w 4.1a

N
L3
L2
L1

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

230V
230V
230V
400V
400V
400V

L1
L2
L3
N
G

WIRING DIAGRAM

ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

NO	DATE	BY	DWG NO
1	6-23-88	ALO	A-7289
2	9-6-88	ALO	
3	10-1-92	LRW	
4			

REVISIONS

DCD,ED-72,ED-72/P,/PR,/PL   220V

SCALE 1=1   DRWN BY ALO

DATE 3-25-87   APP'D BY DAR

220V
50Hz
4650W
21.1A

12/3 CORD
(CD-3607)

RH SWITCH
(SW-3616)

RH PILOT
LIGHT
(LI-3025)

RH THERM
(TT-3498)

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

CTR SWITCH
(SW-3616)

LH SWITCH
(SW-3616)

HI TEMP HEATING CABLE
220V - 1050W (CB-3045)

LH PILOT
LIGHT
(LI-3025)

LH THERM
(TT-3498)

10 LAMPS TYP.
(LP-3384)
100 WATTS EACH

NOTE #1: ALL NUMBERS IN < > = ALTO-SHAAM PART NO'S

NOTE #2: SEE DRW. #B-8581 FOR WIRE ASSEMBLIES

WIRING DIAGRAM

ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

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

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

REVISIONS
NO. | DATE | BY
1 | |
2 | |
3 | |
4 | |
5 | |

10 LAMPS 100 WATTS EACH
(LP-3384)

LAMP #1
LAMP #2
LAMP #3
LAMP #4
LAMP #5
LAMP #6
LAMP #7
LAMP #8
LAMP #9
LAMP #10

HI TEMP HEATING CABLE
230V - 1200W(CB-3045)

RH SWITCH
(SW-3950)
RH PILOT
(LI-3951)
RH THERMOSTAT
(TT-3498)

CENTER SWITCH
(SW-3950)

LH SWITCH
(SW-3950)
LH PILOT
(LI-3951)
LH THERMOSTAT
(TT-3498)

14/5 CORD
(CD-3727)

BROWN
BLACK
BLACK
BLUE
GRN/YLW

230V
400V
230V
400V
230V

L3
L2
L1
N
G

L.H. HEATER ~1200w 5.2a
R.H. HEATERS ~2400w 10.4a
LIGHTS ~1500w 6.8a
L1 L2 L3 N

400V 3N~ 50-60HZ, 3PHASE
AT 230V: 5,100 WATTS, Max. 10.4 AMPS/PHASE

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

WIRING DIAGRAM

ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

DCD,ED-96,ED-96/PR,/PL 120/240V

REVISIONS		
NO.	DATE	BY
5	03-03-93	LRW
6	07-19-94	RS
7		
8		
9		

DRAWN BY LRW | SCALE 3/4"=1" | DWG. NO. A-7260
APP'D DAR | DATE 03/03/93 |
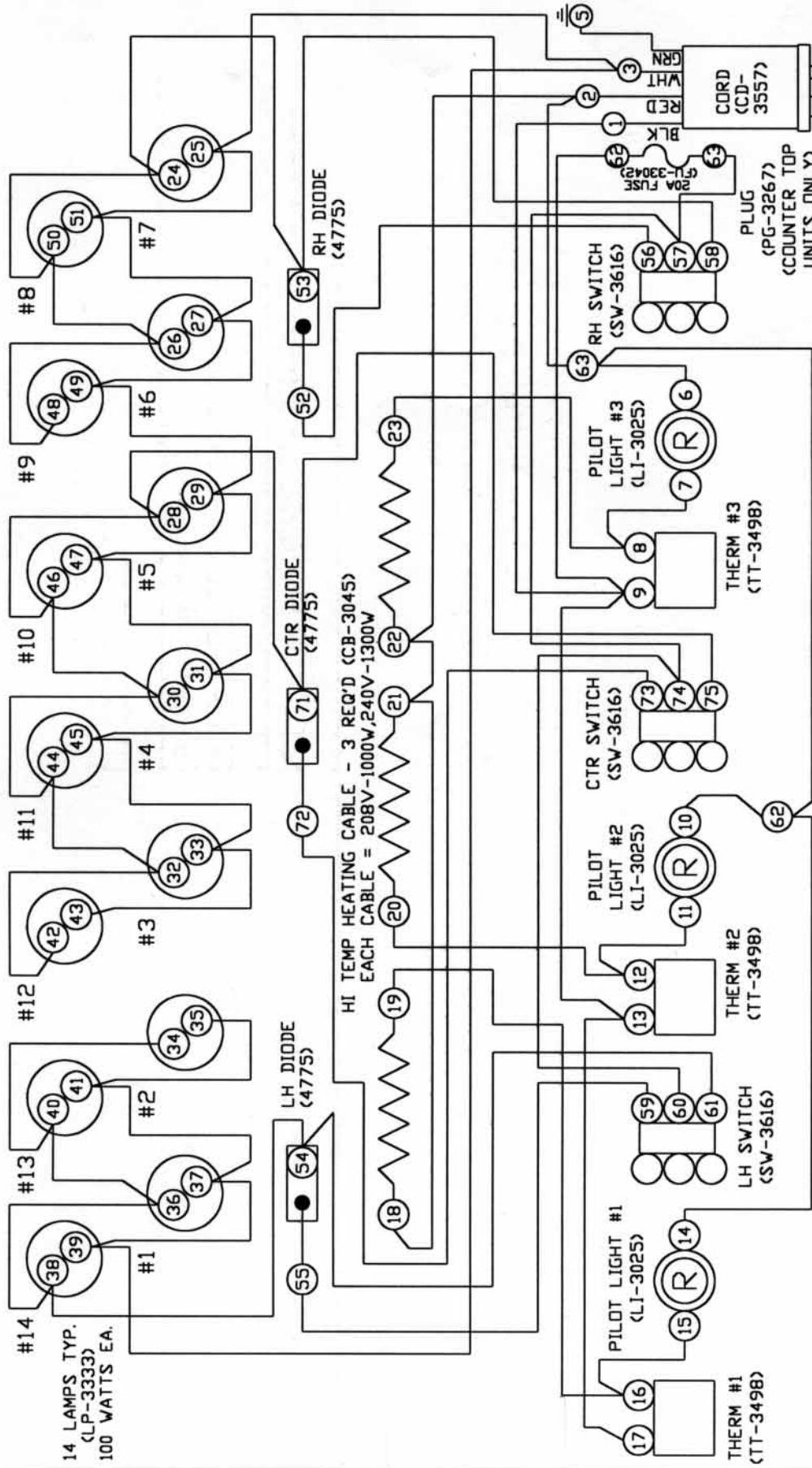
NOTE #1: ALL NUMBERS IN < > = ALTO-SHAAM PART NO'S

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

120/208V OR 120/240V
60Hz   60Hz
5100W   6000W
22.5A   24.7A

14 LAMPS TYP. (LP-3333) 100 WATTS EA.

RH DIODE (4775)
CTR DIODE (4775)
LH DIODE (4775)

HI TEMP HEATING CABLE - 3 REQ'D (CB-3045)
EACH CABLE = 208V-1000W,240V-1300W

CORD (CD-3557)
GRN WHT RED BLK

PLUG (PG-3267) (COUNTER TOP UNITS ONLY)
20A FUSE (FU-3304S)

RH SWITCH (SW-3616)
CTR SWITCH (SW-3616)
LH SWITCH (SW-3616)

PILOT LIGHT #3 (LI-3025)
PILOT LIGHT #2 (LI-3025)
PILOT LIGHT #1 (LI-3025)

THERM #3 (TT-3498)
THERM #2 (TT-3498)
THERM #1 (TT-3498)

120/240V

220V
50Hz
5400W
24.5A

14 LAMPS TYP. 100 WATTS EACH - (LP-3384)

EACH CABLE = HI TEMP HEATING CABLE(3 REQ'D)
220V - 1100W(CB-3045)

#8 #7 #6 #5 #4 #3 #2 #1

#9 #10 #11 #12 #13 #14

PILOT LIGHT #3
(LI-3025)

THERM #3
(TT-3498)

RH SWITCH
(SW-3616)

CTR SWITCH
(SW-3616)

PILOT LIGHT #2
(LI-3025)

THERM #2
(TT-3498)

LH SWITCH
(SW-3616)

PILOT LIGHT #1
(LI-3025)

THERM #1
(TT-3498)

CORD
(CD-3304)

BLK WHT GRN

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

NOTE #2: SEE DRW. #B-8586 FOR WIRE
         ASSEMBLIES

WIRING DIAGRAM

ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

ED,DCD-96   220V

REVISIONS		
NO.	DATE	BY
2	09-06-88	ALO
3	03-02-93	LRW
4	02-23-95	RS
5	05-11-95	RS
6		

DRAWN BY	LRW	SCALE 3/4"=1"	DWG. NO.
APP'D	DAR	DATE 03/02/93	A-7293

WIRING DIAGRAM
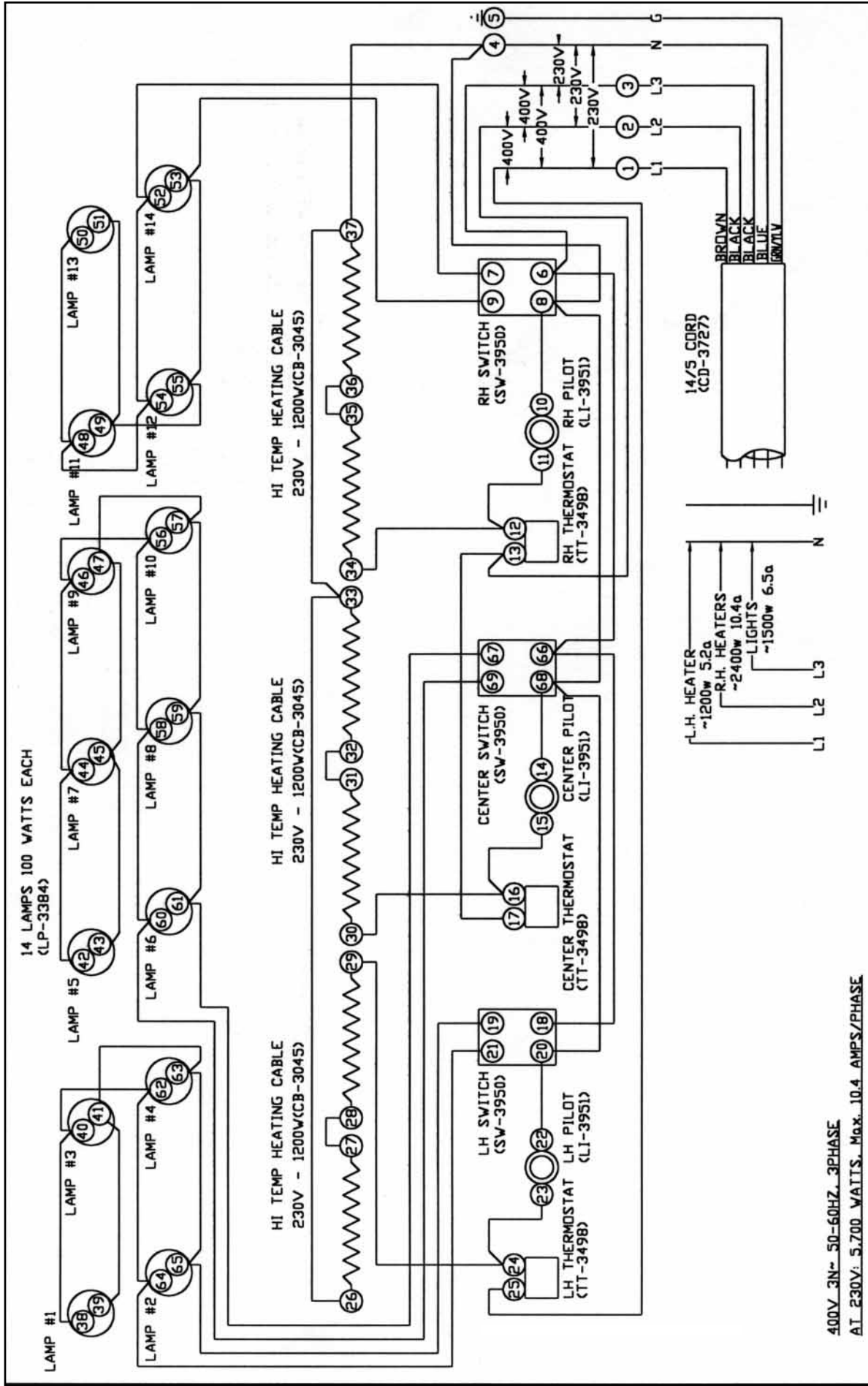
ALTO-SHAAM INC.
MENOMONEE FALLS, WISCONSIN

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

DWG. NO.
A-7429

14 LAMPS 100 WATTS EACH
(LP-3384)

HI TEMP HEATING CABLE
230V - 1200W(CB-3045)

400V 3N~ 50-60HZ 3PHASE
AT 230V: 5.700 WATTS. Max 10.4 AMPS/PHASE

ALL NUMBERS IN ( ) = ALTO-SHAAM PART NO'S
SEE DRW. #B-8586 FOR WIRE ASSEMBLIES

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.

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