

Hot Food Module

Electric



HFM-24



HFM-30



HFM-48



HFM-72

Models:

HFM-24

HFM-30

HFM-48

HFM-72

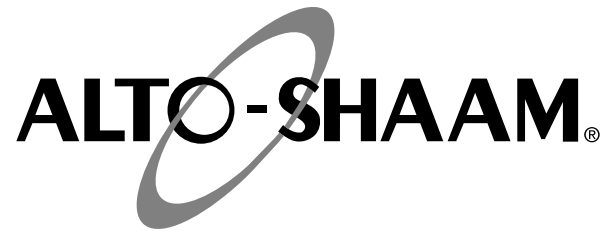
• **INSTALLATION**

• **OPERATION**

• **MAINTENANCE**



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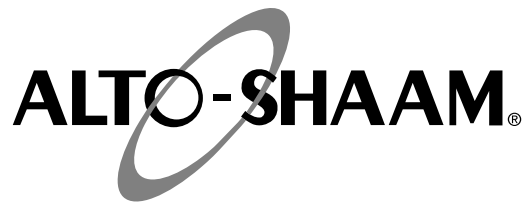
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Wire Diagrams

Always refer to the wire diagram(s) included with the unit for most current version.

Warranty

Transportation Damage and Claims Back Cover
Limited Warranty Back Cover



DELIVERY

This Alto-Shaam appliance has been thoroughly tested and inspected to ensure only the highest quality unit is provided. Upon receipt, 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.*

This appliance, complete with unattached items and accessories, may have been delivered in one or more packages. Check to ensure that all standard items and options have been received with each model as ordered.

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to ensure prompt service in the event of a warranty parts and labor claim.

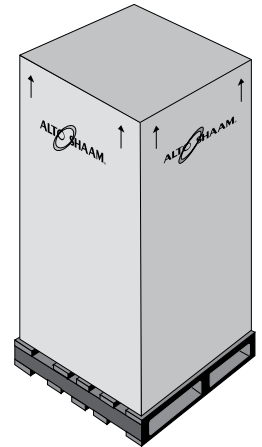
This manual must be read and understood by all people using or installing the equipment model. Contact the Alto-Shaam Tech Team Service Department if you have any questions concerning installation, operation, or maintenance.

NOTE: All claims for warranty must include the full model number and serial number of the unit.

UNPACKING

1. Carefully remove the appliance from the carton or crate.

NOTE: Do not discard the carton and other packaging material until you have inspected the unit for hidden damage and tested it for proper operation.



2. Read all instructions in this manual carefully before initiating the installation of this appliance.


DO NOT DISCARD THIS MANUAL.


This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. *Additional manuals are available from the Alto-Shaam Tech Team Service Department.*


3. Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

SAFETY PROCEDURES AND PRECAUTIONS

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols may be used throughout this manual.

DANGER	
	Used to indicate the presence of a hazard that WILL cause severe personal injury, death, or substantial property damage if the warning included with this symbol is ignored.

WARNING	
	Used to indicate the presence of a hazard that CAN cause personal injury, possible death, or major property damage if the warning included with this symbol is ignored.


CAUTION	
	Used to indicate the presence of a hazard that can or will cause minor or moderate personal injury or property damage if the warning included with this symbol is ignored.


CAUTION	
Used to indicate the presence of a hazard that can or will cause minor personal injury, property damage, or a potential unsafe practice if the warning included with this symbol is ignored.	

NOTE: Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.
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1. This appliance is intended to hold foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

NOTE	
	For equipment delivered for use in any location regulated by the following directive: DO NOT DISPOSE OF ELECTRICAL OR ELECTRONIC EQUIPMENT WITH OTHER MUNICIPAL WASTE.

	Used to indicate that referral to operating instructions is a mandatory action. If not followed the operator or patient could suffer personal injury.
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	Used to indicate that referral to operating instructions is recommended to understand operation of equipment.
---	---

INSTALLATION

DANGER



IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH, OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

CAUTION



METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

CAUTION



TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.



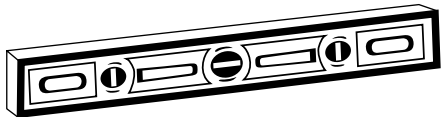
DANGER



DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

SITE INSTALLATION

1. When mounting the module, apply a food grade silicone along the bottom of the support flanges, place the module through the opening on counter top. Let silicone cure according to the manufacturer's recommendations before putting module into service.
2. Peel the protective film from the VHB tape located on the inside flanges of decor face. Press decor face (control) up against the mounting surface.
3. Level the appliance from side-to-side and front-to-back with the use of a spirit level.



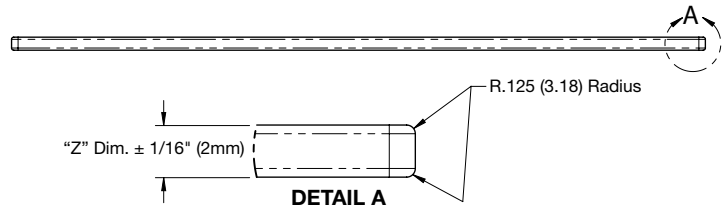
4. Follow solid surface material manufacturer's instructions for its installation.
5. In order to maintain standards established by the National Sanitation Foundation, all edges must be sealed to the heated module with NSF approved sealant.

CLEARANCE REQUIREMENTS

6" (152mm) from bottom of appliance.

INSTALLATION REQUIREMENTS

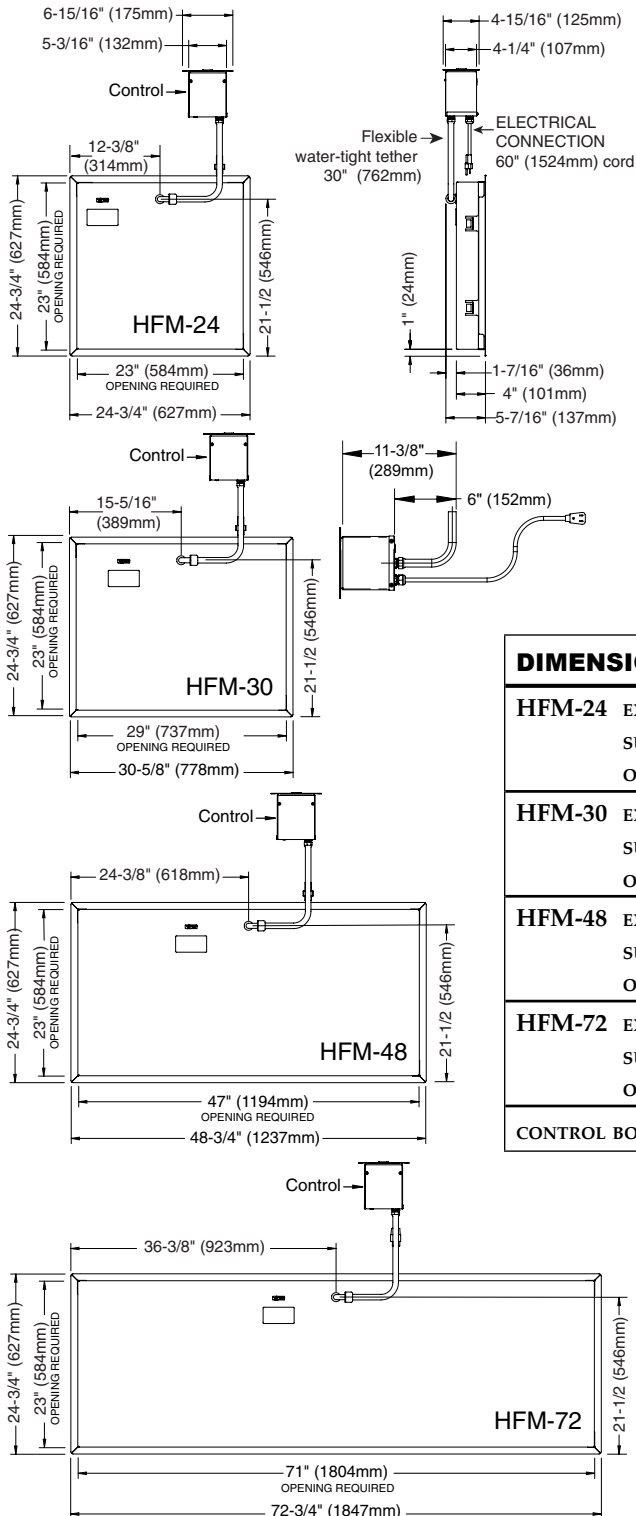
- Unit must be installed level.
- It must not be installed in any area where it may be affected by steam, grease, dripping water, high temperatures, or any other severely adverse conditions.
- Customer supplied solid surface material must be rated to withstand temperatures at 300°F (148°C) or above. Material must be 3/4" (19mm) thickness, 3/8" (10mm) radius corners and 1/8" (3mm) top and bottom edge. Edges must be polished. Contact Alto-Shaam for additional information.



INSTALLATION

SITE INSTALLATION

HFM SERIES SIDE VIEW



DIMENSIONS: L x W x D

HFM-24 EXTERIOR: 24-3/4" x 24-3/4" x 5-7/16" (627 x 627 x 137mm)
 SURFACE MATERIAL: 22-3/8" x 22-3/8" x 3/4" (568 x 568 x 19mm)
 OPENING REQUIRED (L x W): 23" x 23" (584 x 584mm)

HFM-30 EXTERIOR: 30-5/8" x 24-3/4" x 5-7/16" (778 x 627 x 137mm)
 SURFACE MATERIAL: 28-3/8" x 22-3/8" x 3/4" (721 x 569 x 19mm)
 OPENING REQUIRED (L x W): 29" x 23" (737 x 584mm)

HFM-48 EXTERIOR: 48-3/4" x 24-3/4" x 5-7/16" (1237 x 627 x 137mm)
 SURFACE MATERIAL: 46-3/8" x 22-3/8" x 3/4" (1178 x 569 x 19mm)
 OPENING REQUIRED (L x W): 47" x 23" (1194 x 584mm)

HFM-72 EXTERIOR: 72-3/4" x 24-3/4" x 5-7/16" (1847 x 627 x 137mm)
 SURFACE MATERIAL: 70-3/8" x 22-3/8" x 3/4" (1788 x 569 x 19mm)
 OPENING REQUIRED (L x W): 71" x 23" (1803 x 584mm)

CONTROL BOX CUTOUT REQUIRED: 4-1/2" x 5-1/2" x 11-3/8" (115 x 140 x 289mm)

OPTIONS & ACCESSORIES

- Cutting Board (FOR PLACEMENT ON TOP OF SURFACE MATERIAL) BA-2054
 24" (610mm) H x 18" (470mm) W x 1/2" (13mm) D

INSTALLATION

ELECTRICAL CONNECTION

1. An identification tag is permanently mounted on the unit.

DANGER

**ENSURE POWER SOURCE
MATCHES VOLTAGE IDENTIFIED
ON APPLIANCE RATING TAG.**

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

ELECTRICAL					
HFM-24					
VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW	
208	1	60	3.2	0.65	NEMA 6-15P 15A, 250V PLUG
230	1	50/60	3.4	0.78	CEE 7/7* PLUG RATED 250V
HFM-30					
VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW	
208	1	60	3.2	0.65	NEMA 6-15P 15A, 250V PLUG
230	1	50/60	3.4	0.78	CEE 7/7* PLUG RATED 250V
HFM-48					
VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW	
208	1	60	6.4	1.3	NEMA 6-15P 15A, 250V PLUG
230	1	50/60	7.1	1.6	CEE 7/7* PLUG RATED 250V
HFM-72					
VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW	
208	1	60	9.7	1.99	NEMA 6-15P 15A, 250V PLUG
230	1	50/60	10.6	2.4	CEE 7/7* PLUG RATED 250V
*Additional 230V plugs available					
		CH2-16P PLUG RATED 250V		BS1363 PLUG RATED 250V	

DANGER

**ELECTRICAL CONNECTIONS MUST
BE MADE BY A QUALIFIED SERVICE
TECHNICIAN IN ACCORDANCE WITH
APPLICABLE ELECTRICAL CODES.**

DANGER

**To avoid electrical shock, this
appliance **MUST** be adequately
grounded in accordance with local
electrical codes or, in the absence of
local codes, with the current edition
of the National Electrical Code ANSI/
NFPA No. 70. In Canada, all electrical
connections are to be made in
accordance with CSA C22.1, Canadian
Electrical Code Part 1 or local codes.**

OPERATION

USER SAFETY INFORMATION

This appliance is intended for use in commercial establishments by qualified personnel who are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.

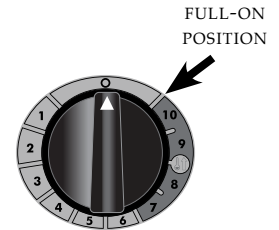
- ▶ **Customer-supplied solid heated surface material must be rated to withstand temperatures at 200°F (93°C) or above. Material must be 3/4" (19mm) thickness.**
- ▶ **DO NOT use knives or utensils on the heated surface. Use a cutting board.**
- ▶ **Use hand protection when handling hot items.**

START-UP

BEFORE INITIAL USE:

Before operating, clean the exterior with a clean, damp cloth and mild soap solution. Rinse carefully.

1. Turn power switch ON.



2. **Preheat the unit before placing food on the heated surface.** The unit is equipped with a thermostat indicating a range of 1 through 10, plus a full-on position slightly beyond the 10 on the dial. Set the dial to preheat (for quickest preheat use full-on). When the indicator light goes out, the unit is preheated (may take up to 1 hour).
3. This unit is not designed for heating cold products. The product must be at the proper heated internal temperature before transferring to the hot food module surface. Use a temperature sensing food probe to check the internal temperature of the product being held.
4. Adjust the thermostat on the hot food module to give the best overall setting based on the type and quantity of the product.
5. When holding food for prolonged periods, it is advisable to periodically check the internal temperature of each item with a food thermometer to assure proper temperature maintenance.
6. Read this manual for additional information on safe internal product temperatures, general holding guidelines, and sanitation procedures.

CAUTION



METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

DANGER



IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH, OR CAUSE PROPERTY DAMAGE. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.



DANGER



DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

OPERATION

GENERAL HOLDING GUIDELINES

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

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

When product is removed from a high temperature cooking environment for immediate transfer into equipment with the lower temperature required for hot food holding, condensation can form on the outside of the product and on the inside of plastic containers used in self-service applications. Allowing the product to release the initial steam and heat produced by high temperature cooking can alleviate this condition. To preserve the safety and quality of freshly cooked foods however, a maximum of 1 to 2 minutes must be the only time period allowed for the initial heat to be released from the product.

Use a metal-stemmed thermometer to measure the internal temperature of the product 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	130°F	54°C
BEEF ROAST — Med/Well Done	155°F	68°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	130°F	54°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	140° — 165°F	60° — 74°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. ALL FOOD HOLDING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.		

CLEANING AND PREVENTATIVE MAINTENANCE

PROTECTING STAINLESS STEEL SURFACES



It is important to guard against corrosion in the care of stainless steel surfaces. Harsh, corrosive, or inappropriate chemicals can completely destroy the protective surface layer of stainless steel. Abrasive

pads, steel wool, or metal implements will abrade surfaces causing damage to this protective coating and will eventually result in areas of corrosion. Even water, particularly hard water that contains high to moderate concentrations of chloride, will cause oxidation and pitting that result in rust and corrosion. In addition, many acidic foods spilled and left to remain on metal surfaces are contributing factors that will corrode surfaces.





Proper cleaning agents, materials, and methods are vital to maintaining the appearance and life of this appliance. Spilled foods should be removed and the area wiped as soon as possible but at the very least, a minimum of once a day. Always thoroughly rinse surfaces after using a cleaning agent and wipe standing water as quickly as possible after rinsing.

CLEANING AGENTS

Use non-abrasive cleaning products designed for use on stainless steel surfaces. Cleaning agents must be chloride-free compounds and must not contain quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel surfaces. Always use the proper cleaning agent at the manufacturer's recommended strength. Contact your local cleaning supplier for product recommendations.

CLEANING MATERIALS

The cleaning function can usually be accomplished with the proper cleaning agent and a soft, clean cloth. When more aggressive methods must be employed, use a non-abrasive scouring pad on difficult areas and make certain to scrub with the visible grain of surface metal to avoid surface scratches. Never use wire brushes, metal scouring pads, or scrapers to remove food residue.

 CAUTION	
 NO SCRAPERS	TO PROTECT STAINLESS STEEL SURFACES, COMPLETELY AVOID THE USE OF ABRASIVE CLEANING COMPOUNDS, CHLORIDE BASED CLEANERS, OR CLEANERS CONTAINING QUATERNARY SALTS. NEVER USE HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL. NEVER USE WIRE BRUSHES, METAL SCOURING PADS OR SCRAPERS.
 NO WIRE BRUSHES	
 NO STEEL PADS	

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 AFTER EACH USE:

1. Disconnect from the power source.
2. Remove cutting board after each use. Clean and sanitize separately following applicable state or local health sanitation ordinances. Air dry the board on a clean, flat surface to prevent board from warping. If the board becomes warped, heating will restore flexibility to facilitate flattening. Warped boards may be heated on the carving shelf surface, in a preheated Combitherm CombiOven for 10 minutes on the steam program, or in a preheated Halo Heat cook and hold oven for 15 minutes at 250°F (121°C).
3. Clean metal surface with mild soap solutions only. DO NOT clean with lye or alkaline based cleaners or any abrasive cleaners. Rinse carefully with a clean sponge and water to remove all soap or detergent residue.
4. Follow manufacturer's recommendations for the care of the customer-supplied solid heated surface material.



⚠ DANGER	
	DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

DANGER	
	AT NO TIME SHOULD THE INTERIOR OR EXTERIOR BE STEAM CLEANED, HOSED DOWN, OR FLOODED WITH WATER OR LIQUID SOLUTION OF ANY KIND. DO NOT USE WATER JET TO CLEAN.
	SEVERE DAMAGE OR ELECTRICAL HAZARD COULD RESULT. WARRANTY BECOMES VOID IF APPLIANCE IS FLOODED

SANITATION

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 not 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 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 is both cost effective and relatively simple. While HACCP guidelines go far beyond the scope of this manual, additional information is available by contacting:

**CENTER FOR FOOD SAFETY AND APPLIED
NUTRITION FOOD AND DRUG ADMINISTRATION
1-888-SAFEFOOD**

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° TO 40°F	(2° 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)

SERVICE

CAUTION

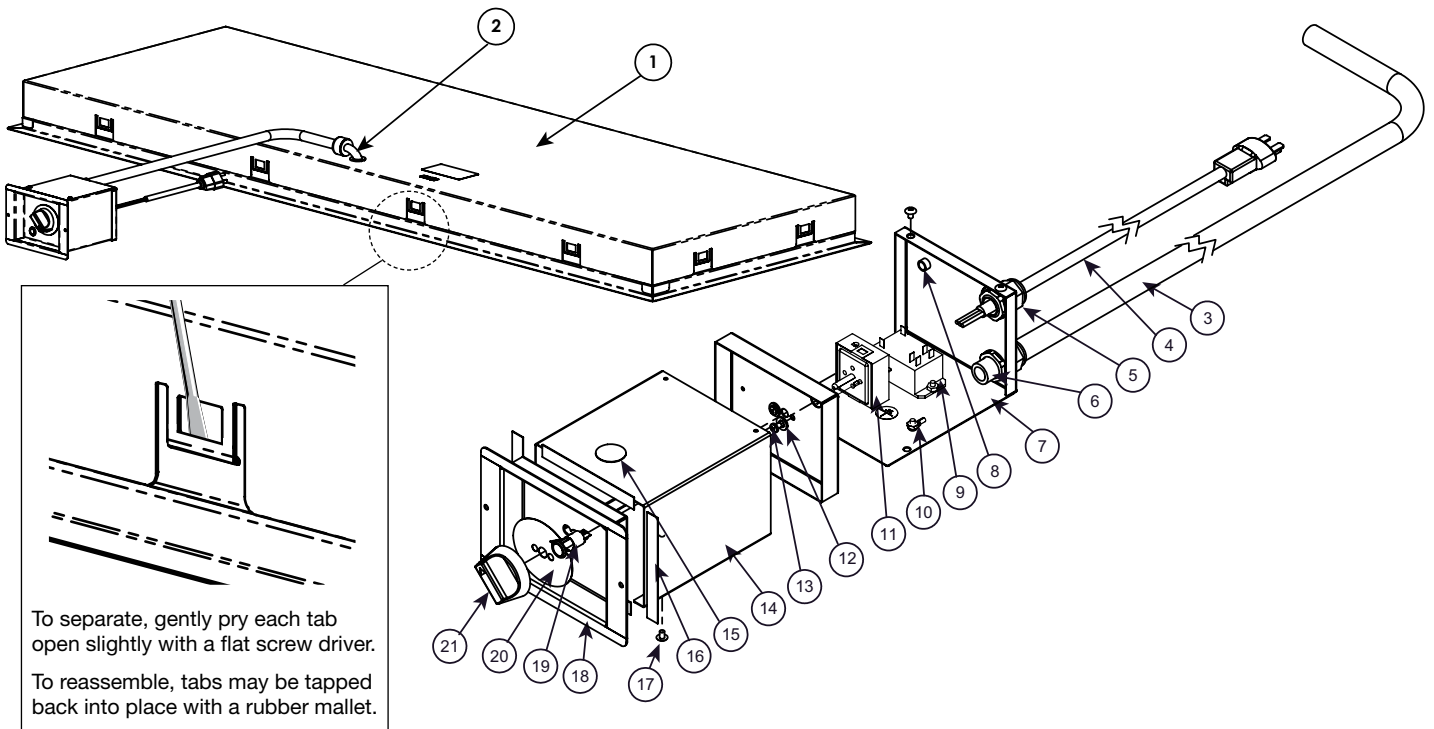
THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED SERVICE TECHNICIANS ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED SERVICE PERSONNEL.



DANGER



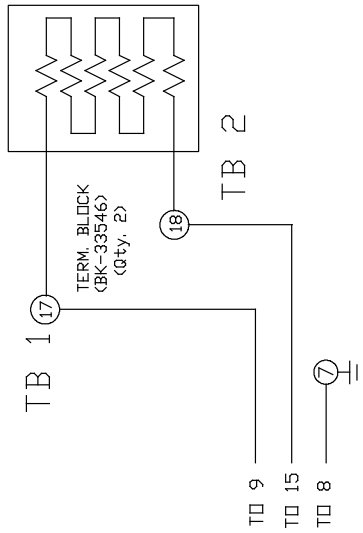
DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.



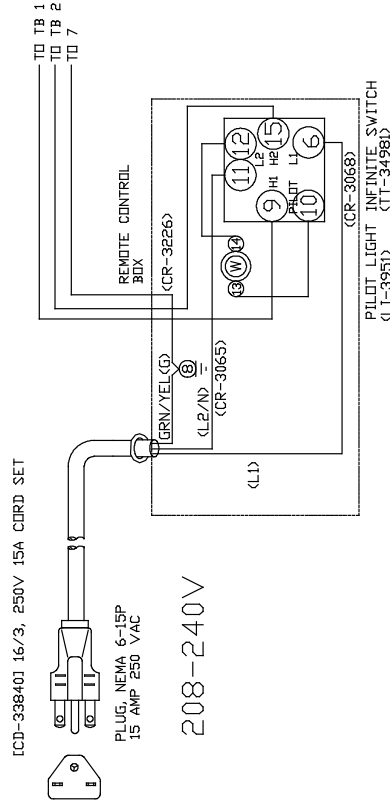
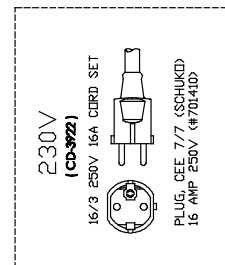
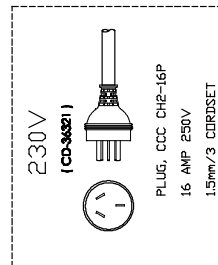
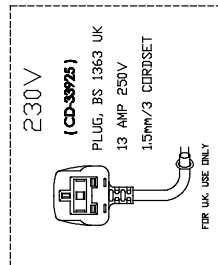
ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY	
1	HEAT PAD ASSEMBLY	HFM-24, 24 x 24	5015505	1	9	RELAY, POWER PANEL MOUNT HFM-48, -72	RL-33493	1
		HFM-30, 24 x 30	5015506	1	10	NUT, #8-32	NU-26526	1
		HFM-48, 24 x 48	5014472	1	11	THERMOSTAT	TT-34981	1
		HFM-72, 24 x 72	5015507	1	12	WASHER, FLAT	WS-22297	2
2	CONNECTOR, FLEX		CR-33179	1	13	SCREW, M4 x 0.7 x 6mm PAN	SC-22271	2
3	CONDUIT FLEX	3' (0.91m)	TU-33178	1	14	REMOTE BOX	5013001	1
4	CORDSET, 9' (2.74m)	208V, NEMA 6-15P	CD-33840	1	15	PLUG, 7/8" HOLE	PG-3559	1
		230V, CEE 7/7	CD-3922	1	16	TAPE, VHB FOAM, 1/2" x 72YD	TA-34637	4
		230V, CH2-16P	CD-36321	1	17	SCREW, 8-32 x 1/4" PHIL	SC-2459	4
		230V, BS1363	CD-33925	1	18	REMOTE BOX, DECOR FACES	1011926	1
5	BUSHING, STRAIN RELIEF		BU-3964	1	19	LIGHT, INDICATOR	LI-3951	1
6	BUSHING, STRAIN RELIEF		BU-34606	1	20	PANEL OVERLAY (1-10)	PE-29421	1
7	REMOTE BOX, BOTTOM		5015521	1	21	KNOB, THERMOSTAT	KN-26568	1
8	PLUG, 3/8" HOLE		PG-25574	1	22*	BLOCK, 2 TERMINAL, PORCELAIN	BK-33546	1

*NOT SHOWN

Part numbers and drawings are subject to change without notice.



FOIL PAD OF HI-TEMP CABLE EL-35384 = 66.56 OHMS AMBIENT TEMP



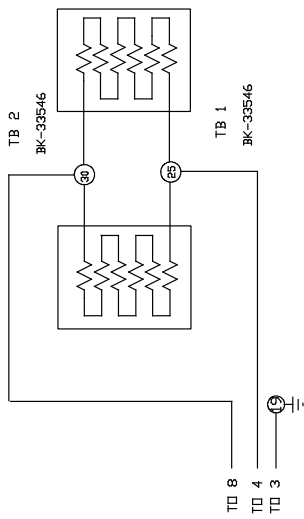
Cordset	Line 1	Line 2/N
208-240V	Black	White

Cordset	Line 1	Line 2
230V	Brown	Blue

2	6756	NEW POWER CORD APPLICATIONS	10/08/13	TJG
1	6142	INCLUDE 230V APPLICATION	10/12/12	TJG
0	-	INITIAL RELEASE	07/31/12	TJG
REV	ECO	DESCRIPTION	DATE	APP
HFM-24, 30		208-240V , 230V	50/60HZ	
ALTO-SHAAM			WIRING DIAGRAM	
BY: NVADATE: 03/24/12		DWG: 77503		SHEET
				1_OF_1

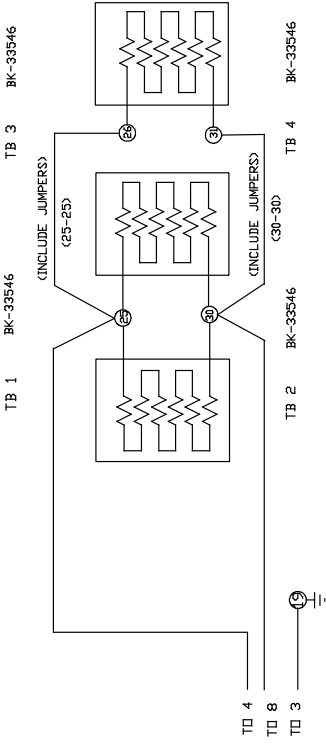
REFERENCE WIRE ASSBY #5015458

HFM - 48

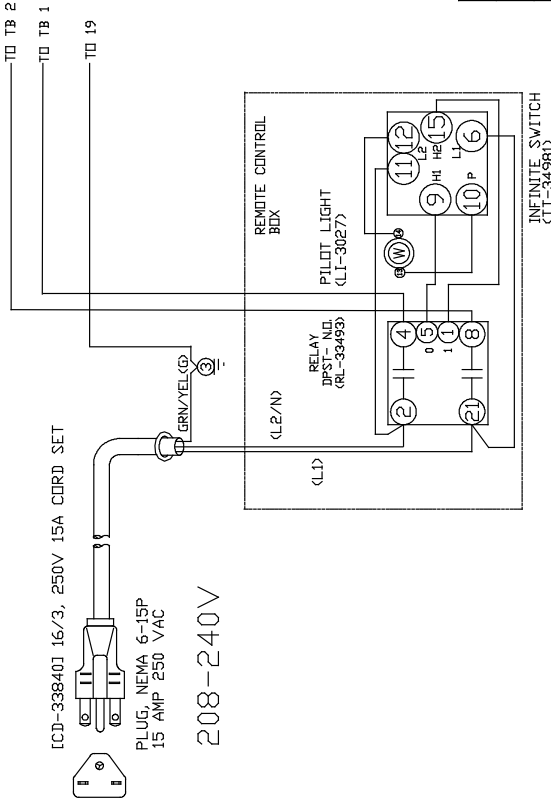
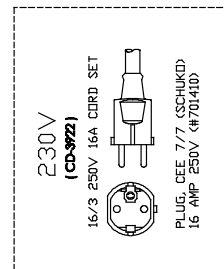
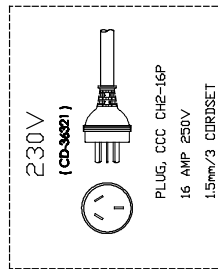
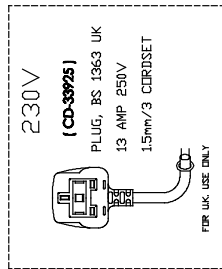


2: FOIL PADS OF EL-35384 = 66.56 OHMS EACH AMBIENT TEMP

HFM - 72

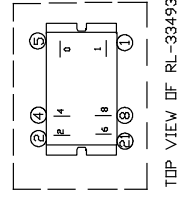


3: FOIL PADS OF EL-35384 = 66.56 OHMS EACH AMBIENT TEMP



Cardset	Line 1	Line 2/N
	208-240V	Black
		White

Cardset	Line 1	Line 2
	230V	Brown
		Blue



2	6756	NEW POWER CORD APPLICATIONS	10/08/13	TJG
1	6142	INCLUDE 230V APPLICATION	10/12/12	TJG
0	-	PRODUCT RELEASE	08/01/2012	TJG
REV	ECO	DESCRIPTION	DATE	APP
HFM-48, 72 SERIES 208-240V, 230V 50/60HZ				
ALTO-SHAAM			WIRING DIAGRAM	
BY: NV		DATE: 03/24/12	DWG: 77512	SHEET 1_OF_1

REFERENCE WIRE ASSBY #5015460 FOR HFM-72 VERSION
REFERENCE WIRE ASSBY #5015459

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.

LIMITED WARRANTY

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

The original parts warranty period is as follows:

For the refrigeration compressor on Alto-Shaam Quickchillers™, five (5) years from the date of installation of appliance.

For the heating element on Halo Heat® cooking and holding ovens, as long as the original purchaser owns the oven. This excludes holding only equipment.

For all other original parts, one (1) year from the date of installation of appliance or fifteen (15) months from the shipping date, whichever occurs first.

The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.

To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

THIS WARRANTY DOES NOT APPLY TO:

1. Calibration.
2. Replacement of light bulbs, door gaskets, and/or the replacement of 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, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
5. Damage incurred as a direct result of poor water quality, inadequate maintenance of steam generators and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm® Cleaner, including but not limited to damage due to chlorine or other harmful chemicals. **Use of Alto-Shaam's Combitherm® Cleaner on Combitherm® ovens is highly recommended.**
7. Any losses or damage resulting from malfunction, including loss of product, food product, revenue, or consequential or incidental damages of any kind.
8. 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, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Alto-Shaam be liable for loss of use, loss of revenue or profit, or loss of product, or for any indirect, special, incidental, or consequential damages. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.



Effective November 1, 2012

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE.

ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

Model: _____ Date Installed: _____
Voltage: _____ Purchased From: _____
Serial Number: _____

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