

ALTO SHAAM®

OPERATION and CARE MANUAL



HOT ROTATING MERCHANDISER

Model: 750-GDR



COOK/HOLD/SERVE SYSTEMS

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ALTO-SHAAM® Hot Rotating Visual Merchandiser

UNPACKING and SET-UP

The Alto-Shaam Hot Rotating Visual Merchandiser 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.)

The cabinet, complete with unattached items and accessories, may be delivered in one or more packages. Check to ensure all the following items have been received as standard with each cabinet.

- 1: Stainless Steel Drip Pan
- 10: Stainless Steel Wire Baskets

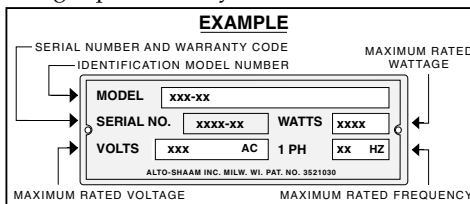
Save all the information and instructions packed inside the cabinet. To maintain sanitation ordinances, cabinets intended for counter-top applications must be sealed to the counter with a NSF approved sealant or mounted on six inch legs.

Complete and return the warranty card to the factory as soon as possible to insure prompt service in the event of a warranty parts and labor claim.

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

ELECTRICAL INSTALLATION

An identification tag is permanently mounted on the cabinet.



Plug the case into a properly grounded receptacle only. A proper receptacle or outlet configuration or permanent wiring for this unit must be installed by a licensed electrician in accordance with applicable, local electrical codes.

**ENSURE THE POWER SOURCE
MATCHES THE VOLTAGE STAMPED
ON THE UNIT NAMEPLATE.**



START-UP

- Before operating the cabinet, clean both the interior and exterior of the unit with a damp cloth and mild soap solution. Rinse carefully. Clean all window areas with a standard commercial glass cleaner.
- Clean the stainless steel wire baskets and drip pan. Insert the stainless steel drip pan on the bottom surface of the interior cabinet.
- This cabinet should NOT be installed in any area where it may be affected by steam, grease, dripping water, high temperatures or any other severely adverse conditions. Do not install directly adjacent to heat producing equipment.



At no time should the inside or outside of the cabinet be flooded with water or liquid solution. NEVER STEAM CLEAN. Do not use water jet to clean. Severe damage or electrical hazard could result, voiding the warranty.

OPERATIONAL PROCEDURES

- TURN DISPLAY LIGHTS "ON" AND SET THE THERMOSTAT AT NUMBER "10" TO PREHEAT.**
An indicator light will illuminate when the thermostat is turned "ON." The indicator 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 30 minutes before loading the merchandiser with food. When preheating is completed, or whenever the unit reaches any temperature set by the operator between 1 and 10, the indicator light will go "OUT".
- LOAD THE CABINET WITH HOT FOOD ONLY.**
The purpose of the holding cabinet is to maintain hot food at proper serving temperature. **Only hot food should be placed into the cabinet.** Before loading the cabinet with food, use a food thermometer to make certain all products are at an internal temperature range of 140° to 160°F (60° to 71°C). Any food product not within the proper temperature range should be heated to this temperature before loading into the holding cabinet.
- RESET THE THERMOSTAT.**
After all products are loaded, check to make certain the cabinet doors are securely closed, and reset the thermostat to the number "8" setting. *This will not necessarily be the final setting.*

The proper temperature range for the products being held will depend on the type and quantity of product. When holding food for prolonged periods, it is advisable to periodically check the internal temperature of each item with a food thermometer to assure maintenance of the proper temperature range of 140° to 160°F (60° to 71°C).

CARE and CLEANING

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

CLEAN THE MERCHANDISING CABINET DAILY:

- Disconnect the cabinet from the power source.
- Remove all detachable items such as wire baskets, drip pans, etc. Clean these items separately.
- Clean the interior metal surfaces of the cabinet with a damp cloth and any good alkaline or alkaline chlorinated based commercial detergent or grease solvent at the recommended strength. Use a plastic scouring pad or oven cleaner for difficult areas. Avoid the use of abrasive cleaning compounds, chloride based cleaners, or cleaners containing quaternary salts. Rinse carefully to remove all residue and wipe dry.
- Clean all window areas with a standard commercial glass cleaner.

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

- To help maintain the protective film coating on polished stainless steel, clean the exterior of the cabinet with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a 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 foodservice equipment.



SANITATION GUIDELINES

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

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

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

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

The most accurate method of measuring safe temperatures of

INTERNAL FOOD PRODUCT TEMPERATURES		
HOT FOODS		
DANGER ZONE	40° TO 140°F	(4° TO 60°C)
CRITICAL ZONE	70° TO 120°F	(21° TO 49°C)
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)

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 GUIDELINE

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.

CABINET CHARACTERISTICS

The cabinet is equipped with a special, low-heat-density, heating cable. Through the Halo Heat concept, the heating cable is mounted against the walls of the warming compartment to provide an evenly applied heat source controlled by a thermostat. The design and operational characteristics of the cabinet eliminates a heat circulating fan. Through even heat application, the quality of a food product is maintained for many hours.

THERMOSTAT and LIGHT SEQUENCE

Whenever the thermostat is turned up, the indicator light will indicate the power ON/OFF condition of the heating cable, and consequently, the cycling of the cabinet as it maintains the dialed cavity temperature. If the light does not go on after normal start-up, the main power source, thermostat, and/or the light must be checked. If a warming compartment does not hold the temperature as dialed, the calibration of the thermostat must be checked. (See the paragraph on thermostat calibration.) If a warming compartment fails to heat or heats continuously with the thermostat OFF, the thermostat must be initially checked for proper operation. If all is in order, a continuity and resistance check of the heating cable should be made.

(See the circuit diagram.)

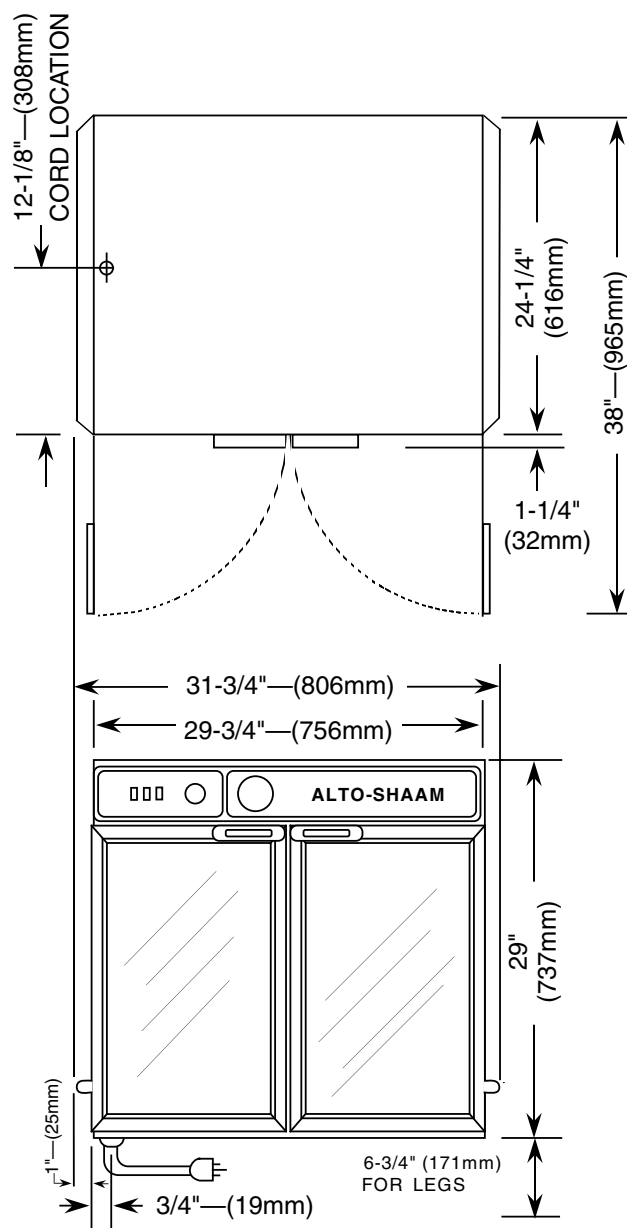
THERMOSTAT CALIBRATION

The thermostat is precision calibrated at the factory. Normally, no adjustment or recalibration is necessary unless the thermostat has been mishandled in transit, changed or abused while in service. A thermostat with a sensing bulb operates on hydraulic pressure. Consequently, any bending of the bulb results in a change in its volume and displaces the accuracy of the thermostat calibration.

A thermostat should be checked or recalibrated by placing a quality temperature indicator at the center of an empty warming cavity. **DO NOT CALIBRATE WITH FOOD PRODUCT IN THE WARMING CABINET.** The temperature must be allowed to stabilize at one particular setting for at least one hour. The center of the thermal swing of the cavity temperature should approximately coincide with the thermostat setting.

The calibration screw of the thermostat is located in the dial shaft, and should be adjusted with great care and caution. With the shaft held stationary, a very slight clockwise motion of the calibration screw APPRECIABLY lowers the thermostat setting while a reverse, counter-clockwise motion results in the opposite condition. After achieving the desired cycling of the thermostat, the calibration screw must be sealed in place with a few drops of sealant. [Red nail polish or equivalent is acceptable.]

EXTERIOR DIMENSIONS



750-GDR



Disconnect Cabinet from the Power Source Before Cleaning or Servicing

HOT ROTATING VISUAL MERCHANDISER — 750-GDR

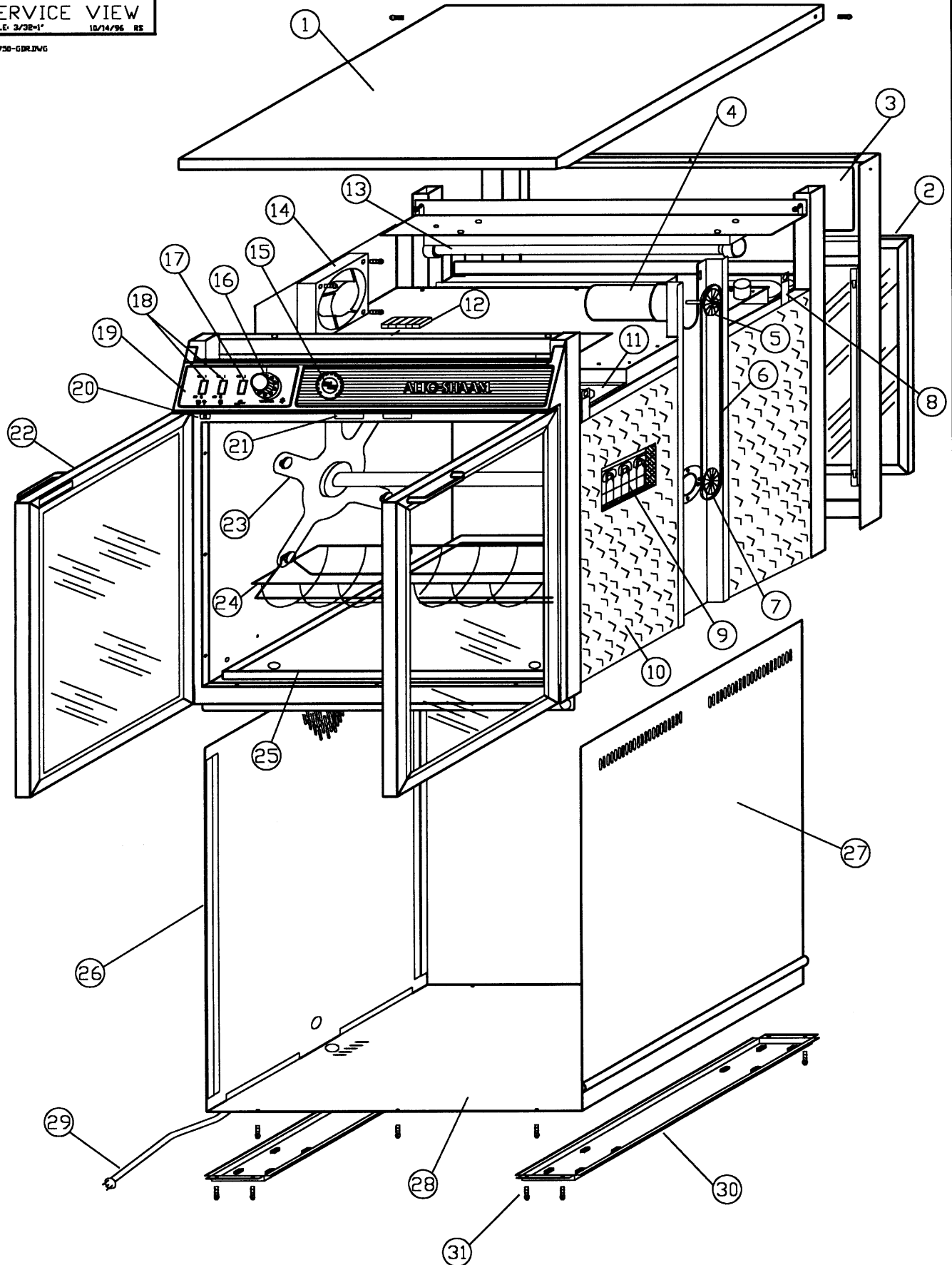
12-21-00							
PART DESCRIPTION		UNIT QUANTITY	ALTO-SHAAM PART NO.	PART DESCRIPTION		UNIT QUANTITY	ALTO-SHAAM PART NO.
1. TOP		1	14254	20. MICROSWITCH		2	SW-33271
TOP MOUNTING SCREWS		2	SC-2425				
2. REAR GLASS ASSEMBLY		1	14208	21. DOOR LATCH (MAGNETIC)		2	LT-23187
3. GRAPHICS PANEL		1	SG-23648	22. GLASS DOOR - LEFT HAND		1	4972
SIGN HOLDER		1	13098	GLASS DOOR - RIGHT HAND		1	4973
MTG. SCREWS		4	SC-2425	EACH DOOR includes:			
4. GEAR MOTOR, 2.3 RPM W/CAPACITOR		1	MO-33383	— DOOR HINGE, TOP		1	HG-2892
MOTOR SHIM SPACER (NOT SHOWN)		4	MO-23651	— DOOR HINGE, BOTTOM		1	HG-23952
SPLIT LOCK WASHER		4	WS-23671	— HINGE PIVOT PIN, TOP		1	PI-2894
#10 FLAT WASHER		4	WS-23672	— HINGE PIVOT PIN, BOTTOM		1	PI-23953
5. SPROCKET WITH HUB		1	SO-23569	— HANDLE		1	HD-2910
6. CHAIN NO. 25 — 40" (1016mm)		1	CH-23570	— HANDLE MOUNTING SCREWS		2	SC-2911
CHAIN LINK NO. 25		1	CH-23640	— DOOR GASKET ASSEMBLY		1	GS-2891
7. SPROCKET WITH HUB		1	SO-23569	23. SPINDLE ASSEMBLY:			
INNER DRIVE BEARING ASSEMBLY		1	14860	— SPINDLE LUG ASSEMBLY		1	14211
DRIVE LUG & SHAFT (NOT SHOWN)		1	SO-23646	— SLEEVE		10	SL-22578
OUTER DRIVE BEARING ASSEMBLY		1	14859	— STUD / SIDE RACK		10	ST-22505
8. CABLE CONNECTION HARDWARE				— S.S. 10-32X1/2" FLAT HEAD SCREWS		8	SC-23670
9. HEATING CABLE: 105' (32004mm)		1	CB-3045	NOT IN ASSEMBLY:			
10. INSULATION: 25" x 120" (635mm x 3048mm)		1	IN-22364	SPINDLE BEARING (NOT SHOWN)		1	BG-23641
— BOARD INSULATION (NOT SHOWN)				SPINDLE BEARING SCREWS (NOT SHOWN)		3	SC-2713
CUT TO 3-1/2" X 7-1/2" (89mm X 191mm)		2	IN-2003				
— BOARD INSULATION (NOT SHOWN)				24. BASKETS, 24" (610mm)		10	BS-23645
CUT TO 3-1/2" X 9" (89mm X 229mm)		2	IN-2003	25. DRIP PAN		1	PN-23166
11. TEMPERED GLASS, SKYLIGHT		2	GL-23644	26. RIGHT CASING ASSEMBLY		1	14217
12. TERMINAL BLOCK ASSEMBLY		1	BK-33381	27. LEFT CASING ASSEMBLY		1	14212
13. LAMP FIXTURE ASSEMBLY:				28. BOTTOM CASING ASSEMBLY		1	14523
— LAMP FIXTURE		2	LP-33311	MOUNTING SCREWS		6	SC-2425
— LAMPS, 17 WATTS		2	LP-33341	29. POWER CORD: 12/3 CORDSET, 120V		1	CD-3397
— SHOULDER STUDS		4	ST-2547	POWER CORD, 230V		1	CD-3922
14. FAN, 120V		1	FA-3599	30. LEG OR CASTER BRACKET		2	4974
FAN, 230V		1	FA-3568	31. LEG OR CASTER BRACKET MOUNTING SCREWS		8	SC-2425
FAN MOUNTING SCREWS		4	SC-2661	32. BUMPER BREAKDOWN, PER UNIT (NOT SHOWN) includes:			
15. TEMPERATURE GAUGE		1	GU-3273	RAIL CHANNEL		2	13732
TEMPERATURE GAUGE WASHER		1	WS-22024	VINYL BUMPER, 3.4' (1036mm)		1	BM-24082
16. THERMOSTAT KNOB		1	KN-3473	END CAP		4	BM-24083
THERMOSTAT 200 with # DIAL		1	TT-3057	MOUNTING SCREWS		10	SC-22425
THERMOSTAT WASHER		1	WS-22025	33. STACKING SPACER ASSEMBLY (OPTION)		1	14209
17. HEAT INDICATOR LIGHT, 120V		1	LI-3493	includes:			
HEAT INDICATOR LIGHT, 230V		1	LI-3923	STACKING FRAME		1	13102
18. POWER SWITCH		2	SW-3409	ADHESIVE GASKET, 9.5' (2896mm)		1	GS-2019
19. PANEL OVERLAY		1	PE-23612	SERVICE VIEW ON FOLLOWING PAGES			
				CABLE HEATING SERVICE KIT - Part No. 4879			
				Includes:			
				CB-3045	Cable Heating Element	112 ft.	
				CR-3226	Ring Connector	6	
				IN-3488	Insulation Corner	1 ft.	
				BU-3105	Shoulder Bushing	6	
				BU-3106	Cup Bushing	6	
				SL-3063	Insulating Sleeve	6	
				TA-3540	Electrical Tape	1 roll	

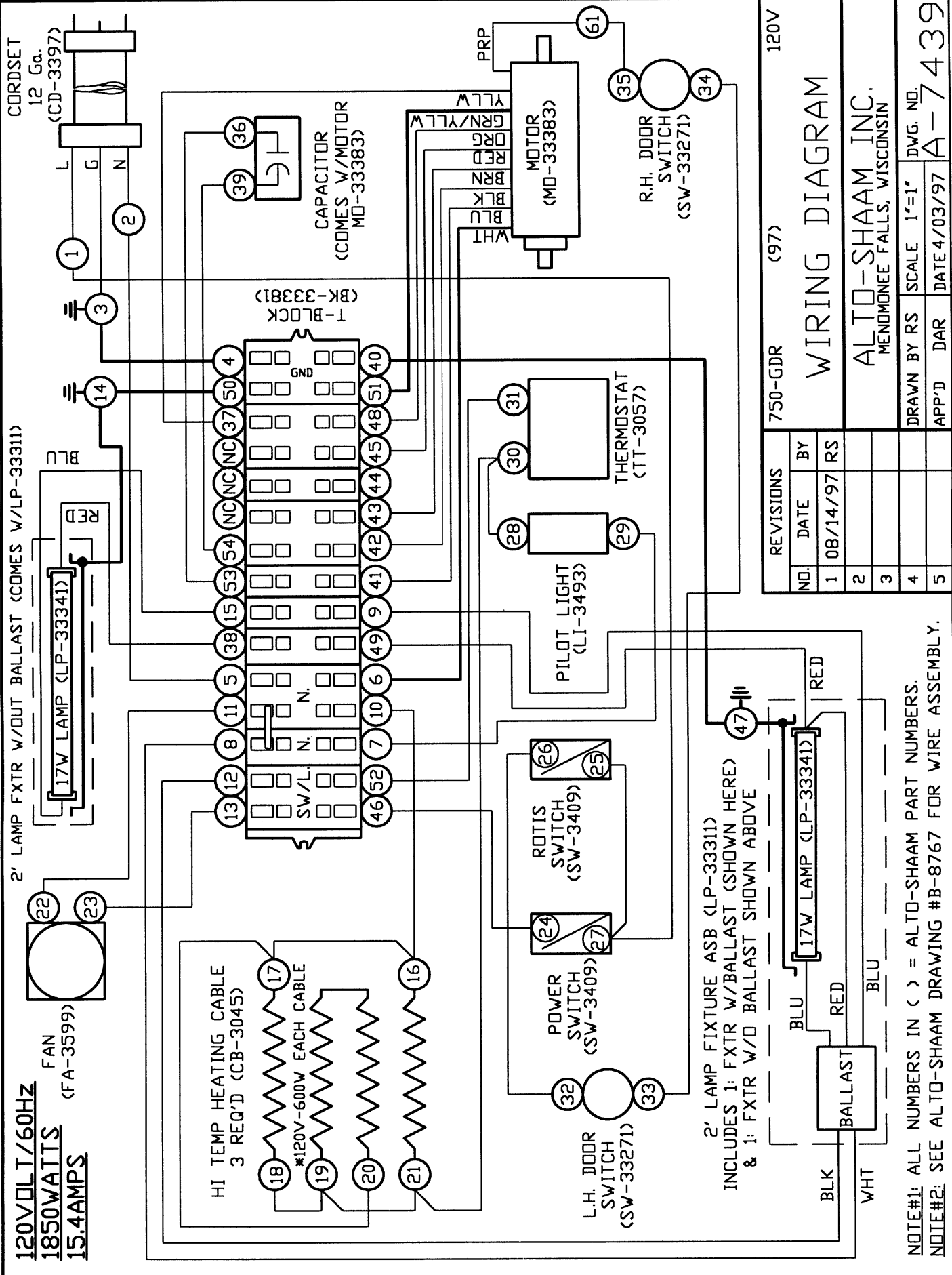
750-GDR SERVICE VIEW

SCALE: 3/32"=1"

10/14/96 RS

D:\SM\750-GDR.DWG





REVISEMENTS		750-GDR	(97)	120V
NO.	DATE	BY	RS	
1	08/14/97			
2				
3				
4				
5				

WIRING DIAGRAM

ALTO-SHAAM INC.
 MENOMONEE FALLS, WISCONSIN

NOTE#1: ALL NUMBERS IN () = ALTO-SHAAM PART NUMBERS.
NOTE#2: SEE ALTO-SHAAM DRAWING #B-8767 FOR WIRE ASSEMBLY.

DRAWN BY RS **SCALE 1"=1'** **DWG. NO. A-7439**

APP'D **DAR** **DATE 4/03/97**

TRANSPORTATION DAMAGE and CLAIMS



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

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

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

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

ALTO-SHAAM® LIMITED WARRANTY

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

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

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

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

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

This warranty does not apply to:

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

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

ALTO-SHAAM, INC.

Warranty effective January 1, 2000

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

Model: _____

Serial Number: _____

Purchased From: _____

Date Installed: _____ Voltage: _____

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

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