ALTO SHAAM.

OPERATION and CARE MANUAL



Hot Display Case

EDW-96/PL Full Service and Self Service



COOK/HOLD/SERVE SYSTEMS

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

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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

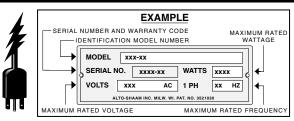
cabinet is provided. When you receive your unit, check for any possible shipping damage and report it at once to the delivering carrier. See *Transportation Damage and Claims* section located in this manual.

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



- 1. An identification tag is permanently mounted on cabinet.
- 2. Permanent wiring or proper receptacle for this unit must be installed by a licensed electrician in accordance with applicable, local electrical codes.
- **3.** Plug the case into a properly grounded receptacle ONLY. Arcing will occur when connecting or disconnecting the display case unless all controls are in the OFF position. Always position the appliance so the power supply cord is easily accessible in case of an emergency.



ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON NAMEPLATE OF UNIT

OPERATIONAL PROCEDURES

- 1. DO NOT ADD WATER TO THE DISPLAY CASE Alto-Shaam display cases maintain a constant heat which eliminates much of the moisture loss, and 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 <u>VERY</u> important to note*, no matter what type of pan configuration you choose, pan separator bars or divider bars must be used to close all gaps between pans, and all gaps between the pans and the edges of the display case. Otherwise, heat distribution will be uneven and uniform temperature will be difficult to hold. If needed, additional pan divider bars are available.

3. TURN UNIT ON AND SET THE THERMOSTATS TO NUMBER "9" TO PREHEAT

An indicator light will illuminate when the thermostats are turned "**ON**." The indicators will remain lit as long as the unit is preheating or calling for heat. The unit should be preheated, at the number **9** setting, for a minimum of forty-five 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 lights will go "**OUT**".

4. LOAD HOT FOODS INTO THE 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), or a Combitherm oven/steamer, to bring the product within the correct temperature range.

- ✓ Use hand protection when handling hot items.
- ✔ Do not stack food containers.
- Be certain only hot PREPACKAGED foods in appropriate heat tested containers are used in the self-service section of the display case.

5. TURN LIGHTS ON AND RESET THERMOSTATS

After all products are loaded into the display case and the doors are closed, reset the thermostats 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. Self service sections always require a higher thermostat setting.

6. SERVE FRESH HOT FOOD

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



DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING



#871 Operation & Care Manual • 1.

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.



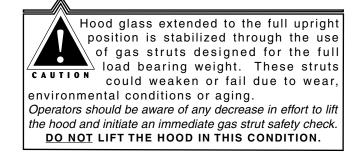
THOROUGHLY CLEAN THE DISPLAY CASE DAILY

- 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.
- **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 unit be steam cleaned, flooded with water or liquid solution. Do not use water jet to clean. Do not steam clean. Severe damage or electrical hazard could result, voiding the warranty.





QUARTZ HEAT ELEMENTS

- White cotton gloves should be worn when handling quartz elements. Never touch them with bare hands, as oil and dirt from the skin can contaminate the quartz sheath and cause hot spots and premature heater failure. If this element is touched, thoroughly wipe, using a dry, clean cloth and alcohol or other suitable solvent.
- → Do not expose these heater elements to water.
- → Solvent vapors can be flammable. Be sure to provide adequate ventilation.
- Quartz heater elements are designed to be used in a horizontal position only.

Installation

Care should be taken to insure that all installations meet local code requirements and safety regulations. The quartz heater will expand about 1% of its length. Be sure it is mounted to allow this growth. Check the area around the quartz heat element for flammable material.

Electrical

Never operate the quartz heater element at a voltage higher than the design voltage. Disconnect and/or lock out power before installing heater and making electrical connections. Make electrical connections according to local, national or country codes. Be sure all electrical connections are made safely and that the terminals do not contact the housing. On units supplied with leads, make certain the lead connections are tight before applying power. When attaching leads to the heater element, be sure to hold the inner terminal nut with pliers to prevent twisting or breaking.

Operation

These heaters are designed to provide trouble-free operation; however, some minimal precautions are required. Be sure the area is free of flammable hazards. If the heaters are facing up, be sure to remove objects that fall into the heaters or the reflectors behind them. Periodically check to see that the wiring is not frayed, burnt, or cut. If there is vibration, check to see that mounting screws remain secure. The heaters will operate best with clean reflectors. The loss of efficiency can be as high as 30% with dirty reflectors. Always disconnect and lock out power before parts are replaced.

Replacement

Replacement is accomplished by removal of the screws holding the end caps, removing the end caps, and disconnecting the power leads from the terminals on the heater element. Installation is accomplished by reversing the procedure.

Quartz elements should not be touched with bare fingers as oil from hands can destroy or cause premature failure. If accidentally touched, clean with a dry, soft cloth and rubbing alcohol.

SANITATION GUIDELINES

GENERAL HOLDING GUIDELINES

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

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

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

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

			The most
INTERNAL FOO	OD PRODUCT T	EMPERATURES	accurate
HOT FOODS			method o
DANGER ZONE	40° TO 140°F	(4° TO 60°C)	measuring
CRITICAL ZONE	70° TO 120°F	(21° TO 49°C)	safe temp
SAFE ZONE	140° TO 165°F	(60° TO 74°C)	
C	atures of l		
DANGER ZONE	ABOVE 40°F	(ABOVE 4°C)	hot and co
SAFE ZONE	36°F TO 40°F	(2°C TO 4°C)	foods is b
FR	internal		
DANGER ZONE	ABOVE 32°F	(ABOVE 0°C)	product
CRITICAL ZONE	0° TO 32°F	(-18° TO 0°C)	temperatu
SAFE ZONE	0°F or below	(-18°C or below)	-
			' A quality

te of ing nperof both cold s by ť ature. 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.

This unit 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, temperature throughout the cabinet remains constant without the necessity of a heat distribution fan, thereby preventing further moisture loss due to evaporation or dehydration.

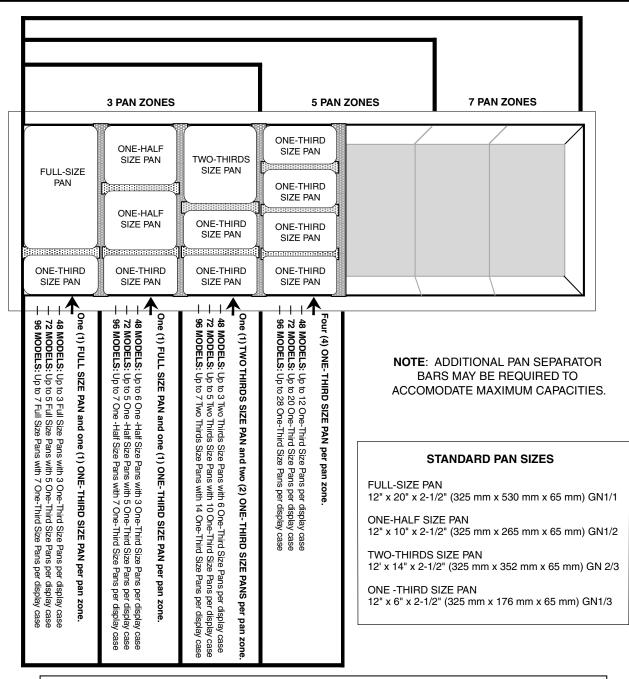
In an enclosed holding environment, too much moisture content is a condition which can be relieved. A product achieving extremely high temperatures in preparation must be allowed to decrease in temperature before being placed in a controlled holding atmosphere. If the product is not allowed to decrease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

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.

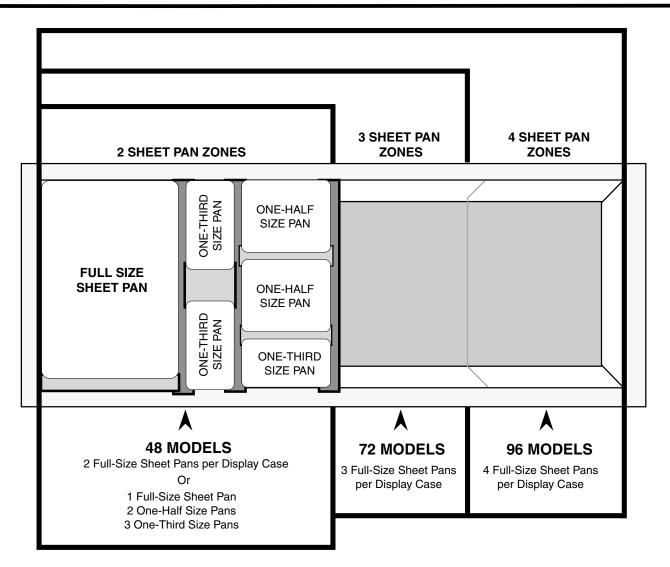
HOLDING TEMPERATURE RANGE

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



STANDARD PAN DIVIDER & SEPARATOR BARS						
No de réf.	DESCRIPTION	DIMENSIONS 48			IODEL	.s I 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 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)			_
11320	SHEET PAN DIVIDER BAR	1-3/4" x 17- 3/4"	(45 mm x 451 mm)		3	4
11357	SHEET PAN DIVIDER BAR	5-29/32" x 27-13/16"	(150 mm x 706 mm)	_	2	3
11732	SHEET PAN 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



STANDARD PAN DIVIDER & SEPARATOR BARS						
	DESCRIPTION	DIMENSIONS		48	MODELS 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

EDW-96/PL • SERVICE PARTS

11-12-01	PART DESCRIPTION	ΟΤΥ	A/S PT NO.
1.	Heat Element		
2.	Thermostat Thermostat, Quartz Thermostat, Bezel Thermostat Knob		TT-33461 TT-3713
3.	Block, Terminal Block, Modular, Assembly	1 1	BK-3021 BK-33696
4.	Heat Indicator Light	8	LI-3025
5.	Switch, Circuit Breaker, Bulb Switch, Circuit Breaker		SW-33342 SW-3715
6.	Bulb, 100 Watt, 120VBulb ReceptacleBulb Guard	8	RP-3952
7.	Door Assembly Door Track, Top Door Track, Bottom Door Gasket		TK-24914 TK-24915
8.	Glass, Divider	1 1 1 1 2 1	GL-24912 GL-24911 GL-25297
9.	Capillary Cover	1	
10.	Cutting Board Assembly Cutting Board Bracket Bracket Guide Cutting Board Support Cutting Board		BT-2342 13147
11.	Panel, Solid End, Left Panel, Mirror for PE-25289, LH Panel, Solid End, Right Panel, Mirror for PE-25290, RH	· · · .1 · · ·	
12.	Gas Strut Hinge, Insert Hinge, Pivot Hinge, Upright Plug Pin, Hinge Pin, Strut Bushing		HG-22672 HG-23669 PG-24926 PG-2899 PI-23678 PI-23679
13.	Panel, Front Trim, lower	1	
14.	Insert Pan	1	
15.	Pan Divider Bars Long Short Sheet Pan Sheet Pan		
16.	Shelf	1	SH-22473

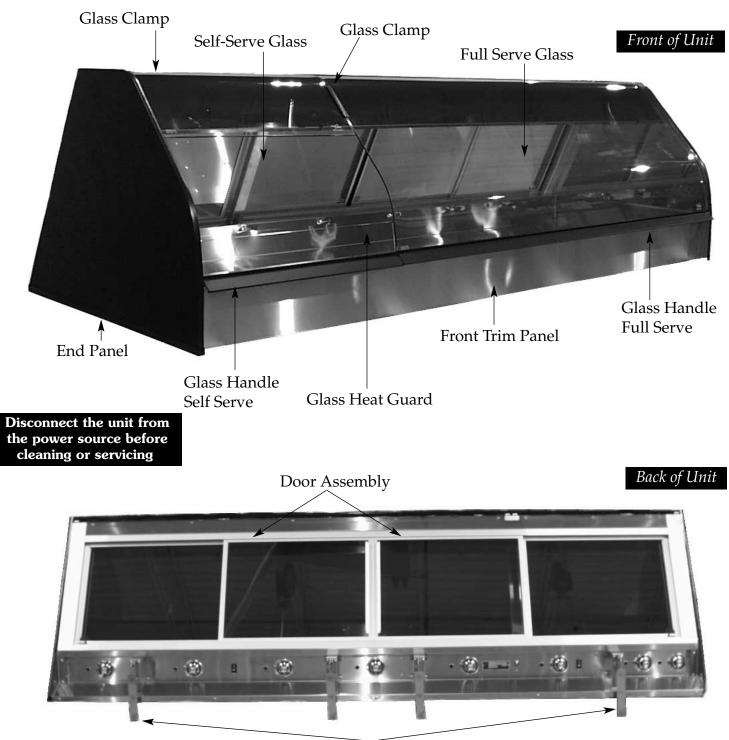




Disconnect the unit from the power source before cleaning or servicing.

Service should be done by authorized service technicians only.

EDW-96/PL • SERVICE VIEWS

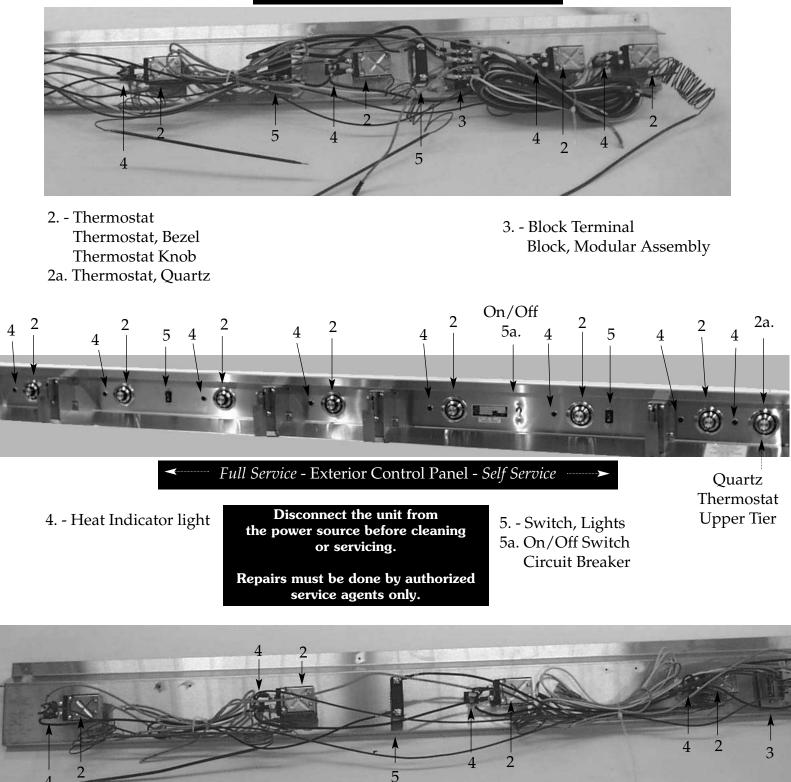


Cutting Board Assembly Brackets

To change the heat elements, remove the cutting boards from the brackets. The brackets do not need to be removed. Remove the screws from the bottom of the control panel -- then the screws from the top of the control panel. Gently pull the control panel down. This allows access to the heat elements and the interior components of the control panel.

EDW-96/PL • SERVICE VIEWS

Interior Control Panel - FULL SERVE side



Interior Control Panel - SELF SERVE side

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EDW-96/PL • SERVICE VIEWS



Bottom Heat Elements

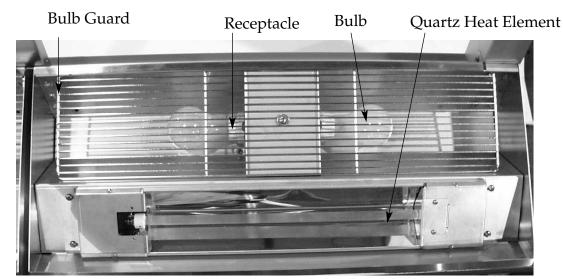
To remove the heat element, bend down the retaining clip. Holding the element in place and disconnect the wires to the element. Pull element straight out and replace in holder.

To replace, reconnect wires retape, slide back into place, and bend retaining clip back into position.

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

Repairs must be done by authorized service agents only.

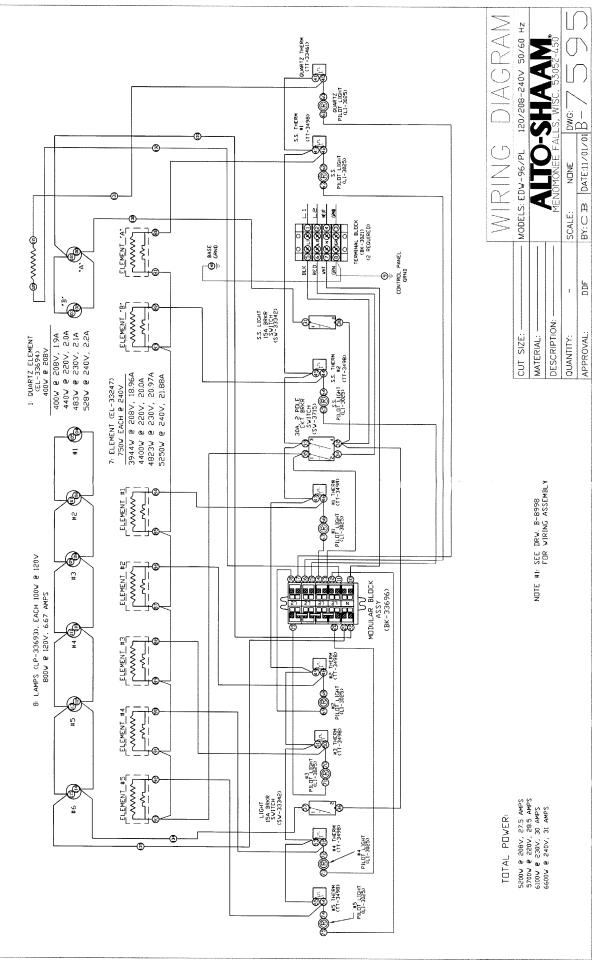




Upper canopy underside

Self Serve Side

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TRANSPORTATION DAMAGE and CLAIMS



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

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

- Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
- 2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
- 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.
- 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:	correspondence regarding the diffe
Serial Number:	
Purchased From:	

COOK/HOLD/SERVE SYSTEMS BY ALTO-SHAAM.

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