

Cook, Hold, Smoke Oven Deluxe Control



Model:

300-TH/III 500-TH/III 750-TH/III 1000-TH/III 1200-TH/III 767-SK/III 1767-SK/III 1000-SK/III



- INSTALLATION
- OPERATION
- MAINTENANCE

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

500-TH/III

300-TH/III

PHONE: 262.251.3800 • 800.558.8744 U.S.A. / CANADA FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY www.alto-shaam.com









Delivery	Care and Cleaning
Unpacking1	Care and Cleaning Instructions26
Safety Procedures and Precautions	Preventative Maintenance Checklist
Installation	Sanitation
Installation Requirements	Food Safety30
Clearance Requirements4	Internal Food Product Temperatures30
Dimension Drawings, weights & capacities 5	
Options and Accessories	Service
Stacking Configurations	Trouble Shooting - Error Codes
Leveling	Trouble Shooting Electrical Components
Restraint Requirements - Mobile Equipment13	Exterior Service View & Parts
Drip Tray Installation14	Electronic Components View & Parts
Electrical Specifications	Cable Heating Kits
	HACCP Data Logger Service Parts (option) 47
Operating Instructions	
User Safety Information	Wire Diagrams
Start-up Operation	Always refer to the wire diagram(s) included with the unit
Audible Signals17	for most current version.
Control Features18	
Cook/Hold/Smoke Instructions19	Warranty
Operating Features & Functions	Transportation Damage and Claims Back Cover
Smoking Instructions	Limited Warranty Back Cover
User Options	
HACCP24	
General Holding Guidelines	



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 be delivered in one or more packages. Ensure all standard items and options have been received with each model as ordered.

Save all the information packed with the appliance. Register online at www.alto-shaam.com 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.

1-800-558-8744; servicedept@alto-shaam.com

Serial number is required for all inquiries.

Always include both model and serial number(s) in any correspondence regarding the appliance.

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

Unpacking

 Carefully remove the appliance from the carton or crate.

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



- Read all instructions in this manual carefully before installing this appliance, using the appliance or performing routine maintenance. Following procedures other than those indicated in this guide to use and clean the appliance is considered inappropriate and may cause damage, injury or fatal accidents, in addition to invalidating the guarantee and relieving Alto-Shaam of all liability.
- DO NOT DISCARD THIS MANUAL.

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

CAUTION



Appliance and accessories may be heavy. To prevent serious injury, **always** use a sufficient number of trained and experienced workers when moving or leveling appliance and handling accessories.

ENVIRONMENTAL CONDITIONS

- Operational Environmental Conditions
- Unit must acclimate to room temperature in the environment it is placed. 24 hours is recommended.
- Ambient temperature range of 60°F to 110°F (16°C to 43°C).
- Relative humidity of less than 95% non-condensation.
- Atmospheric pressure range of 50KPa to 106KPa.

Safety Procedures and Precautions

- This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized and is therefore considered dangerous. The appliance must not be used to cook food containing flammable materials (such as food with alcohol). Substances with a low flash point can ignite spontaneously and cause a fire.
- 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. We recommend regular training of your staff to avoid the risk of accident or damage to the unit. Operators must also receive regular safety instructions.
- Any trouble shooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified and trained technicians.
- 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.



NOTICE: For equipment delivered for use in any location regulated by the following directive: 2012/95/EC WEEE

> DO NOT dispose of electrical or electronic equipment with other municipal waste.

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. The following hazard signal words and symbols may be used throughout this manual.

ANGER



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.

NOTICE: Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.



Used to indicate that referral to operating instructions is a mandatory action. If not followed the operator could suffer personal injury.



Used to indicate that referral to operating instructions is recommended to understand operation of equipment.

Additional Safety Procedures and Precautions

- To prevent serious injury, death or property damage, your appliance should be inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- ONLY allow an authorized service partner or trained technician to service or to repair your appliance. Installation or repairs that are not performed by an authorized service partner or trained technician, or the use of non-factory authorized parts will void the warranty and relieve Alto-Shaam of all liability.
- When working on this appliance, observe precautions in the literature, on tags, on labels attached to or shipped with the appliance and other safety precautions that may apply.
- If the appliance is installed on casters freedom of movement of the appliance must be restricted so that utility connections (including gas, water, and electricity) cannot be damaged when the unit is moved. If the appliance is moved, make sure that all utility connections are properly disconnected. If the unit is returned to its original position, make sure that any retention devices and utility connections are properly connected.
- ONLY use the appliance when it is stationary.
 Mobile oven racks, mobile plate racks, transport trolleys, and appliances on casters can tip over when being moved over an uneven floor or threshold and cause serious injury.
- ALWAYS apply caster brakes on mobile appliances or accessories when these are not being moved.
 These items could move or roll on uneven floors and cause property damage or serious injury.
- Be extremely careful when moving appliances because the food trays may contain hot fluids that may spill, causing serious injury.
- ALWAYS open the appliance door very slowly.
 Escaping hot vapors or steam can cause serious injury or death.

WARNING



To prevent serious personal injury, death, or property damage:

The appliance must be cleaned thoroughly to avoid deposits of grease and or food residues inside the appliance that may catch fire. If fat deposits and/or food waste inside the appliance ignite, shut down the appliance immediately and keep the appliance door closed to extinguish the fire. If further extinguishing is required, disconnect the appliance from the main power and use a fire extinguisher (do not use water to extinguish a grease fire!). Failure to clean the appliance properly invalidates the warranty and relieves Alto-Shaam of all liability.

WARNING



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

WARNING



Improper installation, alteration, adjustment, service, cleaning, or maintenance could result in PROPERTY DAMAGE, SEVERE INJURY, or DEATH.

Read and understand the installation, operating and maintenance instructions thoroughly before installing, servicing, or operating this equipment.

CAUTION



To prevent **personal injury** or **property damage**:

Always use hand protection when operating this appliance to avoid burns. Metal parts of this equipment become extremely hot when in operation.

CAUTION



Appliance and accessories may be heavy. To prevent serious injury, **always** use a sufficient number of trained and experienced workers when moving or leveling appliance and handling accessories.

WARNING

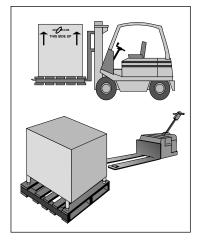


For your safety

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

SITE INSTALLATION

The Alto-Shaam Cook & Hold oven must be installed in a location that will permit the oven to function for its intended purpose and to allow adequate clearance for ventilation, proper cleaning, and maintenance access.



- **1.** The oven must be installed on a stable and level surface.
- 2. Do not install this appliance in any area where it may be affected by any adverse conditions such as steam, grease, dripping water, high temperatures, or any other severely adverse conditions.
- **3. Do not** store or use any flammable liquids or allow flammable vapors in the vicinity of this oven or any other appliance.
- **4.** This appliance must be kept free and clear of any combustible materials.
- **5.** This appliance must be kept free and clear of any obstructions blocking access for maintenance or service.

Cook & Hold emissions testing conducted by Underwriters Laboratories, Inc.® was found to be in compliance with the applicable requirements of NFPA96: Eighth Edition, Par. 4.1.1.2. U.L emissions sampling of grease laden vapor resulted in a total of 0.55 milligrams per cubic meter and is considered representative of all oven models in the line.

Smoker resulted in a total of 0.21 milligrams per cubic meter.

Based on these results, hood installation and/or outside venting should not be a requirement in most areas. Verify local codes for locations where more restrictive codes are applicable.

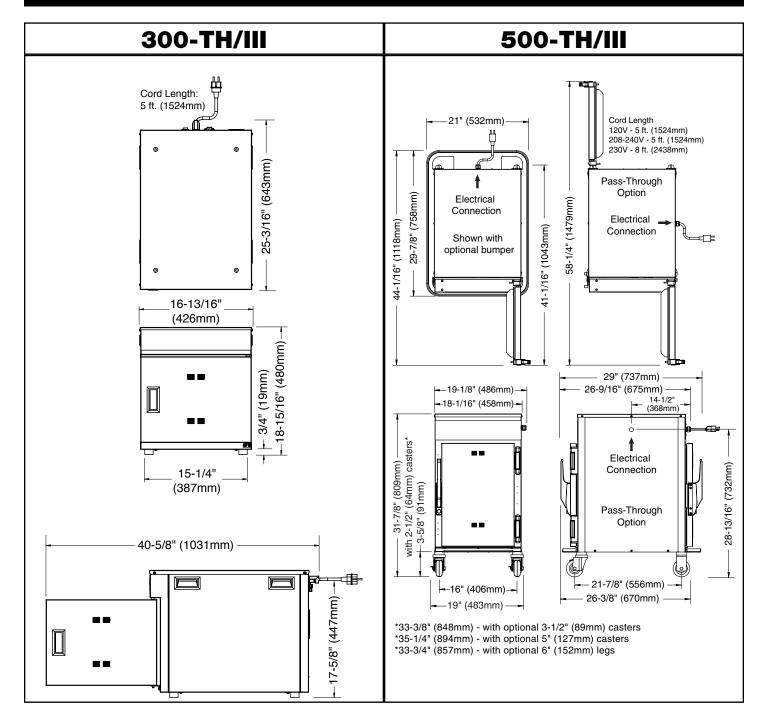
Rear 3" (76mm) from non-heated surfaces 18" (457mm) from heat producing equipment

Top 2" (51mm)

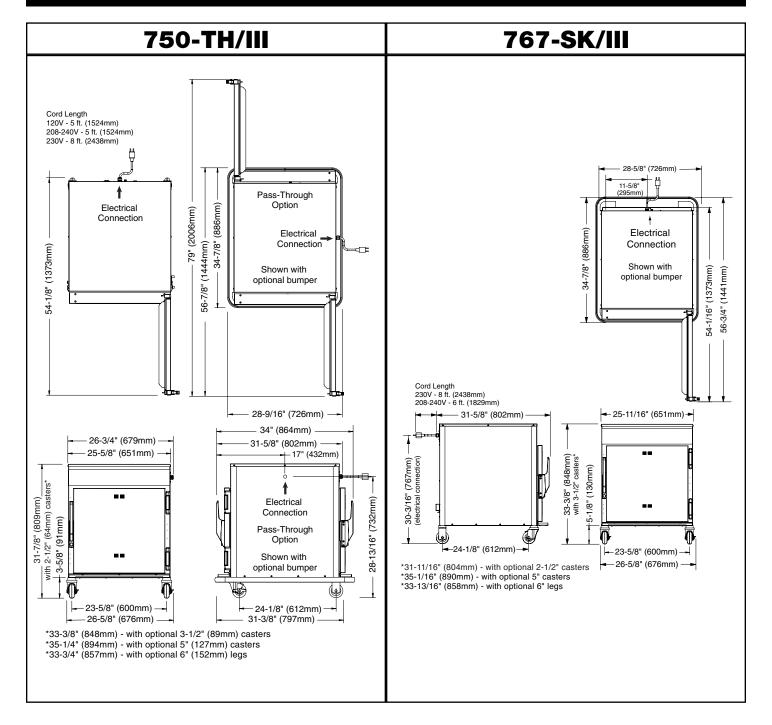
Left, Right 1" (25mm)

NOTICE

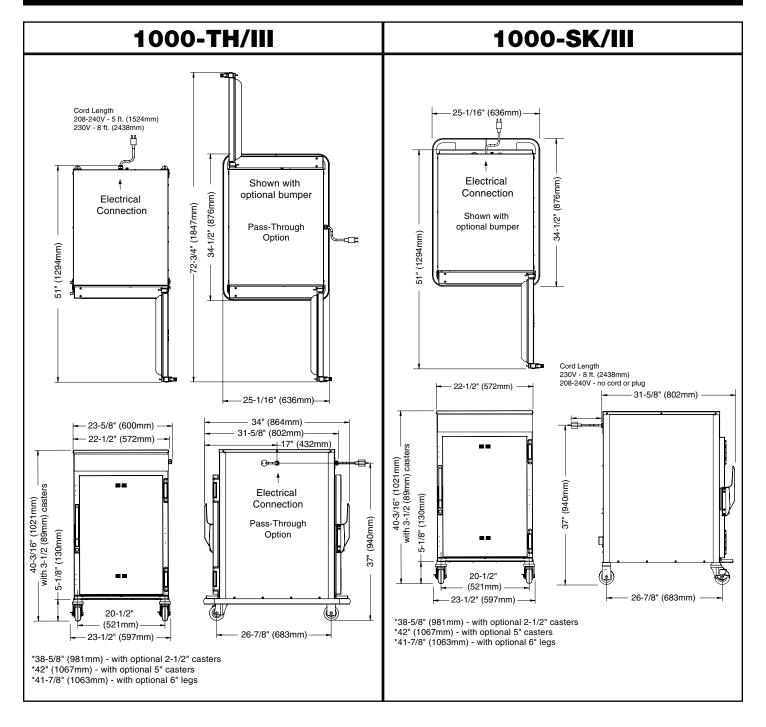
If the appliance has been unplugged for an extended period of time, the Real Time Clock may require recharging. Turn main breaker to the unit off for 10 seconds and then restore power. For more information, see Error Code E-60 in the Troubleshooting section of this manual.



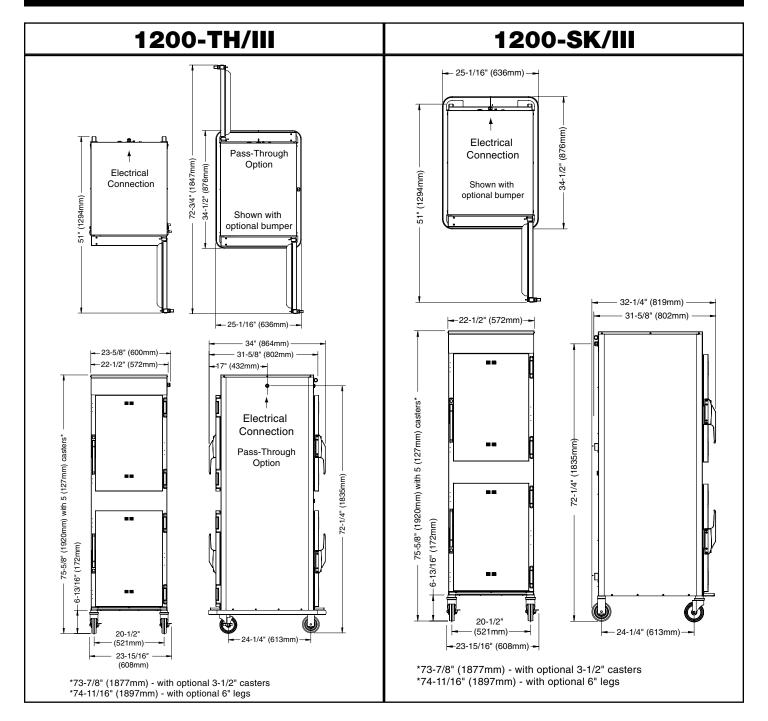
Weight - 300-TH/III	Weight - 500-TH/III		
Net: 69 lb (31 kg)	Net: 140 lb (64 kg)		
Ship: Contact factory	Ship: 180 lb (82 kg)		
Product capacity - 300-TH/III	Product capacity - 500-TH/III		
36 lb (16 kg) maximum	40 lb (18 kg) maximum		
Volume maximum: 22.5 quarts (28,5 liters)	Volume maximum: 30 quarts (38 liters)		



Weight			Product\Pan capacity	
Model	Net Weight	Ship Weight	100 11 (45 1)	
750-TH/III	192 lb (87 kg)	260 lb (118 kg)	100 lb (45 kg) maximum	
767-SK/III	196 lb (89 kg)	275 lb (125 kg)	Volume maximum: 53 quarts (67 liters)	

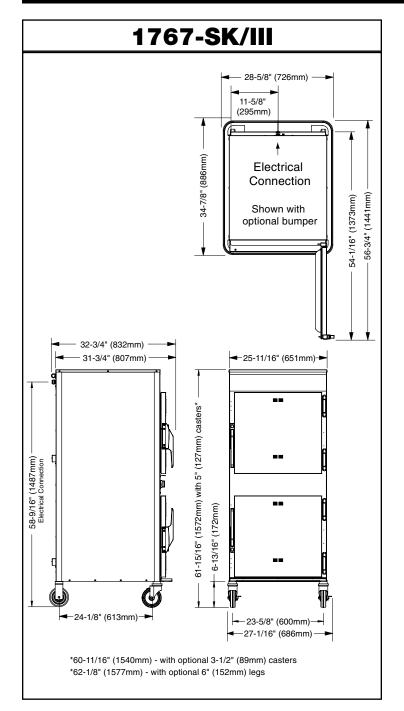


Weight			Product\Pan capacity	
Model	Net Weight	Ship Weight	100 H (541)	
1000-TH/III	230 lb (104 kg) est.	275 lb (125 kg)	120 lb (54 kg) maximum	
1000-SK/III	203 lb (92 kg) est.	282 lb (128 kg)	Volume maximum: 60 quarts (76 liters)	



Weight			Product\Pan capacity (per compartment)
Model	Net Weight	Ship Weight	100 11 (541)
1200-TH/III	345 lb (156 kg)	435 lb (197 kg)	120 lb (54 kg) maximum
1200-SK/III	390 lb (177 kg) est.	465 lb (211 kg)	Volume maximum: 60 quarts (76 liters)

SITE INSTALLATION



Weight		
Model	Net Weight	Ship Weight
1767-SK/III	359 lb (163 kg) est.	450 lb (204 kg)

Product\Pan capacity (per compartment) 100 lb (45 kg) maximum Volume maximum: 53 quarts (67 liters)

COOK & HOLD OPTIONS AND ACCESSORIES

Options and Accessories	300-TH/III	500-TH/III	750-TH/III	1000-TH/III	1200-TH/III
Bumper, Full Perimeter (not available with 2-1/2" casters)	_	5011161	5010371	5009767	5009767
Carving Holder Prime rib Steamship (cafeteria) round	HL-2635 —	HL-2635 4459	HL-2635 4459	HL-2635 4459	HL-2635 4459
Casters - 2 rigid, 2 swivel w/brake 5" (127mm) 3-1/2" (89mm) 3" (76mm) 2-1/2" (64mm)	— Factory installed —	5004862 5008017 — Standard	5004862 5008017 — Standard	5004862 Standard — 5008022	Standard 5008017 — —
Door Lock with Key	_	LK-22567	LK-22567	LK-22567	LK-22567
Drip Pan With drain Without drain Extra deep	— — PN-2122	14813 11898 —	14831 1014684 —	5005616 11906 15929	5005616 11906 15929
HACCP Data Logger (factory installed)	5015563	5015563	5015563	5015563	5015563
Legs, 6" (152mm), Stemmed (set of four)	_	5011149	5011149	5011149	5011149
Pan Grid, Wire - 18" x 26" pan insert	_	_	PN-2115	PN-2115	PN-2115
Security Panel with button lock	_	5013939	5013936	5013934	5013934
Shelf, Stainless Steel Flat wire, reach-in Flat wire, pass-through Rib rack	SH-2107 — —	SH-2326 SH-2326 —	SH-2324 SH-2327 SH-2743	SH-2325 SH-2346 SH-29474	SH-2325 SH-2346 SH-29474
Stacking Hardware - Over or under TH, SK, or S-Series Under XL-300 Xcelerate® Under XL-400 Xcelerate® Under CTX4-10 Combitherm™	_ _ _ _	5004864 — — — —	5004864 5019677 5019678 5019679	5004864 5019677 — 5019679	_ _ _ _

COOK, HOLD, SMOKE OPTIONS AND ACCESSORIES

Smoker Options and Accessories	767-SK/III	1767-SK/III	1000-SK/III	1200-SK/III
Bumper, Full Perimeter (not available with 2-1/2" casters)	5010371	5010371	5009767	5009767
Carving Holder Prime rib Steamship (cafeteria) round	HL-2635 4459	HL-2635 4459	HL-2635 4459	HL-2635 4459
Casters - 2 rigid, 2 swivel w/brake 5" (127mm) 3-1/2" (89mm) 2-1/2" (64mm)	5004862 Standard 5008022	Standard 5008017 —	5004862 Standard 5008022	Standard 5008017 —
Door Lock with Key	LK-22567	LK-22567	LK-22567	LK-22567
Drip Pan With drain Without drain Extra deep	14831 1014684 —	14831 1014684 —	5005616 11906 15929	5005616 11906 15929
HACCP Data Logger (factory installed)	5015563	5015563	5015563	5015563
Legs, 6" (152mm), Stemmed (set of four)	5011149	5011149	5011149	5011149
Pan Grid, Wire - 18" x 26" pan insert	PN-2115	PN-2115	PN-2115	PN-2115
Security Panel with button lock	5013936	5013936	5013934	5013934
Shelf, Stainless Steel Fat wire, reach-in Rib rack	SH-2324 SH-2743	SH-2324 SH-2743	SH-2325 SH-29474	SH-2325 SH-29474
Stacking Hardware - Over or under TH, SK, or S-Series Under XL-300 Xcelerate® Under XL-400 Xcelerate® Under CTX4-10 Combitherm™	5004864 5019677 5019678 5019679	— — — —	5004864 5019677 — 5019679	
Wood Chips, bulk pack, 20 lb (9 kg) Apple Cherry Hickory Maple	WC-22543 WC-22541 WC-2829 WC-22545	WC-22543 WC-22541 WC-2829 WC-22545	WC-22543 WC-22541 WC-2829 WC-22545	WC-22543 WC-22541 WC-2829 WC-22545

STACKING INSTRUCTIONS

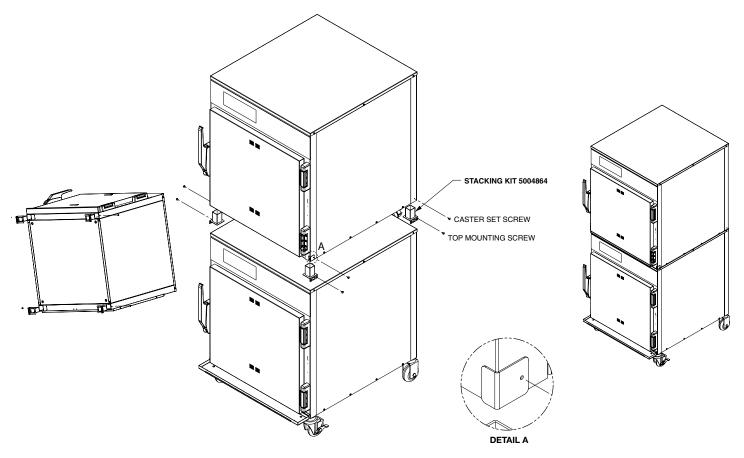
1) If the two appliances were shipped together from the factory, the top unit will have the casters already removed. A stacking kit will be included with the shipment.

If casters need to be removed, lay the unit on its back, and using a rubber or non-marring hammer, tap on the top and underside of the caster, alternating sides, until the caster slides out.

2) While appliance is laid on its back, insert one stacking post in each of the four corners of the upper unit. Secure the stacking posts using one screw and two flat washers that come with the stacking kit. Use template 68696 to locate set screw hole. Drill with #30 Bit and Tap 8-32.

Note: The flange on the stacking posts must face the outside of the unit.

3) Remove the four top mounting screws from the lower unit. Place the upper appliance, which has the stacking posts installed, on top of the bottom unit. Center the top unit from front to back. Re-install the four screws through the flange of the four stacking posts.



Stacking Configurations					
Model	Can be stacked with				
300-TH/III	300-TH/III or 300-S No Stacking Hardware needed. Align dimples at top and bottom of units. It is recommended that the legs be removed from the top unit before stacking.				
500-TH/III	500-TH/III, 500-TH-II or 500-S				
750-TH/III or 767-SK/III	750-TH/III, 750-TH-II, 750-S, 767-SK, 767-SK/III, XL-300 or XL-400				
1000-TH/III or 1000-SK/III	1000-TH/III, 1000-SK/III, 1000-SK/II, 1000-S, or XL-300				

SITE INSTALLATION

A number of adjustments are associated with initial installation and start-up. It is important that these adjustments be conducted by a qualified service technician. Installation and start-up adjustments are the responsibility of the dealer or user. These adjustments include but are not limited to thermostat calibration, door adjustment, leveling, electrical hook-up and installation of optional casters or legs.

Leveling



Level the oven from side-to-side and front-to-back with the use of a spirit level. For ovens installed with casters, it is important that the installation surface be level due to the probability of frequent oven repositioning.

We recommend checking the level of the oven periodically to make certain the floor has not shifted nor the oven moved.

NOTICE: Failure to properly level this oven can cause improper function and will result in the uneven baking with products consisting of semi-liquid batter.

Restraint Requirements —Mobile Equipment

MARNING

RISK OF ELECTRIC SHOCK.



Appliance must be secured to building structure. Failure to observe this precaution may result in damage to the equipment and severe personal injury.

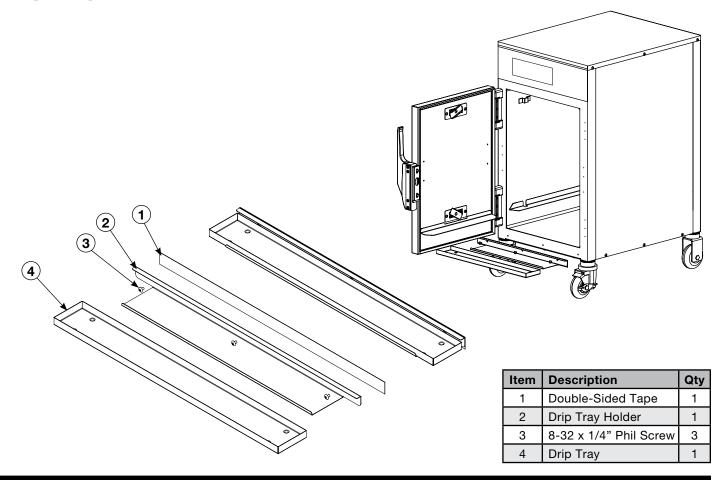
Any appliance that is not furnished with a power supply cord but that includes a set of casters must be installed with a tether. Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. The following requirements apply:

- 1. Maximum height of casters is 6" (152mm).
- **2.** Two of the casters must of be the locking type.
- **3.** Such mobile appliances or appliances on mobile stands must be installed with the use of a flexible connector secured to the building structure.

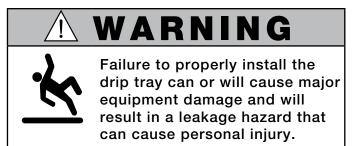
A mounting connector for a restraining device is located on the upper back flange of the appliance. A flexible connector is not supplied by nor is it available from the factory.

SITE INSTALLATION

Drip tray installation instructions



- 1. Poke holes through double-sided tape 1 which is attached to the back of drip tray holder 2.
- 2. Remove backing on double-sided tape 1.
- 3. Put screws (3) through holes and attach drip tray holder (2) to unit.
- 4. Optional, but strongly recommended apply a line of food-grade silicone caulk along top edge of drip tray holder **2** to seal.
- 5. Place drip tray 4 in drip tray holder 2.



ELECTRICAL CONNECTION

DANGER



Appliances with no cord provided by factory must be equipped with a cord of sufficient length to permit the appliance to be moved for cleaning.



To prevent SERIOUS INJURY, DEATH, or PROPERTY DAMAGE:

all electrical connections must be made by a qualified service technician in accordance with applicable electrical codes.

Always use the correct AWG wire size based on the electrical requirements for the appliance.

CAUTION



Power source must match voltage identified on appliance rating tag. The rating tag provides essential technical information required for any appliance installation, maintenance or repairs. Do not remove, damage or modify the rating tag.

The appliance must be installed by a qualified service technician. The oven must be properly grounded in accordance with the National Electrical Code and applicable local codes.

Plug the unit into a properly grounded receptacle **only**, positioning the unit so that the plug 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.

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.

REGARDING INTERNATIONAL STANDARD UNITS:

If the unit is not equipped with flexible cord and plug, an all-pole country approved disconnection device which has a contact separation of at least 3mm in all poles must be incorporated in the fixed wiring for disconnection. When using a cord without a plug, the green/yellow conductor shall be connected to the terminal which is marked with the ground symbol. If a plug is used, the socket outlet must be easily accessible. If the power cord needs replacement, use a similar one obtained from the distributor.

WARNING



To prevent SERIOUS INJURY, DEATH, or PROPERTY DAMAGE:

All electrical connections must be made by a qualified and trained service technician in accordance with applicable electrical codes.



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.



For CE approved appliances: To prevent an electrical shock hazard between the appliance and other appliances or metal parts in close vicinity, an equalization-bonding stud is provided. An equalization bonding lead must be connected to this stud and the other appliances/metal parts to provide sufficient protection against potential difference. The terminal is marked with the following symbol.

Hard wired models:

Hard wired models must be equipped with a country certified external allpole disconnection switch with sufficient contact separation.

If a power cord is used for the connection of the product an oil resistant cord like H05RN or H07RN or equivalent must be used.

NOTICE: Where local codes and CE regulatory requirements apply, appliances must be connected to an electrical circuit that is protected by an external GFCI outlet.

ELECTRICAL

Elect	rical	Spec	cifica	tion	IS (Wire diagra	ms are located	inside the bonn	et of the unit)		
Voltage	Phase	Hz	Amps	kW	NEMA 5-15p 15a-125v plug	NEMA 5-20p 20a-125v plug	CEE 7/7 Plug rated 250V	CH2-16p Plug rated 250V	BS1363 Plug rated 250V (U.K. only)	AS/NZS 3112 Plug rated 250\
300-T	H/III	`	•		•					
120V	1	60	6.7	.80	✓	✓				
230V	1	50/60	2.7	.62			✓	✓	✓	
500-T	H/III	,								'
120V	1	60	16.0	1.9		✓				
208V 240V	1	60	11.2 12.5	2.7 3.0			Cord	, no plug		
230V	1	50/60	12.0	2.8			✓	✓	✓	✓
750-T	H/III									
120V	1	60	14.2	1.7		✓				
208V 240V	1	60	14.0 16.0	2.9 3.9			Cord	, no plug		
230V	1	50/60	12.2	2.8			✓	✓	✓	✓
1000-	TH/III									
208V 240V	1	60	14.0 16.0	2.9 3.9			Cord	, no plug		
230V	1	50/60	12.2	2.8			✓	✓	✓	✓
1200-	TH/III									
208V 240V	1	60	29.0 33.3	6.1 8.0		No cord or plug				
230V	1	50/60	28.7	6.6			No co	rd or plug		
380-415V	3	50/60	16.5	6.0			No co	rd or plug		
1200-	TH/III	(U.K. 0	ONLY)							
230V	1	50/60	21.5	4.9			No co	rd or plug		
767-S	K/III									
208V 240V	1	60	16.0 18.5	3.9 4.4			Cord	, no plug		
230V	1	50/60	14.0	3.1			✓	✓	✓	✓
1767-	SK/III									
208V 240V	1	60	32.0 36.3	7.7 8.7			No co	rd or plug		
230V	1	50/60	30.0	6.2	No cord or plug					
380-415V	3	50/60	17.2	6.4	No cord or plug					
1000-	SK/III									
208V 240V	1	60	16.0 18.3	3.3 4.4	Cord, no plug					
230V	1	50/60	14.0	3.1			✓	✓	✓	✓
1200-	SK/III	•		٨	•	•				•
208V 240V	1	60	32.0 36.3	7.7 8.7		No cord or plug				
2401						No cord or plug				

Other plugs are available. Contact factory for more information.

Cord Length: 120V - 6 ft. (1.8m) 208-240V - 9 ft. (2.7m) 230V - 8ft. (2.5m)

USER SAFETY INFORMATION

CAUTION



To prevent **personal injury** or **property damage**:

Always use hand protection when operating this appliance to avoid burns. Metal parts of this equipment become extremely hot when in operation.

The Alto-Shaam cook and hold oven is intended for use in commercial establishments by qualified operating personnel 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.

START-UP OPERATION

Before initial use or after removing the appliance from storage:

- 1. Remove all packing material from the appliance.
- 2. Remove and wash any detachable items such as wire shelves, side racks, pans, and drip pans with hot, soapy water. Dry with a clean damp lint-free cloth.
- 3. Remove all visible grease or oil from the appliance.
- 4. Clean the interior and exterior of the appliance with a mild soap and water solution. Apply the solution with a clean damp cloth. Do not use commercial or household cleaners that contain ammonia. Wipe with a clean, damp cloth to remove all detergent residue. Dry with a clean, lint-free cloth.
- 5. Clean the appliance glass with glass cleaner or distilled vinegar.
- 6. Install the side racks and wire shelves position shelves with the curved end up and toward the rear of the appliance. Re-install drip pan.
- 7. Operate the oven without food for a period of two (2) hours at a temperature of 300°F (149°C) to remove surface oils and any accompanying odor.

The appliance is now ready for operation.

WARNING



To prevent serious personal injury, death, or property damage:

Do not steam clean, hose down or flood the interior or exterior with water or liquid solution of any kind. **Do not** use water jet to clean. Failure to observe this precaution will void the warranty.

⚠ WARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

AUDIBLE SIGNALS

Oven beeping indicates a response, mode changes, and error conditions.

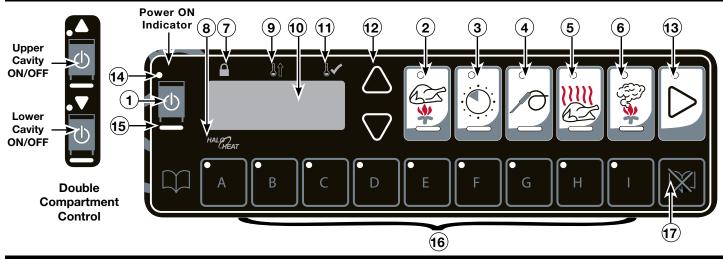
One brief beep - response to a button being pressed.

Two brief beeps - informative beep that indicates that something has been changed, such as the user entering a volume change, entering a temperature scale change, etc.

Three brief beeps - indicates the oven is done preheating, the probe has exceeded set-point in cold smoking, the door has been open too long, or the control is unlocked.

Four brief beeps - indicates an error. Refer to the Troubleshooting section of this manual.





CONTROL FEATURES

1. On/Off Button

The On/Off control system button operates the functions of the control panel. If there is any power loss during operation, the on/off indicator light will flash. To clear, push button and release.

2. Cook Button — Temperature range 200°F to 325°F (93°C to 162°C)

Used to select cooking mode and to review the cook temperature setting.

3. Time Button — Maximum time 24 hours

Used to select cook time and to review set time.

4. Probe Button — Temperature range 50°F to 195°F (10°C to 91°C)

Used to select internal product probe temperature mode, review probe temperature setting, enable Probe Hold mode, and edit probe holding temperature.

5. Hold Button — Temperature range 60°F to 205°F (15°C to 96°C)

Used to select food holding mode and to review set holding temperature.

6. Smoker Button — Time range 0 to 4 hours

Used to select warm smoke or cold smoke and to review the smoke time remaining.

7. Lock Indicator

When illuminated, this symbol indicates settings used in the cooking sequence are locked and cannot be changed.

8. Halo Heat Indicator

When the oven is preheating, the Halo Heat indicator will illuminate during preheating and remain steady until the oven reaches the set cooking temperature. When the temperature has stabilized, the indicator will illuminate periodically as the oven calls for heat.

9. Oven Preheat Light

Illuminates until the oven is preheated or in ready mode.

10. LED Display

Indicates interior oven air temperature, internal product probe temperature, time, or when used in conjunction with other buttons, will review original cooking, holding and probe temperature settings. The display will also indicate various programming and diagnostic information.

11. Ready Indicator Light

Illuminates when the oven has finished preheating.

12. Up/Down Arrows

Used to increase or decrease set time, including cooking, holding and probe temperature settings.

13. Start Button

Used to initiate a selected mode sequence when pressed and released. You may stop any mode of operation by pressing and holding the Start button until you hear a 2-second beep.

14. Green Indicator Lights

Located within each function button, the green light functions as an operator prompt indicating additional operator action is required and also identifies current mode of operation.

15. Amber Indicator Lights

Located below the Cook, Time, Probe and Hold buttons, these indicators will illuminate to identify the current mode of operation and allows the operator to identify the information currently shown in the LED display.

16. Preset Program Buttons

Provides memory storage and operation of up to eight operator set cooking programs for specific products (A thru H). I enables locking abilities.

17. Cancel Button

Used to erase a program from memory storage.

IMPORTANT

Do not use the oven if the controls are not properly functioning. Refer to the Troubleshooting Guide located in this manual or call an authorized service technician.

Cook/Hold/Smoke Instructions



Press and release control On/Off button. The oven will beep for one second and power to the unit will be indicated by an illuminated green indicator light located in the upper left corner of the On/Off button. The oven will begin operating in the hold mode. The amber hold indicator will be illuminated and the last set hold temperature will be displayed.



Set cook temperature — Press **Cook** button. Oven preheat indicator will illuminate and the last set cooking temperature will displayed. Press the **Up** or **Down Arrow** buttons to change the cook temperature.



If cooking by time — Press the **Time** button. The green time indicator will illuminate and the last set cooking time will be displayed. Press the **Up** or **Down Arrow** buttons to change the set time. The display will alternate between the set temperature and the elapsed time.



If cooking by probe — Press the **Probe** button. The green probe indicator will illuminate and the last set internal product temperature will be displayed. Press the **Up** or **Down Arrow** buttons to change the set temperature. The display will alternate between the set temperature, the elapsed time, and the probe temperature.



Set hold temperature — Press the **Hold** button. The green cook indicator light will remain illuminated. Press the **Up/Down Arrow** buttons to change set hold temperature. The display will alternate between the set hold temperature and the amount of time the product has been in the hold mode. Oven will remain in the hold mode until the **On/Off** button is pressed.



To enable Probe Hold mode (optional when cooking by probe) — Press the **Probe** button. The probe cooking temperature will be displayed. Press the **Probe** button again to toggle to the Probe Hold temperature. The yellow LEDs below the **Probe** and **Hold** buttons will alternate, signaling the Probe Hold mode. Press the **Up** or **Down Arrow** buttons to set probe holding temperature.



Set Smoke time if desired (hot smoke) — Press **Smoke** button. Press the **Up** or **Down Arrow** buttons to set the smoke time desired. The last set time will be displayed.



To save program to a preset — Select desired **Preset** button (A-H) for the product programmed by the previous steps. Press and hold the selected **Preset** button for two seconds. When the preset has been saved, you will hear a one second beep and the preset light will illuminate.



NOTICE: Only one preset can be programmed at a time. If programming an additional preset is desired, the unit must be started and stopped either by cycling the power to the cavity or by pressing the **Start/Stop** button. The last **Preset** button used will be the oven cooking run sequence for the next product to be programmed. Settings can be manually changed for the next product and an alternate pre-programmed letter button selected.



Start cooking cycle - Press **Start** button.

To Cook/Hold/Smoke using Preset Menu Buttons



Press desired **Preset** button (A through H). **Preset** buttons with stored cooking programs will have green indicator illuminated. The oven will automatically enter preheat mode. Oven will beep periodically when it has reached a preheat ready state, and both the Ready and Start indicator lights will flash.



Start cooking cycle - Press Start button.

To Erase a Preset — Oven must be in either the power-up hold mode or in the preheat mode. The oven cannot be running a **Preset** menu program.

When the oven is in the power-up hold mode or in the preheat mode, press and hold the **Cancel** button and then the appropriate letter **Preset** button to be erased for two seconds. When the preset has been erased the oven will beep for one second.

Important - After programming a specific product into memory in a programmable preset button, it is very important to make a written permanent record of the product and the program letter assigned. Menu card (PE-23384) is provided for this purpose.

OPERATING FEATURES & FUNCTIONS

To stop an operation at any time:

Press and hold the Start button until the control beeps for two seconds, indicating the operation has been cancelled. The oven will remain in a power-on state.

To turn oven control panel off:

Press and hold the **On/Off** button until the oven beeps. The On/Off indicator light will go out.

Door open indicator:

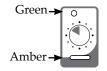
Display will flash "door" and a triple beep will alert the user. Press **On/Off** button to acknowledge error and disable triple beep.

Arrow Buttons:

Cook, Hold and Probe temperature, and the time setting can be adjusted by pressing the Up or Down Arrow buttons. Pressing and releasing the Up or Down Arrow button will change settings in increments of one. To change a setting more rapidly, press and hold the Up or Down Arrow button. Once the setting reaches a number divisible by 10, it will begin to increase in increments of 10.

Green and amber indicators:

Each program button includes a green light which indicates a requirement for additional programming by the operator or the current operational state of the oven.



The Cook, Time, Probe, and Hold buttons include an amber indicator light to identify the information being displayed.

Power fail detect:

If the power were to fail for any reason while heating, the control will retain, in memory, the programmed operating conditions. When power is restored, the control will resume operating from the point where it was interrupted and the On/Off indicator light will flash, indicating that such an event did occur. The operator can acknowledge the power failure by pressing the On/Off button. Pressing the button will display the amount of time that the power has been off. The control will stop counting the amount of time the power has been off when it has been off for more than 24 hours.

NOTICE: If such an event has occurred, it is strongly recommended that you ensure the food is safe for consumption according to local health regulations.

To set date and time:

All oven cavities must be turned Off.

To set time of day (HH:mm) Hours/minutes - press and hold "A" button for three seconds, then press Up/Down Arrow button.

To set year - press and hold "B" button for three seconds, then press the Up or Down Arrow button

To set month and day (MM.dd) - press "C" button for three seconds, then press the Up or Down Arrow button.

OPERATING FEATURES & FUNCTIONS

To Enable Probe Hold (optional when cooking by Probe)

• Press the Probe button to see the probe cooking temperature.



• Press the Probe button again to toggle to the probe hold temperature.

NOTICE: The yellow LEDs below the Probe and Hold buttons will alternate, signaling the Probe Hold mode.

• Press the Up/Down arrow buttons to set desired probe holding temperature.



• Press Start button to begin cooking cycle.



Display High/Low Probe Temperatures:

To observe the recorded maximum or minimum probe temperature when cooking by probe, press the following buttons while the probe remains in the product:

Highest Temperature: Press Probe button and Up Arrow button at same time.

Lowest Temperature: Press Probe button and Down Arrow button at same time.

Probe Calibration:

- 1. To verify product probe calibration, place the probe in a glass of ice water.
- 2. After allowing the temperature to settle, press the probe button for five (5) seconds. Compare reading against 32°F (0°C).
- 3. If calibration is required, the unit must be in the power up hold mode. From the off state turn the unit on. The unit will begin to operate in the power up hold mode, press the probe button for eight (8) seconds until the unit beeps twice and a temperature is displayed. Adjust the probe offset temperature by pressing the up or down arrows to increase or decrease the temperature. Repeat step 2 to verify.
- 4. Repeat steps 1 and 2 to verify the probe calibration as necessary.

Probe Usage:

When the oven probe remains inserted in the probe bracket, the LED temperature display will indicate the ambient air temperature inside the oven. To use the probe for cooking remove it from the bracket and wipe the full length of the metal probe with a disposable alcohol pad to clean and sanitize before using.

Only the tip of the probe senses the internal product temperature; therefore, it is important the tip be placed correctly in the product for internal temperature accuracy. Push the probe tip halfway into the product, positioning the tip at the center of the food mass, avoiding the bone. When inserting the probe into solid foods such as meat roast or poultry breasts, push the probe in from a straight downward position or in from the side to the center position. If placing into a semi-liquid or liquid product, the probe cable must be secured to keep the probe positioned properly. Do not let the probe tip touch the edges, bottom or side of a container. Tape the probe cable to the lip or edge of the container.

Sous Vide Cooking:

With the oven in a preheat mode, press and hold the Probe button. After 5 seconds, it will display "SouS" if in sous-vide mode, or "rE9" if in a regular probe mode. If changes are desired, continue holding the Probe button for an addition three seconds which will toggle the option.

When cooking by probe, insert the probe into the raw product after the oven has been preheated.

Wait one full minute to allow the probe temperature to decrease to the internal temperature of the product. Press the start button to begin the cooking process after this probe temperature adjustment period. A false probe reading of the internal product temperature will cause the oven to default to a holding temperature.

A CAUTION

To maintain safe temperature levels, cold food for rethermalization or reheating must never be added to the oven while hot foods are being held.

Preparation

Adjust the inside door vents per the individual cooking procedure selected. Always keep door vents closed when cooking with the smoking function. Insert drip pan on the bottom of the oven cavity.

Wood Chips

Soak one full tray of wood chips in water for 5 to 10 minutes. Shake off excess water, and place the moistened chips in the wood chip tray of the smoker oven. Replace the container in the oven.





Fire Hazard

The use of improper materials for the smoke function could result in a fire which may lead to personal injury or property damage.

Do not use sawdust for smoking. **Do not** use wood chips smaller than 1/2" (13mm) diameter.

Use Alto-Shaam approved wood chips for the smoke function in this appliance.

Hot Smoke Procedure



Press and release On/Off button.



Press and set Cook thermostat to required cooking temperature.



Press and set Time or Probe.



Press and set Hold thermostat to required holding temperature.



Enable and set Probe Hold mode if desired.



The Oven is automatically programmed to preheat to the set cooking temperature. The (((oven will produce an audible signal when fully preheated.

Prepare product for cooking. Load product on shelves.

To Set Smoking Time



Press the Smoker Button.

Press the Up/Down arrow buttons to select the smoke time in minutes. Press Start.



NOTICE: The smoking timer activates the heating element located within the wood chip container when in either a cook or hold mode. The smoke element will not turn on during preheat or ready modes. A full wood chip container will produce smoke for a period of approximately 1 hour, even though the timer can go past one hour.

For maximum product tenderizing and to reduce labor during peak preparation hours, products can be cooked and held overnight.

These instructions are basic operational guidelines only. For complete instructions, see the Halo Heat Cooking, Holding, Smoking Guidelines provided with the oven.

Cold Smoke Procedure



To Enter Cold Smoke Mode

Press and release power switch On/Off Control button.



Press and hold the Smoker Button for a period of 3 seconds.

To Set Cold Smoke Holding Temperature

The temperature will default to the last smoke holding temperature set by the user. The holding temperature range is 14°F to 205°F (-10°C to 96°C).



To increase this default temperature, press the Hold button and press the Up Arrow to set a higher default temperature.

To Set Smoking Verification Temperature (IF DESIRED)



Press the Probe button

Press the Up/Down Arrow buttons to select the verification temperature. The probe range is 14°F to 195°F (-10°C to 91°C).

This will incorporate the probe into the coldsmoking process and the control will alarm if the temperature exceeds the probe set point.

To Set Smoking Time



Press the Smoker button.

Press the Up/Down Arrow buttons to select the smoke time in minutes.

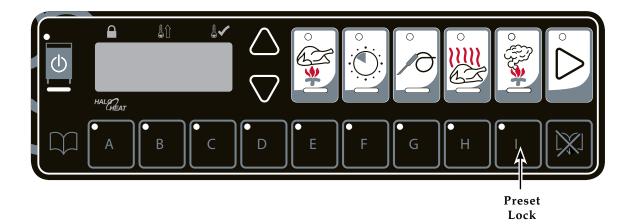
Prepare product for smoking. Place stainless steel tray filled with ice on shelf above the smoker tray. Load product on shelves.



Press Start.

Taste preference	Minimum Smoking time
Light Smoke Flavor	10 min.
Medium Smoke Flavor	30 min.
Heavy Smoke Flavor	40 min.
Very Heavy Smoke Flavor	60 min.
Extra Heavy Smoke Flavor	80 min.

USER OPTIONS



Preset Buttons Lock and Unlock

Preset buttons A through H can be locked in order to prevent storing, altering or erasing a program.

To lock the Preset buttons, press and hold the "I" button until the oven beeps. Release the "I" button. The green indicator light on the "I" button will illuminate. Oven Preset buttons A through H are now locked.

NOTICE: Only the oven Preset buttons A through H are affected by this lock-out in order to also allow the oven to be used with the unprogrammed Cook, Probe, or Hold modes.

To unlock the Preset buttons, press and hold the Cancel button along with the "I" button for two seconds until the "I" button light no longer illuminates. Release all buttons. The oven preset buttons are now unlocked.

Fahrenheit or Celsius Selection

With the control in the Off mode, press and hold the Up Arrow button until the display shows the current selection.

Press the Up/Down Arrow buttons to toggle between the two options. After each change the button must be released. The display must clear before the procedure can be repeated.

Control Panel Lock and Unlock

The control panel can be locked at any time in order to prevent inadvertent or accidental setting changes.

To lock the control panel, press and hold the Up Arrow button and then press the On/Off button. You will hear a brief beep and the panel lock indicator will illuminate. Release all buttons. The oven's control panel is now locked.

NOTICE: The control panel is now fully locked with the exception of the On/Off button and Up/Down Arrow buttons. You will be unable to turn the oven control off at this point.

To unlock the control panel, press and hold the Down Arrow button and then press the On/Off button. You will hear three beeps and the panel lock indicator light will extinguish. Release all buttons. The panel is now unlocked and ready for normal use.

Beeper Volume Selection

With the control in the Off mode, press and hold the Down Arrow button until the display shows the current control volume. Press the Up or Down Arrow button to cycle through the four options (0 = Off, 1 = Low, 2 = Mid, 3 = High).



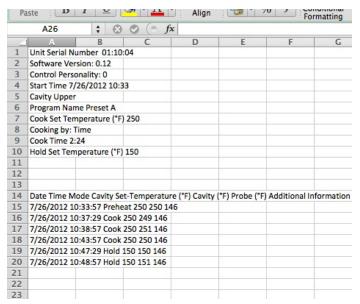
HACCP

HACCP Documentation, Data Logger - Optional

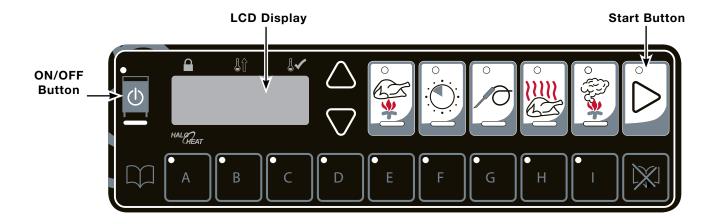
This oven meets the requirements of established HACCP criteria by providing automated sampling, record keeping, set-point validation, recipe used, dates and time. This data is retained for the last 30 days. This information can be viewed on screen or downloaded to a USB drive and then copied to your computer. The file format is a comma-separated variable (*.csv), that is easily opened using a spreadsheet software.

To download the data collected:

- 1. All oven cavities must be turned Off.
- 2. It is recommended that a completely empty USB flash drive is used. Remove the cap of the USB port located on the right side of the control panel and insert the USB flash drive. Display will show "Usb". If display does not show "Usb", try again with another flash drive device or call Alto-Shaam Service.
- 3. Press and hold the Start button until display shows "≡ XYZ". The number at the far right is the percentage of the download completed. The Start button indicator light will flash while the download is in process. When display shows "≡ 100", the download is complete.
- **4.** Remove the USB flash drive and replace the cap on the USB port. When the USB is removed, the oven will beep for 1-second, acknowledging the removal.



HACCP Data Sample



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.

Most Halo Heat Holding Equipment is provided with a thermostat control between 60°F 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.

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°F-175°F	71°C-79°C			
Corn Beef	160°F-175°F	71°C-79°C			
Pastrami	160°F-175°F	71°C-79°C			
Prime Rib — Rare	130°F	54°C			
Steaks — Broiled/Fried	140°F-160°F	60°C-71°C			
Ribs — Beef Or Pork	160°F	71°C			
Veal	160°F-175°F	71°C-79°C			
Ham	160°F-175°F	71°C-79°C			
Pork	160°F-175°F	71°C-79°C			
Lamb	160°F-175°F	71°C-79°C			
Poultry					
Chicken — Fried/Baked	160°F-175°F	71°C-79°C			
Duck	160°F-175°F	71°C-79°C			
Turkey	160°F-175°F	71°C-79°C			
General	160°F-175°F	71°C-79°C			
Fish/Seafood					
Fish — Baked/Fried	160°F-175°F	71°C-79°C			
Lobster	160°F-175°F	71°C-79°C			
Shrimp — Fried	160°F-175°F	71°C-79°C			
Baked Goods					
Breads/Rolls	120°F-140°F	49°C-60°C			
Miscellaneous					
Casseroles	160°F-175°F	71°C-79°C			
Dough — Proofing	80°F-100°F	27°C-38°C			
Eggs —Fried	150°F-160°F	66°C-71°C			
Frozen Entrees	160°F-175°F	71°C-79°C			
Hors d'oeuvres	160°F-180°F	71°C-82°C			
Pasta	160°F–180°F	71°C-82°C			
Pizza	160°F-180°F	71°C-82°C			
Potatoes	180°F	82°C			
Plated Meals	140°F-165°F	60°C-74°C			
Sauces	140°F-200°F	60°C-93°C			
Soup	140°F-200°F	60°C-93°C			
Vegetables	160°F–175°F	71°C-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.

CARE AND CLEANING

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 per 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. Failure to observe this precaution will void the warranty. Always use the proper cleaning agent at the manufacturer's recommended strength. Contact your local cleaning supplier for product recommendations.

Cleaning Materials

Cleaning can usually be accomplished with the proper cleaning agent and a soft, clean cloth. When more aggressive methods are needed, 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. Failure to observe this precaution will void the warranty.

CAUTION



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.

WARNING



To prevent serious personal injury, death, or property damage:

The appliance must be cleaned thoroughly to avoid deposits of grease and or food residues inside the appliance that may catch fire. If fat deposits and/or food waste inside the appliance ignite, shut down the appliance immediately and keep the appliance door closed to extinguish the fire. If further extinguishing is required, disconnect the appliance from the main power and use a fire extinguisher (do not use water to extinguish a grease fire!). Failure to clean the appliance properly invalidates the warranty and relieves Alto-Shaam of all liability.

CARE AND CLEANING

WARNING



To prevent serious personal injury, death, or property damage:

Do not steam clean, hose down or flood the interior or exterior with water or liquid solution of any kind. **Do not** use water jet to clean. Failure to observe this precaution will void the warranty.

Clean Daily

- 1. Disconnect unit from power source, and let cool.
- 2. Remove all detachable items such as wire shelves, side racks, and drip pans. Clean these items separately.
- 3. Wipe the interior metal surfaces of the oven with a paper towel to remove loose food debris.
- 4. Clean the interior metal surfaces, door vents, and front drip tray with a damp clean cloth or sponge and any good commercial detergent.

NOTICE: Never use of abrasive cleaning compounds, chloride based cleaners, or cleaners containing quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel.

- 5. Spray heavily soiled areas with a water soluble degreaser and let stand for 10 minutes, then remove soil with a plastic scouring pad.
- 6. Wipe control panel, door vents, door handles, and door gaskets thoroughly since these areas harbor food debris.
- 7. Rinse surfaces by wiping with sponge and clean warm water.
- 8. Remove excess water with sponge and wipe dry with a clean cloth or air dry. Leave doors open until interior is completely dry. Replace side racks and shelves.

⚠ WARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

- 9. Wipe door gaskets and control panel dry with a clean, soft cloth.
- 10. Interior can be wiped with a sanitizing solution after cleaning and rinsing. This solution must be approved for use on stainless steel food contact surfaces.
- 11. 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 clean cloth and wipe with the grain of the stainless steel.
- 12. Clean any glass with a window cleaner.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for equipment.

CARE AND CLEANING

WARNING



To prevent serious personal injury, death, or property damage:

Do not steam clean, hose down or flood the interior or exterior with water or liquid solution of any kind. **Do not** use water jet to clean. Failure to observe this precaution will void the warranty.

Clean the door vents

Door vents need to be inspected and cleaned as required.

Clean the probes daily

Remove all food soil from probes. Wipe entire probe and cable assembly with warm detergent solution and a clean cloth. Remove detergent by wiping each probe and cable with clean rinse water and a cloth. Wipe probes, and probe brackets with disposable alcohol pad or sanitizing solution recommended for food contact surfaces. Allow probe and cable to air dry in probe holding bracket.

Check the cooling fan in the oven control area

While the oven is warm, check that the cooling fan in the oven control area is functioning. The fan is located at the back of the unit, toward the top.

Check overall condition of oven once a month

Check the oven once a month for physical damage and loose screws. Correct any problems before they begin to interfere with the operation of the oven.

Do not use oven if controls are not properly functioning.

Refer to the Trouble Shooting Guide located in this manual or call an authorized service technician.

WARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

Daily prong cleaning

To ensure accurate internal product temperature readings the prongs on the removable probe must be cleaned daily.

- 1. Remove all food debris from prongs at the end of each production shift. Wipe the entire prong casing, and between each prong with a clean cloth and warm detergent solution.
- 2. Remove detergent by wiping with a cloth and clean rinse water.
- 3. Allow prongs to air dry before replacing detachable probe.



PREVENTATIVE MAINTENANCE CHECKLIST

Daily

- $\hfill\Box$ Perform daily oven cleaning as stated in this guide.
- □ Clean front drip tray as recommended in this guide.

Monthly

□ Inspect the door gasket for signs of cracking, deformation, or damage and replace as needed.
 □ Inspect the door window gasket for proper seal.
 □ Inspect the cavity door vent slides for proper operation.
 □ Inspect the side racks, shelves and shelf supports for damage and replace as needed.
 □ Calibrate removable product probe (if applicable).
 □ Clean the cooling fan intake area and exhaust vents.
 □ Visually inspect the smoke element (if applicable). If any visual signs of deformation, cracks or breaks are seen, remove the oven from service and contact a factory authorized service

Every 12 months (Inspection by a factory authorized technician)

□ Open the control area and inspect and tighten all electrical connections.
□ Inspect all electrical components.
□ Inspect the smoke element and smoke element wiring (if applicable).
□ Visually inspect the smoke element (if applicable). If any visual signs of deformation, cracks
or breaks are seen, remove the oven from service and contact a factory authorized service
technician for service.
□ Confirm proper current draw of heating elements.
□ Test heating elements for electrical short to ground. Replace/repair as needed.
□ Inspect the condition of the plug and cord and replace if damaged.
□ Tighten the cord connection inside the appliance control area.
□ Test/replace independent indicator lights (where applicable).
□ Replace the control cooling fans (if applicable).
□ Check the site voltage.
□ Set the voltage switch (where applicable).
☐ Inspect and test the product probe and product probe receptacle.

- $\hfill \hfill \hfill$
- □ Visually inspect the cavity for structural integrity.
- □ Replace the door gasket.

technician for service.

- □ Visually inspect any door handles and hinges. Replace/repair as needed.
- □ Remove any loose handle and hinge screws. Apply Loctite® and then properly secure the screws.
- □ Inspect the perimeter bumper. Repair/replace as needed.
- □ Inspect the casters. Repair/replace as needed.
- □ Perform cavity temperature calibration per manufacturer's recommended calibration procedures.

FOOD SAFETY

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, operating efficiency, and appearance of equipment contribute considerably to savory, appetizing foods.

Most food imparts its own particular aroma and many foods also absorb existing odors. Unfortunately, during this absorption there is not a 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 undesireable flavors are usually the result of germ activity.

The easiest way to ensure 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 ensure 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 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 food temperatures from the time the food is received through the time the food is served.

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.

Internal Food Product Temperatures					
Hot Foods					
Danger Zone	40°F to 140°F	(4°C to 60°C)			
Critical Zone	70°F to 120°F	(21°C to 49°C)			
Safe Zone	140°F to 165°F	(60°C 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°F to 32°F	(-18°C to 0°C)			
Safe Zone	0°F or Below	(-18°C or Below)			

Hazard Analysis (at) Critical Control Points (HACCP), 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. Additional HACCP information is available by contacting:

Center for Food Safety and Applied Nutrition Food and Drug Administration PHONE: 1-888-SAFEFOOD www.foodsafety.gov

Troubleshooting

Code	Description	Possible Causes		
E-10	Cavity air sensor shorted	Cavity air sensor reading < 5°F (-15°C). Verify sensor integrity. See sensor test instructions below.		
E-11	Cavity air sensor open	Cavity air sensor reading > 517°F (269°C). Verify sensor integrity. See sensor test instructions below.		
E-20	Product probe is shorted Oven will cook in time only	Product probe reading < 5°F (-15°C). Verify sensor integrity. See sensor test instructions below.		
E-21	Product probe is open Oven will cook in time only	Product Probe reading > 517°F (269°C). Verify sensor integrity. See sensor test instructions below.		
E-30	Under temperature	Unit has been more than 25°F (14°C) below set point for longer than 90 minutes.		
E-31	Over temperature	Unit has been more than 60°F (33°C) above the maximum set-point for longer than 3 minutes. <i>Notice:</i> Holding Cabinets with this error code are more than 145°F (81°C) above the maximum set-point.		
E-32	Safety switch open (Aux hi-limit switch)	Contact factory.		
E-38	Internal software error	Contact factory.		
E-39	Sensor error	Contact factory.		
E-50	Temp. measurement error	Contact factory.		
E-51	Temp. measurement error	Contact factory.		
E-60	Real time clock error	Data set to factory default. Ensure that date and time are correct if applicable.		
E-61	Real time clock error	Contact factory.		
E-64	Clock is not oscillating	Contact factory.		
E-70	Configuration connector error (DIP switch)	Refer to wiring diagram for the particular model and ensure dip switches on the control match the settings called out on the WD. If the dip switch settings are correct according to the print replace the control.		
E-78	Voltage low	Voltage below 90 VAC on a 125 VAC unit, or below 190 VAC on a 208-240 VAC unit. Correct voltage.		
E-79	Voltage high	Voltage over 135 VAC on a 125 VAC unit, or over 250 VAC on a 208-240 VAC unit. Correct voltage.		
E-80	EEPROM Error	Ensure that all temperatures and times are properly set. Contact factory if problem persists.		
E-81	EEPROM Error	Contact factory.		
E-82	EEPROM Error	Contact factory.		
E-83	EEPROM Error	Contact factory.		
E-85	EEPROM Error	All timers, if previously on, are now off. Possible bad EEPROM.		
E-86	EEPROM Error	Stored HACCP memory corrupted. HACCP Address reset to 1. Possible bad EEPROM. Contact factory if problem persists.		
E-87	EEPROM Error	Stored offsets corrupted. Offsets reset to 0. Control may need a recalibration. Possible bad EEPROM. Contact factory if problem persists.		
E-88	EEPROM Error	All timer set-points are reset to 1 minute. Timers, if previously on, are now off. Possible bad EEPROM.		
E-90	Button stuck	A button has been held down for > 60 seconds. Adjust control. Error will reset when the problem has been resolved.		
E-91	Input failure	Contact factory.		
E-dS	Datakey error	Datakey digital signature incompatible. Cycle power, and install compatible Datakey if error persists.		
E-dT	Datakey error	Datakey incompatible with control. Install compatible Datakey.		
E-dU	Datakey unplugged	Install Datakey and cycle power to control to clear error.		
dLto	Datalogger has timed out	Cycle power. Contact factory if error persists.		
dLSD	Micro SD card not plugged in	Plug in SD card and cycle power. Contact factory if error persists.		
	NOTICE: If in doubt, always cycle the power to the control and contact factory if the problem persists.			

To test probe and air sensor:

Test probe and air sensor by placing sensor in ice water bath and using an ohmmeter set on the ohm scale. The reading should be 100 ohms resistance. If it is more than 2 ohms higher or lower, sensor needs to be replaced.

ALWAYS check the circuit breaker is turned "ON" and your unit is receiving power BEFORE calling your Authorized Alto-Shaam Service Agent.

NOTICE

This section is provided for the assistance of qualified and trained service technicians only and is not intended for use by untrained or unauthorized service personnel. Do not attempt to repair or service the oven beyond this point. Contact Alto-Shaam for the nearest authorized service agent. Repairs made by any other service agents without prior authorization by Alto-Shaam will void the warranty.

Troubleshooting Internal Electrical Components

A. No power. Display will not light.

- 1. Verify that power is available at the outlet or junction box.
- 2. Verify that the circuit breaker switch on the back of the unit is turned on.
- 3. Verify that the power cord is not open. Check continuity with a VOM meter.
- 4. If the problem persists, call a qualified Alto-Shaam service technician at 1-800-558-8744.

B. Display is lit but unit is not heating.

Check to verify that the high limit switch located at the rear of the unit top has not been tripped. If it has been tripped, reset by pressing in the hi-limit reset button at the rear of the appliance.



After resetting, the cause of the high limit trip must be corrected. If the high limit switch will not reset, the high limit switch is defective and must be replaced. *This is a safety device and must not be bypassed or removed from the circuit.*

C. To test air sensor:

Test air sensor by placing sensor in ice water bath and using an ohmmeter set on the ohm scale. The reading should be 100 ohms resistance. If it is more than 2 ohms higher or lower, sensor needs to be replaced.

D. To test probe sensor:

Test food probe by placing in ice water bath and using an ohmmeter set on the ohm scale. The reading should be 100 ohms resistance.

MARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



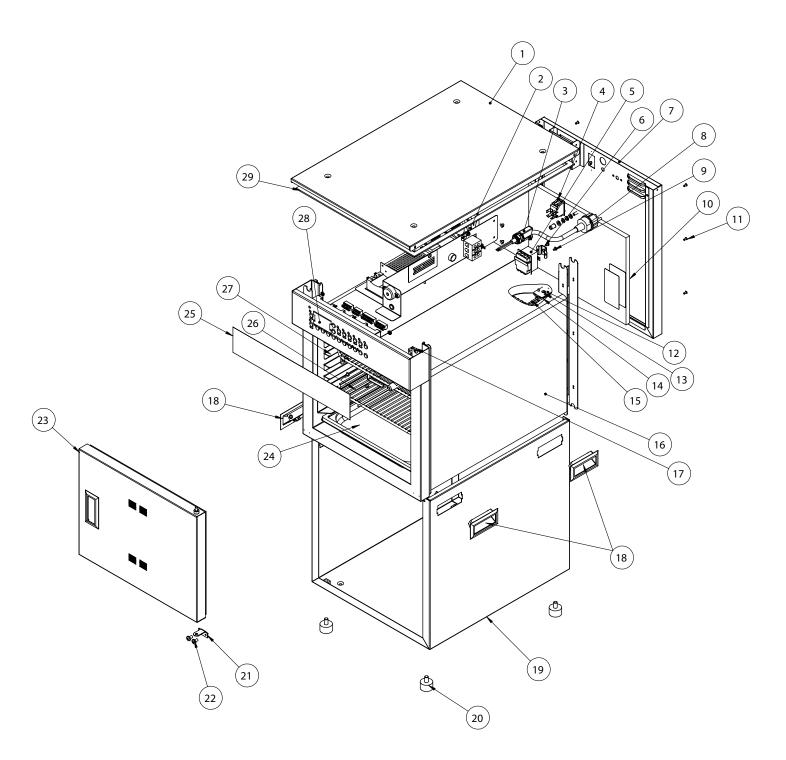
To prevent serious injury, death, or property damage, **always** lock-out or post breaker panel until service work has been completed.

NOTICE

If the appliance has been unplugged for an extended period of time, the Real Time Clock may require recharging. Turn main breaker to the unit off for 10 seconds and then restore power. For more information, see Error Code E-60 in the Troubleshooting section of this manual.

Exterior Service View - 300-TH/III (A)





Part numbers and drawings are subject to change without notice.

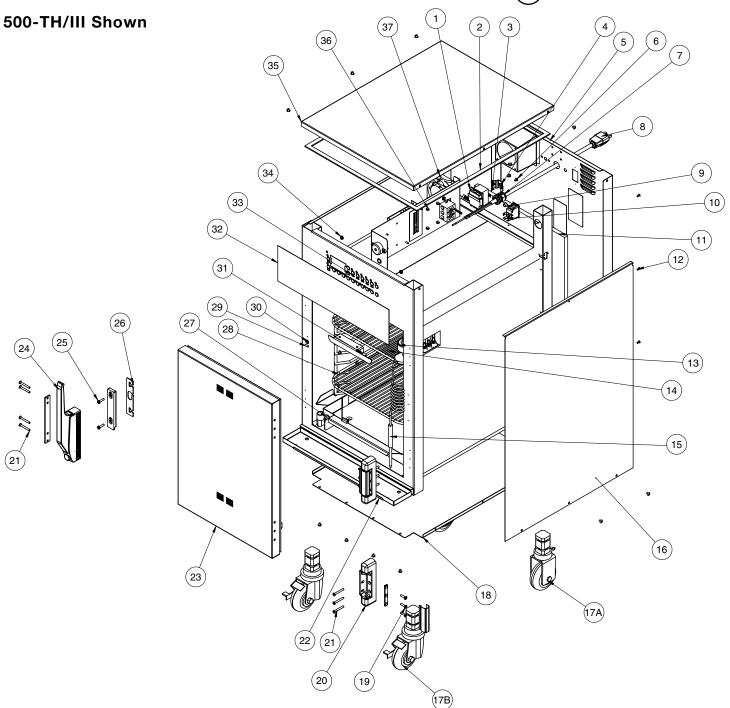
Exterior Parts List - 300-TH/III



ITEM	DESCRIPTION	PART NO.	QTY
1	BONNET TOP COVER	1012831	1
2	FAN BOX, 120V	FA-3973	1
	FAN BOX, 230V	FA-34524	1
3	BUSHING, STRAIGHT, STRAIN RELIEF, 230V	BU-34898	1
	BUSHING, STRAIGHT, STRAIN RELIEF, 120V	BU-3964	1
4	SWITCH, ROCKER, 125-277V, 20A	SW-34769	1
5	HI-LIMIT THERMOSTAT	TT-33476	1
6	HI-LIMIT PROTECTION COVER	1003936	1
7	REAR TRIM	5014525	1
8	CORDSET	SEE PG. 4	13
9	SCREWS, M4-0.7 x 6mm PHIL	SC-22271	2
10	INSULATION	IN-2003	1
11	RIVET, BLIND, #44, S/S	RI-2100	16
12	GUARD SENSOR	1493	1
13	SCREW, 6-32 x 1/2, NC PHIL, FLAT	SC-2254	2
14	BLOCK, SENSOR	BK-29605	1
15	SENSOR	SN-33541	1
16	INSULATION	IN-22364	1
17	PRODUCT PROBE	15892R	1
18	HANDLE, PULL, RECESSED	HD-28789	4
19	OUTER CASING SPOT	5014538	1
20	FEET, 3-1/2" (89mm) RIGID	FE-29203	4
21	HINGE PLATE, BOTTOM RIGHT	5021070	1
	LEFT*	5022273	1
22	SCREW, M6 x 1.0 x 10 PAN	SC-27078	2
23	DOOR ASSEMBLY	5014458	1
	DOOR GASKET	GS-35092	1
24	DRIP PAN	PN-2122	1
25	PANEL, OVERLAY	PE-35086	1
26	SHELF, WIRE	SH-2107	2
27	SIDE RACK	1012872	2
28	CONTROL	CC-34194	1
29	GASKET, ADHESIVE,.125 x .375 [lin ft]	GS-23622	1
30*	PROBE WIRE HOLDER	1017495	1
31*	NUT, THREADED INSERT, M6	NU-22770	1
32*	NUT, 8-32 UNC FEPS ZP	NU-26526	4
33*	SCREW, 8-32 x 2 SLOT PAN HEAD 18-8 S/S	SC-23154	2
34*	SCREW, HHCS M6 x 20, W/NO MARKING	SC-22924	1
35*	SCREW, 8-32 x 1/4" TRH PHH	SC-2459	12
36*	FOIL PAD HEATER, 230V	EL-29740	1
	FOIL PAD HEATER, 120V	EL-35173	1

^{*} NOT SHOWN

Exterior Service View - 500, 750, 1000-TH/III B



Part numbers and drawings are subject to change without notice.

MARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

▲ DANGER

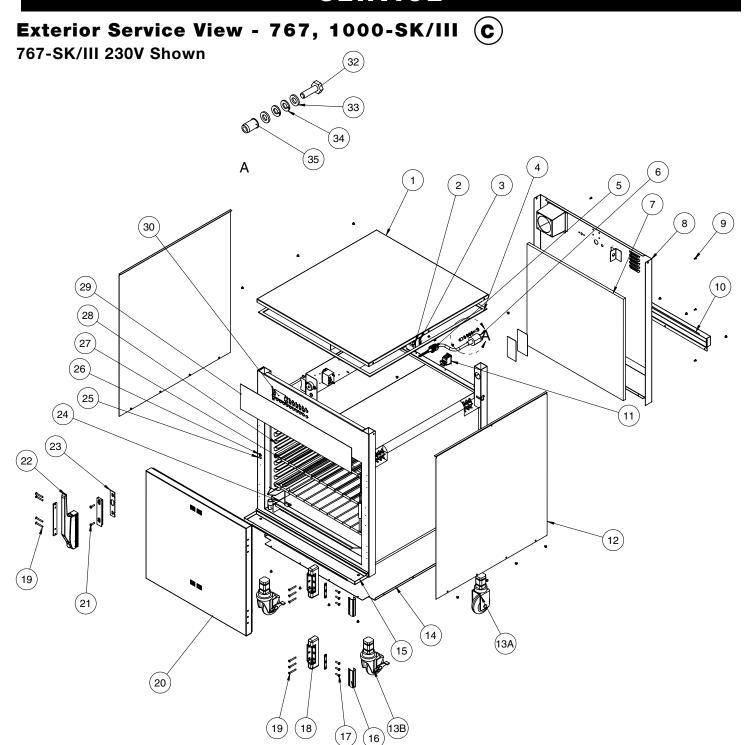


Exterior Parts List - 500, 750, 1000-TH/III



	MODEL >	500-TH/	·	750-TH/		1000-TH	/111
ITEM	DESCRIPTION	PART NO.	QTY	PART NO.	QTY	PART NO.	QTY
1	THERMOSTAT, HI LIMIT	TT-33476	1	TT-33476	1	TT-33476	1
2	GASKET ADHESIVE 0.125 x 0.375 [LIN FT]	GS-23622	1	GS-23622	1	GS-23622	1
3	PLUG, DOME, .187" HOLE	PG-28439	4	PG-28439	4	PG-28439	4
4	HIGH LIMIT PROTECTION COVER	1003936	1	1003936	1	1003936	1
5	REAR TRIM, SPOT	5014004	1	5014081	1	5014172	1
6	SCREW, M4-0.7 x 6mm PHIL	SC-22271	2	SC-22271	2	SC-22271	2
7	BUSHING, STRAIN RELIEF	BU-3964	1	BU-3964	1	BU-3964	1
8	CORDSET	SEE PG. 4	44	SEE PG. 4	15	SEE PG. 4	45
9	PLUG, 3/8" HOLE	PG-25574	1	PG-25574	1	PG-25574	1
10	SWITCH,ROCKER, 125-277V, 20A	SW-34769	1	SW-34769	1	SW-34769	1
11	INSULATION	IN-2003	1	IN-2003	1	IN-2003	1
12	RIVET, BLIND, #44 STAINLESS	RI-2100	6	RI-2100	6	RI-2100	6
13	PROBE RECEPTACLE	PR-34705	1	PR-34705	1	PR-34705	1
14	SHELF, STAINLESS STEEL	SH-2326	2	SH-2324	3	SH-2325	3
15	PROBE, PRODUCT	PR-36065	1	PR-36065	1	PR-36065	1
	PROBE, PRODUCT (UK 230V ONLY)	_		_	_	PR-34298	1
16	PANEL, SIDE	5015081	2	5015083	2	5015088	2
17	CASTER PACKAGE	5008022	1	5008022	1	5014422	1
17A	- CASTER, 3-1/2" (89mm) RIGID		—			CS-25674	2
	- CASTER, 2-1/2" (64mm) RIGID	CS-28178	2	CS-28178	2		_
17B	- CASTER, 3-1/2" (89mm) SWIVEL W/ BRAKE					CS-25675	2
	- CASTER, 2-1/2" (64mm) SWIVEL W/ BRAKE	CS-28179	2	CS-28179	2		
17C*	- SHIM	_	<u> </u>	_		1012735	4
18	BOTTOM PANEL	1010774	1	1010394	1	1009941	1
19	SCREW, 10-32 x 3/4", NF PHIL	SC-2072	6	SC-2072	6	SC-2072	6
20	HINGE	HG-22338	1	HG-22338	1	HG-22338	1
21	SCREW,10-32 x 1-1/2", NF, PHIL	SC-2073	10	SC-2073	10	SC-2073	10
22	DRIP TRAY KIT	5010736	1	5010391	1	5009716	1
	- DRIP TRAY HOLDER	1010782	1	1010584	1	1010188	1
	- DRIP TRAY	1010783	1	1010585	1	1010189	1
23	DOOR ASSEMBLY, SLAB, RH	5010828	1	5010946	1	5010081	1
	*DOOR ASSEMBLY, WINDOW, RH	5010830	1	5010948	1	5010082	1
	*DOOR ASSEMBLY, SLAB, LH	5010824	1	5010947	1	5010071	1
	*DOOR ASSEMBLY, WINDOW, LH	5010829	1	5010949	1	5010076	1
	*DOOR GASKET	GS-22950	1	GS-22951	1	GS-22952	1
24	HANDLE, OFFSET MAG. LATCH	HD-27080	1	HD-27080	1	HD-27080	1
25	SCREW, 3/4" PAN HD	SC-2071	2	SC-2071	2	SC-2071	2
26	SHIM, HANDLE	13947	1	13947	1	13947	1
27	DRIP PAN WELD	14813	1	14831	1	5005616	1
28	SIDE RACK, CHROME	SR-28403	2	SR-28405	2	SR-2266	2
- 00	PAN SLIDES, 230V ONLY	1010880	2	1010813	2		_
29	REED SWITCH, DOOR (QTY PER DOOR)	SW-33559	1	SW-33559	1	SW-33559	1
30	BUSHING, 3/8" BLACK HOLE	BU-3419	1	BU-3419	1	BU-3419	1
31	PROBE WIRE HOLDER	1017495	1	1017495	1	1017495	1
32	PANEL OVERLAY	PE-26710	1	PE-26839 CC-34194	1	PE-26713	1
	CONTROL	CC-34194 NU-26526	1		1	CC-34194	1
34	NUT, #8-32 UNC KEPS ZP	1011946	1	NU-26526 1011872	4	NU-26526	4
35	TOP COVER				1	1011534	1
36	SCREW, 8-32 x 2 SLOT PAN HEAD 18-8 S/S FAN, BOX - 120V ONLY	SC-23154 FA-3973	1	SC-23154 FA-3973	2	SC-23154 FA-3973	1
31	FAN, BOX - 120V ONLY FAN, BOX	FA-3973 FA-34524	1	FA-3973 FA-34524	1	FA-3973 FA-34524	1
38*	SENSOR GUARD	1493	1	1493	1	1493	1
39*	PROBE COVER	5009712	1	5009712	1	5009712	1
40*	SENSOR MOUNTING BLOCK	BK-29605	1	BK-29605	1	BK-29605	1
41*	SCREW, 6-32 x 1/2", NC PHIL, FLAT	SC-2254	2	SC-2254	2	SC-2254	2
42*	SCREW, 8-32 x 1/2 , NO PHIL, FLAT	SC-2459	18	SC-2459	20	SC-2459	26
43*	SCREW, 8-32 x 1/4 PHIL SCREW, 8-32 x 1/2" PHIL, S/S	SC-2439 SC-2425	6	SC-2439 SC-2425	6	SC-2439 SC-2425	6
44*	SENSOR, OVEN TEMPERATURE	SN-33541	1	SN-33541	1	SN-33541	1
46*	WASHER, FLAT, M6 DIN 125	WS-22297	2	WS-22297	2	WS-22297	2
47*	WASHER, M6 SPLIT LOCK S/S 18-8	WS-22302	2	WS-22302	2	WS-22302	2
47	Whorlen, wo or err cook 0/0 10-0	VVO-22302		VVO-22302		VVO-22302	

^{*} NOT SHOWN



Part numbers and drawings are subject to change without notice.

** Shown with electrical chassis prior to 5/1/13

MARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



Exterior Parts List - 767, 1000-SK/III

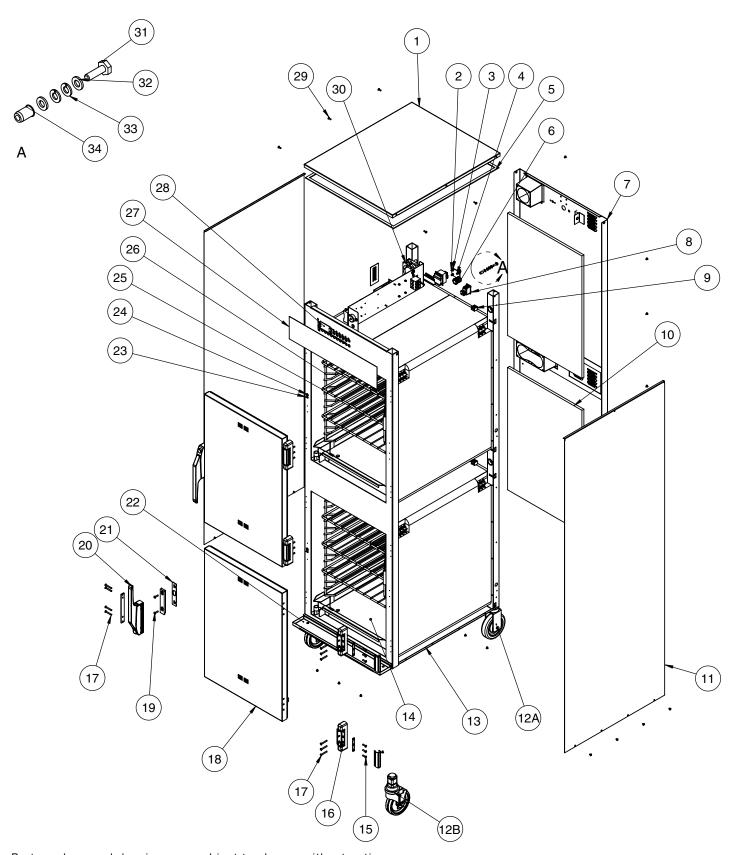


	MODEL >	767-SK	/111	1000-SK	C/III
ITEM	DESCRIPTION			PART NO.	
1	TOP COVER	1011872	1	1011534	1
2	THERMOSTAT, HI-LIMIT	TT-33476	1	TT-33476	1
3	HI-LIMIT PROTECTION COVER	1003936	1	1003936	1
4	GASKETS, ADHESIVE, 0.125 x 0.375 [linear ft]	GS-23622	1	GS-23622	1
5	BUSHING, STRAIGHT, STRAIN RELIEF	BU-3964	1	BU-3964	1
6	CORDSET	SEE PG.	46	SEE PG.	46
7	INSULATION	IN-2003	1	IN-2003	1
8	REAR TRIM, SPOT	5014137	1	5014204	1
9	RIVET, BLIND, #44, STAINLES STEEL	RI-2100	6	RI-2100	6
10	ELEMENT COVER	1010409	1	1011813	1
11	SWITCH, ROCKER, 20A	SW-34769	1	SW-34769	1
12	SIDE PANEL	5015083	2	5015088	2
13 13A	CASTER PACKAGE - CASTER, 1.5" STEM, RIGID 5" (127mm)	5014422 CS-24874	2	5014422 CS-24874	1 2
13A	- CASTER, 1.5" STEM, FI (127mm) SWIVEL W/ BRAKE	CS-24875	2	CS-24875	2
13C*	- SHIM	1012735	4	1012735	4
14	BOTTOM PANEL	1012733	1	1009941	1
15	DRIP TRAY KIT	5010391	1	5009716	1
10	— DRIP TRAY	1010584	1	1010188	1
	— DRIP TRAY HOLDER	1010585	1	1010189	1
16	HINGE COVER	CV-22171	2	CV-22171	2
17	SCREW, M5 x 0.8 x 20mm FLAT	SC-23868	6	SC-23868	6
18	HINGE, 1-3/8" OFFSET, PAIR, CHROME	HG-22338	1	HG-22338	1
19	SCREW, MS x 0.8 x 30mm FLAT	SC-22853	10	SC-22853	10
20	DOOR ASSEMBLY, RH	5011828	1	5012859	1
	*DOOR ASSEMBLY, LH	5011829	1	5012861	1
	*DOOR GASKET	GS-22951	1	GS-22952	1
21	SCREW, M5 x 0.8 x 20mm PAN	SC-22779	2	SC-22779	2
22	HANDLE, OFFSET MAGNETIC LATCH	HD-27080	1	HD-27080	1
23	SHIM, HANDLE	13947	1	13947	1
24	DRIP PAN WELD	14831	1	5005616	1
25	REED SWITCH, DOOR	SW-33559	1	SW-33559	1
26	BUSHING, 3/8" BLACK HOLE	BU-3419	1	BU-3419	1
27	SHELF, WIRE S/S	SH-2324	2	SH-2325	1
28	*SHELF, RIB RACK SIDE RACKS	SH-2743 SR-28405	2	SH-29474 SR-2266	2
20	PAN SLIDES (230V ONLY)	1010813	2	3n-2200	
29	PANEL OVERLAY	PE-27178	1	PE-29385	1
30	CONTROL	CC-34194	1	CC-34194	1
31	SCREW, HHCS, M6 X 20mm	SC-22924	1	SC-22924	1
32	WASHER, FLAT, M6, DIN 125	WS-22297	2	WS-22297	2
33	WASHER, M6 SPLIT LOCK S/S 18-8	WS-22302	2	WS-22302	2
34	NUT, #8-32 UNC KEPS ZP	NU-26526	4	NU-26526	4
35*	SENSOR BLOCK, TERMINAL, PORCELAIN	BK-33546	1	BK-33546	1
36*	SENSOR MOUNTING BLOCK	BK-24427	1	BK-24427	1
37*	BRACKET, CHIP TRAY	BT-29217	1	BT-29217	1
38*	BUSHING, 5/8" SNAP, BLACK	BU-3611	2	BU-3611	2
39*	CHIP TRAY WELD	4652R	1	4652R	1
40*	SMOKE ELEMENT - 208-240V, 230V	EL-35022	1	EL-35022	1
	SMOKE ELEMENT - 120V	EL-35023	1	EL-35023	1
41*	FAN, BOX, 120V	FA-3973	1	FA-3973	1
	FAN BOX	FA-34524	1	FA-34524	1
10*	NUT, THREADED INSERT, M6	NU-22770	1	NU-22770	1
42*	NUT, 1/4-20 HEX S/S	NU-2437	2	NU-2437	2
43*	PLUG, DOME, .187" HOLE	PG-28439	4	PG-28439	4
44*	PROBE ASSEMBLY, PRODUCT	PR-36065	1	PR-36065	1
45* 46*	PROBE COVER PROBE WIRE HOLDER	5009712 1017495	1	5009712 1017495	1
46*	PROBE RECEPTICAL, PRODUCT	PR-34705	1	PR-34705	1
48*	SCREW, 6-32 x 1/2, NC PHIL, FLAT	SC-2239	2	SC-2239	2
49*	SCREW, M4-0.7 x 6mm PHIL	SC-2239	2	SC-2239	2
50*	SCREW, M3 x 0.5 x 16mm PAN	SC-22271	6	SC-22271	6
51*	SCREW, 8-32 x 2 SLOT PAN HEAD 18-8 S/S	SC-23154	2	SC-23154	2
52*	SENSOR, CAVITY	SN-33541	1	SN-33541	1
53*	SENSOR GUARD	1493	1	1493	1
54*	SMOKE HEATER PLATE WELD	5003782	1	5003782	1

^{*} NOT SHOWN

Exterior Service View - 1200-TH/III





Part numbers and drawings are subject to change without notice.

^{**} Shown with electrical chassis prior to 5/1/13

Exterior Parts List - 1200-TH/III D



ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	TOP COVER	1011534	1		- DRIP TRAY	1010189	1
2	SCREW, 10-32 x 1/2, NF PHIL, FLAT	SC-23670	4	23	SWITCH, REED (QTY PER DOOR)	SW-33559	1
3	NUT, 10-32 UNF HEX MS, 18-8 SST	NU-2215	4	24	BUSHING, 3/8" BLACK HOLE	BU-3419	1
4	BRACKET, TETHER	BT-26884	1	25	SHELF, STAINLESS STEEL	SH-2325	6
5	GASKET ADHESIVE 0.125 x 0.375	GS-23622	1	26	SIDE RACK, CHROME	SR-2266	4
6	BUSHING, STRAIN RELIEF	BU-3964	1	27	PANEL OVERLAY	PE-26714	1
7	REAR TRIM, SPOT	5014268	1	28	CONTROL	CC-34194	1
8	SWITCH, ROCKER,125-277V, 20A	SW-34769	1	29	SCREW, 8-32 x 1/2" PHIL SCREW	SC-2425	6
9	SENSOR MOUNTING BLOCK	BK-29605	1	30	FAN, BOX	FA-34524	2
10	INSULATION	IN-2003	2	31	SCREW, HHCS, M6 x 20	SC-22924	1
11	PANEL, SIDE	5015105	2	32	WASHER, FLAT, M6 DIN 125	WS-22297	2
12	CASTER PACKAGE	5014421	1	33	WASHER, M6 SPLIT LOCK S/S 18-8	WS-22302	2
12A	- CASTER, 5" (127mm) RIGID	CS-24874	2	34	NUT, THREADED INSERT	NU-22770	1
12B	- CASTER, 5" (127mm) SWIVEL W/ BRAKE	CS-24875	2	35*	SENSOR GUARD	1493	1
12C*	- SHIM	1012735	4	36*	PROBE WIRE HOLDER	1017495	1
13	BOTTOM PANEL	1009941	1	37*	HIGH LIMIT PROTECTION COVER	1003936	1
14	DRIP PAN WELD	5005616	2	38*	PROBE COVER	5009712	1
15	SCREW,10-32 x 3/4", NF PHIL	SC-2072	12	39*	TERMINAL BLOCK	BK-33546	2
16	HINGE	HG-22338	2	40*	BUSHING, 1-1/8" SNAP BUSHING	BU-3378	8
	HINGE COVER	CV-22171	4	41*	NUT, #8-32 UNC KEPS ZP	NU-26526	4
17	SCREW,10-32 x 1-1/2", NF, PHIL	SC-2073	20	42*	PROBE, PRODUCT	PR-36065	1
18	DOOR ASSEMBLY, RH	5010081	2		PROBE, PRODUCT (UK 230V ONLY)	PR-34298	1
	DOOR ASSEMBLY, WIDOW, RH	5010082	2	43	PROBE RECEPTACLE, 2200mm WIRE	PR-34704	1
	DOOR ASSEMBLY, LH	5010071	2	44	PROBE RECEPTACLE, 600mm WIRE	PR-34705	1
	DOOR ASSEMBLY, WINDOW, LH	5010076	2	45	SCREW, M4-0.7 x 6mm PHIL	SC-22271	4
	DOOR GASKET	GS-22952	2	46	SCREW, 6-32 x 1/2", NC PHIL, FLAT	SC-2254	4
19	SCREW, 3/4" PAN HD	SC-2071	4	47*	8-32 x 2 SLOT PAN HEAD 18-8 S/S	SC-23154	4
20	HANDLE, OFFSET MAG. LATCH	HD-27080	2	48*	SCREW, 8-32 x 1/4" PHIL	SC-2459	22
21	SHIM, HANDLE	13947	1	49*	SENSOR, OVEN TEMPERATURE	SN-33541	2
22	DRIP TRAY KIT	5009716	1	50*	THERMOSTAT, HI LIMIT	TT-33476	2
	- DRIP TRAY HOLDER	1010188	1				

^{*} NOT SHOWN

MARNING



To prevent serious injury, death, or property damage, always disconnect the appliance from the power source before cleaning or servicing.

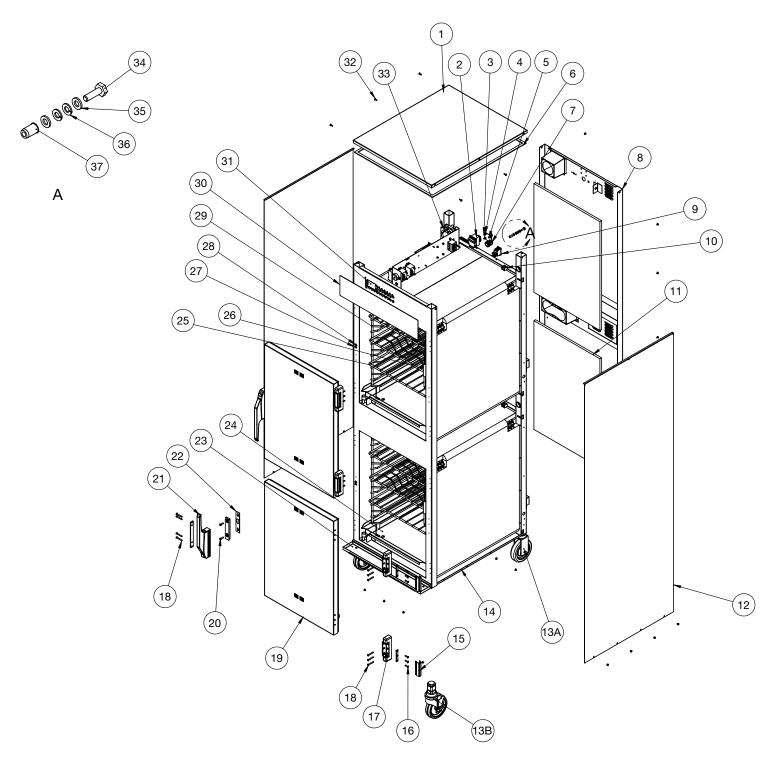
DANGER



Exterior Service View - 1200, 1767-SK/III



1200-SK/III Shown



Part numbers and drawings are subject to change without notice.

^{**} Shown with electrical chassis prior to 5/1/13

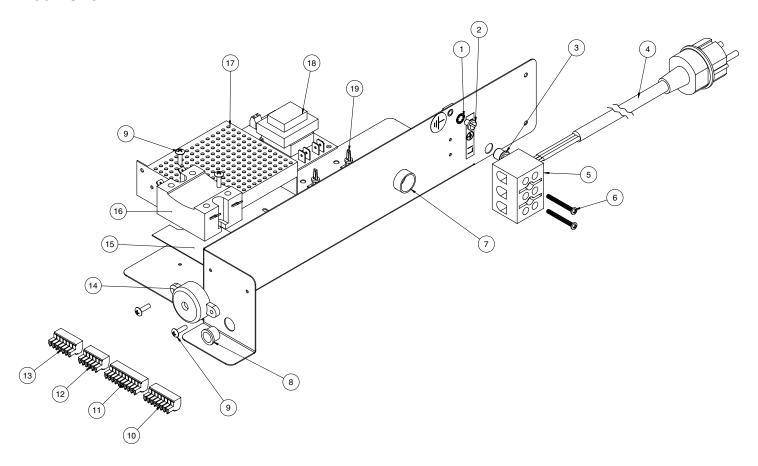
Exterior Parts List - 1200, 1767-SK/III



	MODEL >			1200-SK	
ITEM	DESCRIPTION			PART NO.	
1	TOP COVER	1011872	1	1011534	1
2	THERMOSTAT, HI-LIMIT	TT-33476	2	TT-33476	2
3	SCREW, M5 x 0.8 x 16mm FLAT	SC-22281	4	SC-22281	4
4	NUT, CT, M5-0.8 HEX, 18-8	NU-22289	4	NU-22289	4
5	HI-LIMIT PROTECTION COVER	1003936	2	1003936	1
6	GASKET, ADHESIVE, 0.125 x 0.375 [linear ft]	GS-23622	1	GS-23622	
7 8	BRACKET, TETHER REAR TRIM, SPOT	BT-26884 5014223	1	BT-26884 5014293	1
9	SWITCH, ROCKER, 20A	SW-34769	1	SW-34769	1
10	SENSOR BLOCK, TERMINAL, PORCELAIN	BK-33546	2	BK-33546	2
11	INSULATION	IN-2003	2	IN-2003	2
12	SIDE PANEL	5015102	2	5015105	2
13	CASTER PACKAGE	5014421	1	5014421	1
13A	- CASTER, 1.5" STEM, RIGID 5" (127mm)	CS-24874	2	CS-24874	2
13B	- CASTER, 1.5" STEM, 5" (127mm) SWIVEL W/ BRAKE	CS-24875	2	CS-24875	2
13C*	- SHIM	1012735	4	1012735	4
14	BOTTOM PANEL	1010394	1	1009941	1
15	HINGE COVER	CV-22171	4	CV-22171	4
16	SCREW, M5 x 0.8 x 20mm FLAT	SC-23868	12	SC-23868	12
17	HINGE, 1-3/8" OFFSET, PAIR, CHROME	HG-22338	2	HG-22338	2
18	SCREW, MS x 0.8 x 30mm FLAT	SC-22853	20	SC-22853	20
19	DOOR ASSEMBLY, RH	5011828	2	5012859	2
	*DOOR ASSEMBLY, LH	5011829	2	5012861	2
	*DOOR GASKET	GS-22951	2	GS-22952	2
20	SCREW, M5 x 0.8 x 20mm PAN	SC-22779	4	SC-22779	4
21	HANDLE, OFFSET MAGNETIC LATCH	HD-27080	2	HD-27080	2
22	SHIM, HANDLE	13947	2	13947	2
23	DRIP TRAY KIT	5010391	1	5009716	1
	- DRIP TRAY	1010584	1	1010188	1
	- DRIP TRAY HOLDER	1010585	1	1010189	1
24	DRIP PAN WELD	14831	2	5005616	2
25	SHELF, WIRE S/S	SH-2324	4	SH-2325	4
26	SHELF, RIB RACK	SH-2743	2	SH-29474	2
27	REED SWITCH, DOOR	SW-33559	2	SW-33559	2
28	BUSHING, 3/8" BLACK HOLE	BU-3419	2	BU-3419	2
29	SIDE RACKS	SR-28405	4	SR-2266	4
- 00	PAN SLIDES (230V ONLY)	1010813	4	— —	_
30	PANEL OVERLAY	PE-27181	1	PE-29386	1
31	CONTROL RIVET, BLIND, #44, STNLS	CC-34194 RI-2100	12	CC-34194 RI-2100	12
33	FAN BOX	FA-34524	2	FA-34524	2
34	SCREW, HHCS, M6 x 20	SC-22924	1	SC-22924	1
35	WASHER, FLAT, M6, DIN 125	WS-22297	2	WS-22297	2
36	WASHER, M6 SPLIT LOCK S/S 18-8	WS-22302	2	WS-22302	2
37	NUT, THREADED INSERT, M6	NU-22770	1	NU-22770	1
38*	BRACKET, CHIP TRAY	BT-29217	2	BT-29217	2
39*	BUSHING, 5/8" SNAP, BLACK	BU-3611	4	BU-3611	4
40*	CHIP TRAY WELD	4652R	2	4652R	2
41*	SMOKER ELEMENT	EL-35002	2	EL-35002	2
42*	ELEMENT COVER	1010409	2	1011813	2
43*	NUT, 1/4-20 HEX S/S	NU-2437	4	NU-2437	4
44*	NUT, #8-32 UNC KEPS ZP	NU-26526	4	NU-26526	4
45*	PLUG, DOME, .187" HOLE	PG-28439	4	PG-28439	4
46*	PROBE ASSEMBLY, PRODUCT	PR-36065	2	PR-36065	2
47*	PROBE COVER	5009712	2	5009712	2
48*	PROBE WIRE HOLDER	1017495	2	1017495	2
49*	PROBE RECEPTICAL, PRODUCT	PR-34705	1	PR-34705	1
50*	SCREW, 6-32 x 1/2, NC PHIL, FLAT	SC-2239	4	SC-2239	4
51*	SCREW, M4-0.7 x 6mm PHIL	SC-22271	4	SC-22271	4
52*	SCREW, 8-32 x 2 SLOT PAN HEAD 18-8 S/S	SC-23154	4	SC-23154	4
53*	SCREW, M3 x 0.5 x 16mm PAN	SC-22270	6	SC-22270	6
54*	SENSOR, CAVITY	SN-33541	2	SN-33541	2
55*	SENSOR GUARD	1493	1	1493	1
56*	SENSOR MOUNTING BLOCK	BK-24427	2	BK-24427	2
57*	SMOKE HEATER PLATE WELD	5003782	2	5003782	2

*NOT SHOWN

Electronic Components - 300-TH/III 230V Shown



Part numbers and drawings are subject to change without notice.

ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	WASHER, STAR LOCK	WS-2467	1	9	SCREW, 6-32 x 1/2" NC PHIL TRUSS	SC-2472	6
2	SCREW, 10-32 x 1/4" PAN HD GROUND	SC-2190	1	10	CONNECTOR, 6 PIN	CR-33719	1
3	BUSHING, 3/8" BLACK HOLE	BU-3419	1	11	CONNECTOR, 10 PIN	CR-33717	1
4	CORDSET 120V (NEMA 5-20)	CD-3397	1	12	CONNECTOR, 7 PIN	CR-33762	1
	230V (CEE 7/7)	CD-3922	1	13	CONNECTOR, 8 PIN	CR-33761	1
	230V (CH2-16P)	CD-36231	1	14	BEEPER	BP-3567	1
	230V (BS1363)	CD-33925	1	15	HEATSINK	HE-33926	1
5	T-BLOCK	BK-3019	1	16	RELAY	RL-33829	1
6	SCREW, 6-32 x 1-1/4" ROUND HD	SC-2365	2	17	BOARD, POWER SUPPLY	BA-36144	1
7	BUSHING, HOLE, 3/4"	BU-3008	1	18	BOARD, VOLTAGE MONITOR	BA-33764	1
8	BUSHING, HOLE, 1/2"	BU-3006	1	19	SPACER, LOCK MOUNT	SP-33832	4

WARNING

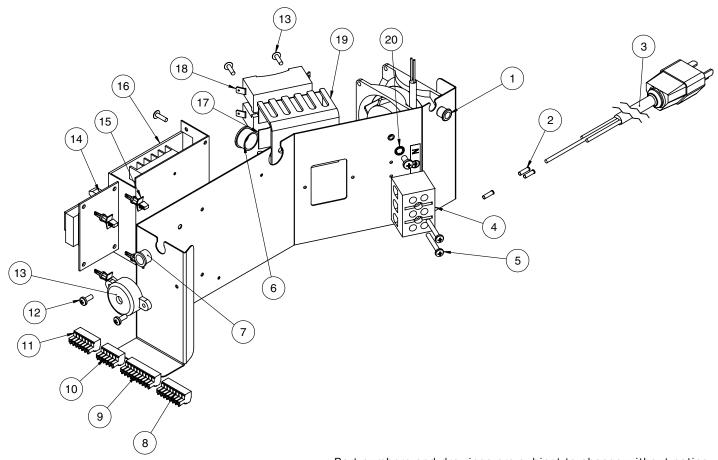


To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



Electronic Components - 500-TH/III



Part numbers and drawings are subject to change without notice.

ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	BUSHING, 3/8" BLACK HOLE	BU-3419	1	9	CONNECTOR, 10 PIN	CR-33717	1
2	CONNECTOR, #12 FERRULE	CR-34830	3	10	CONNECTOR, 7 PIN	CR-33762	1
3	CORDSET 120V (NEMA 5-20)	CD-3397	1	11	CONNECTOR, 8 PIN	CR-33761	1
	230V (CEE 7/7)	CD-3922	1	12	SCREW, 6-32 x 1/2" NC PHIL TRUSS	SC-2472	6
	230V (CH2-16P)	CD-36231	1	13	BEEPER	BP-3567	1
	230V (BS1363)	CD-33925	1	14	BOARD, VOLTAGE MONITOR	BA-33764	1
	230V (AS/NZS 3112)	CD-38149	1	15	SPACER, LOCK MOUNT	SP-33832	4
4	T-BLOCK	BK-3019	1	16	BOARD, POWER SUPPLY	BA-36144	1
5	SCREW, 6-32 x 1-1/4" ROUND HD	SC-2365	2	17	HEATSINK	HE-33926	1
6	BUSHING, 3/4" HOLE	BU-3008	1	18	RELAY	RL-33829	1
7	BUSHING, 1/2" HOLE	BU-3006	1	19	HEATSINK, BASE	1014450	1
8	CONNECTOR, 6 PIN	CR-33719	1	20	STAR LOCK WASHER	WS-2467	1

MARNING

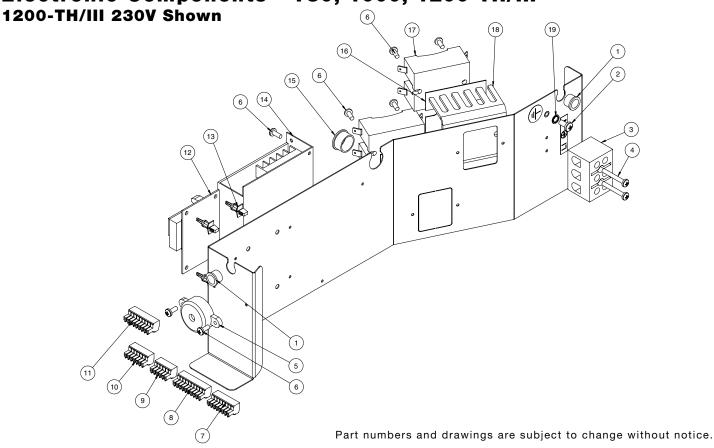


To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



Electronic Components - 750, 1000, 1200-TH/III



ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	BUSHING, 1/2" HOLE	BU-3006	1	15	BUSHING, 3/4" WHITE SNAP	BU-3008	1
2	SCREW, M5 x 0.8 x 10mm PAN	SC-22766	1	16	HEATSINK PAD	HE-33926	1**
3	T-BLOCK	BK-3019	1	17	RELAY	RL-33829	1**
4	SCREW, M4 x 0.7 x 30mm PAN	SC-29276	2	18	HEAT SINK, SSR BASE	1014450	1**
5	BEEPER	BP-3567	1	19	STAR LOCK WASHER	WS-2467	1
6	SCREW, M4 x 0.7 x 10mm PAN	SC-22273	8	20*	CORDSET 120V (NEMA 5-20)	CD-3397	1
7	CONNECTOR, 6 PIN	CR-33719	1		230V (CEE 7/7)	CD-3922	1
8	CONNECTOR, 10 PIN	CR-33717	1		230V (CH2-16P)	CD-36231	1
9	CONNECTOR, 7 PIN	CR-33762	1		230V (BS1363)	CD-33925	1
10	CONNECTOR, 8 PIN	CR-33761	1		230V (AS/NZS 3112)	CD-38149	1
11	CONNECTOR, 9 PIN, 1200-TH/III ONLY	CR-33718	1	21*	CONNECTOR, #12 FERRULE	CR-34830	3
12	BOARD, VOLTAGE MONITOR	BA-33764	1	22*	SERVICE KIT - 1 COMPARTMENT TH/III	5016623	1
13	SPACER, LOCK MOUNT	SP-33832	4		SERVICE KIT - 2 COMPARTMENT TH/III	5016625	1
14	BOARD, POWER SUPPLY	BA-36144	1				

^{**}PER COMPARTMENT

MARNING



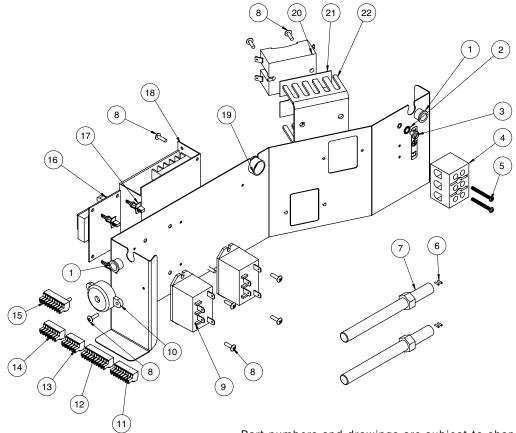
To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



^{*} NOT SHOWN

Electronic Components - 767, 1000, 1200, 1767-SK/III 1767-SK/III 208-240V Shown



Part numbers and drawings are subject to change without notice.

ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	BUSHING, 1/2" HOLE	BU-3006	1	16	BOARD, VOLTAGE MONITOR	BA-33764	1
2	STAR LOCK WASHER	WS-2467	1	17	SPACER, LOCK MOUNT	SP-33832	4
3	SCREW, 10-32 x 1/4" PAN HD GROUND	SC-2190	1	18	BOARD, POWER SUPPLY	BA-36144	1
4	T-BLOCK	BK-3019	1	19	BUSHING, 3/8" WHITE SNAP	BU-3008	1
5	SCREW, 6-32 x 1-1/4" ROUND HD	SC-2365	2	20	RELAY,SPST 30A @ 277 VAC 12VDC	RL-33558	1**
6	CONNECTOR, FERRULE #18	CR-34827	2**	21	HEATSINK PAD, RELAY	HE-33926	1**
7	SMOKER ELEMENT, 208-240V, 230V	EL-35022	1**	22	HEAT SINK, SSR BASE	1014450	1**
	SMOKER ELEMENT, 120V	EL-25023	1**	23*	CORDSET 120V (NEMA 5-20)	CD-3397	1
8	SCREW, 6-32 x 1/2, PHIL TRUSS	SC-2472	12		230V (CEE 7/7)	CD-3922	1
9	RELAY, 230V, 25A	RL-33829	1**		230V (CH2-16P)	CD-36231	1
10	BEEPER	BP-3567	1		230V (BS1363)	CD-33925	1
11	CONNECTOR, 6 PIN	CR-33719	1		230V (AS/NZS 3112)	CD-38149	1
12	CONNECTOR, 10 PIN	CR-33717	1	24*	CONNECTOR, #12 FERRULE	CD-34830	3
13	CONNECTOR, 7 PIN	CR-33762	1	25*	SERVICE KIT - 1 COMPARTMENT SK/III	5016624	1
14	CONNECTOR, 8 PIN	CR-33761	1		SERVICE KIT - 2 COMPARTMENT SK/III	5016626	1
15	CONNECTOR, 9 PIN	CR-33718	1				

^{**}PER COMPARTMENT

WARNING



To prevent serious injury, death, or property damage, **always** disconnect the appliance from the power source before cleaning or servicing.

A DANGER



^{*} NOT SHOWN

Cable Heating Kits

	CABLE HEATING KIT > (one kit required per cavity)	#4880 (500)	#4881 (750, 1000, 1200, 1767)	#4880 UK ONLY (1200) 4900W
ITEM	DESCRIPTION	QTY	QTY	QTY
CB-3045	CABLE HEATING ELEMENT	134 ft.	210 ft.	134 ft.
CR-3226	RING CONNECTOR	4	12	4
IN-3488	INSULATION CORNER	1 ft.	1 ft.	1 ft.
BU-3105	SHOULDER BUSHING	4	12	4
BU-3106	CUP BUSHING	4	12	4
ST-2439	STUD	4	12	4
NU-2215	HEX NUT	8	24	8
SL-3063	INSULATING SLEEVE	4	12	4
TA-3540	ELECTRICAL TAPE	1 ROLL	1 ROLL	1 ROLL

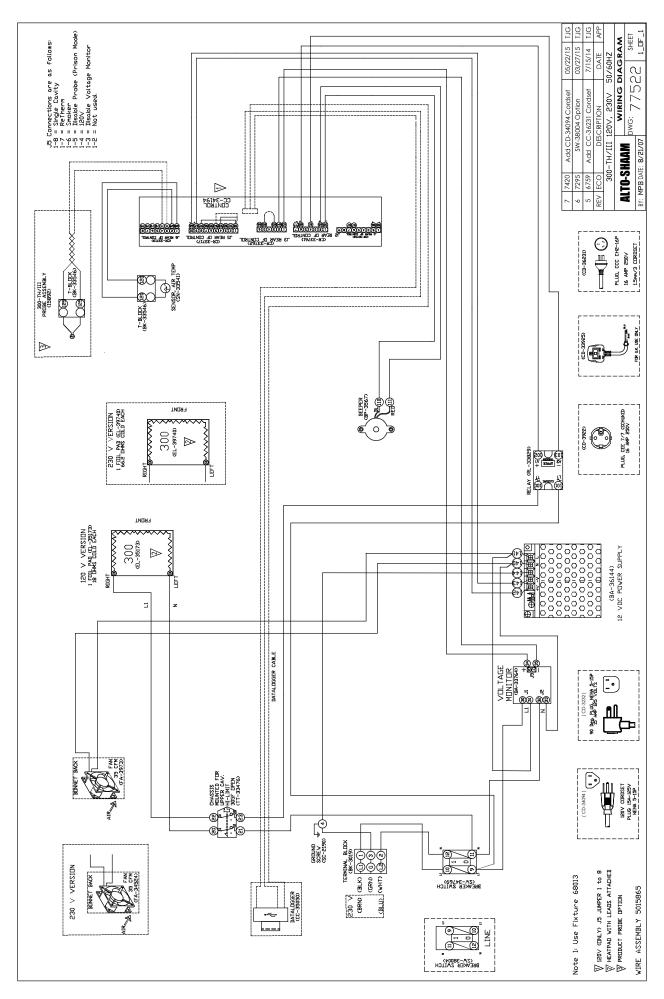




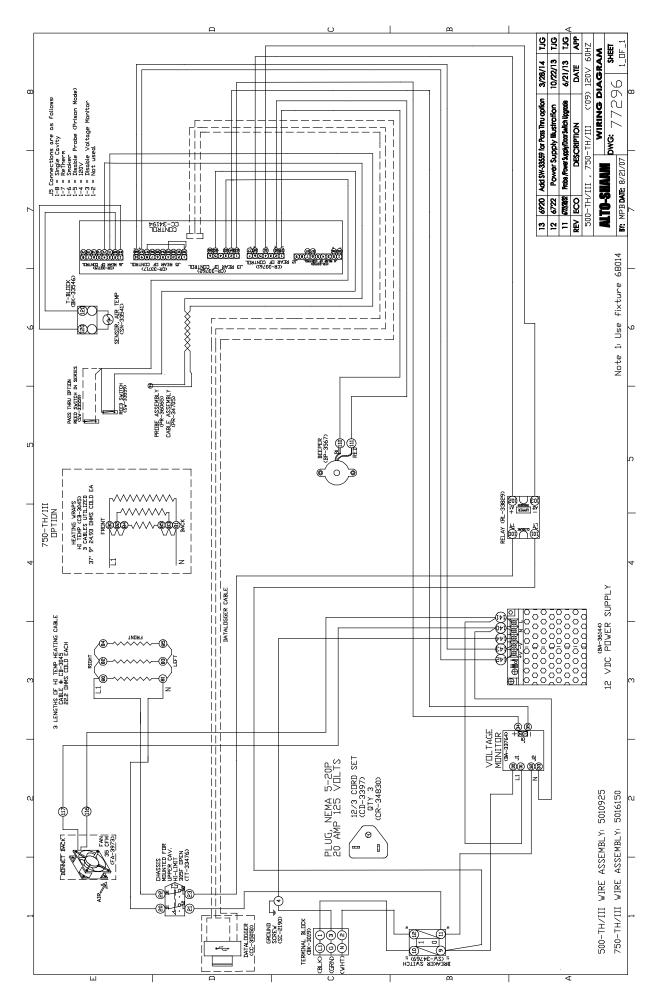
HACCP Data Logger (OPTION)

ITEM	DESCRIPTION	QTY
5015562	HACCP DATA LOGGER, RETRO-FIT KIT	1
CC-37264	— HACCP DATA LOGGER*	1
5014750	HACCP PACKAGE WITH USB PORT	1
CB-34893	— CAP, WATERPROOF USB SHIELDED	1
CB-34894	— CABLE USB WATERPROOF SHIELDED	1

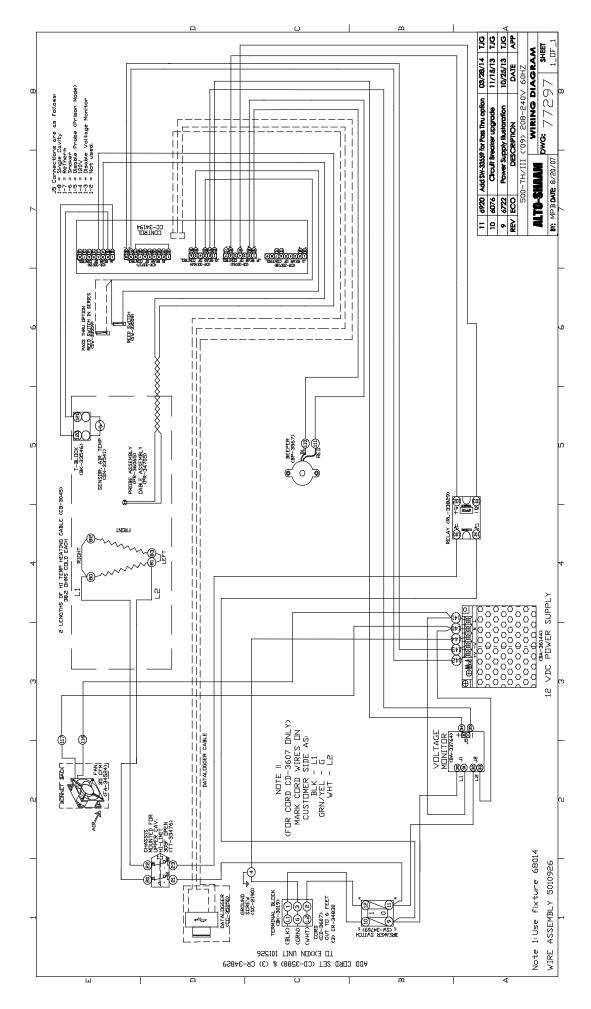
^{*} CC-37264 may be ordered as a separate item for units that already have the Data Logger Kit installed.



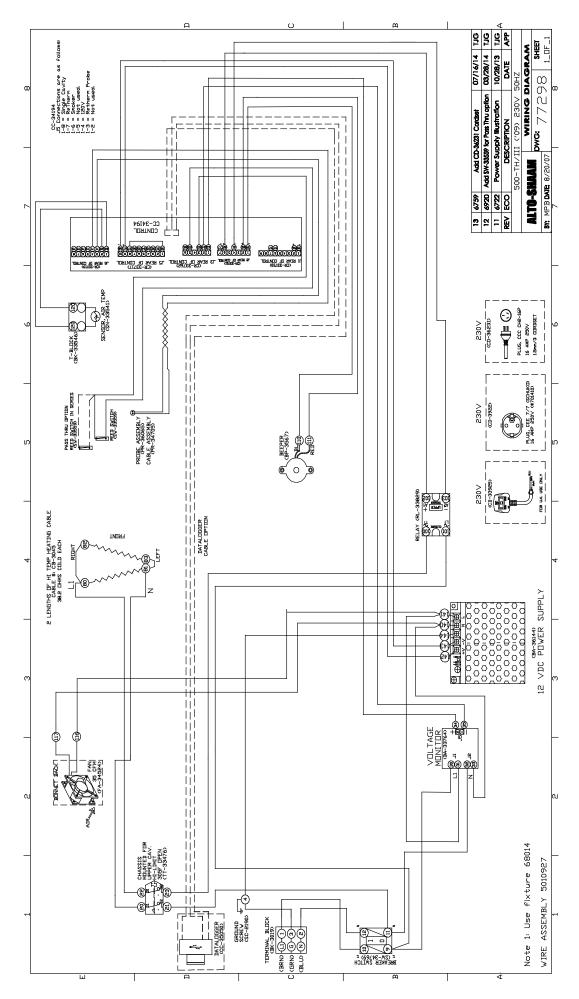
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 48



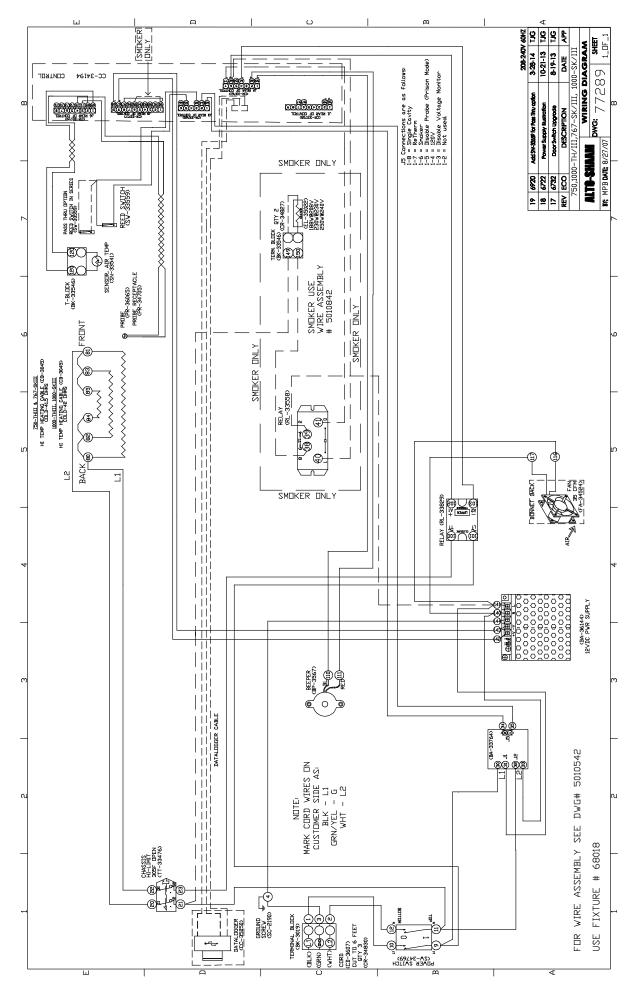
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 49



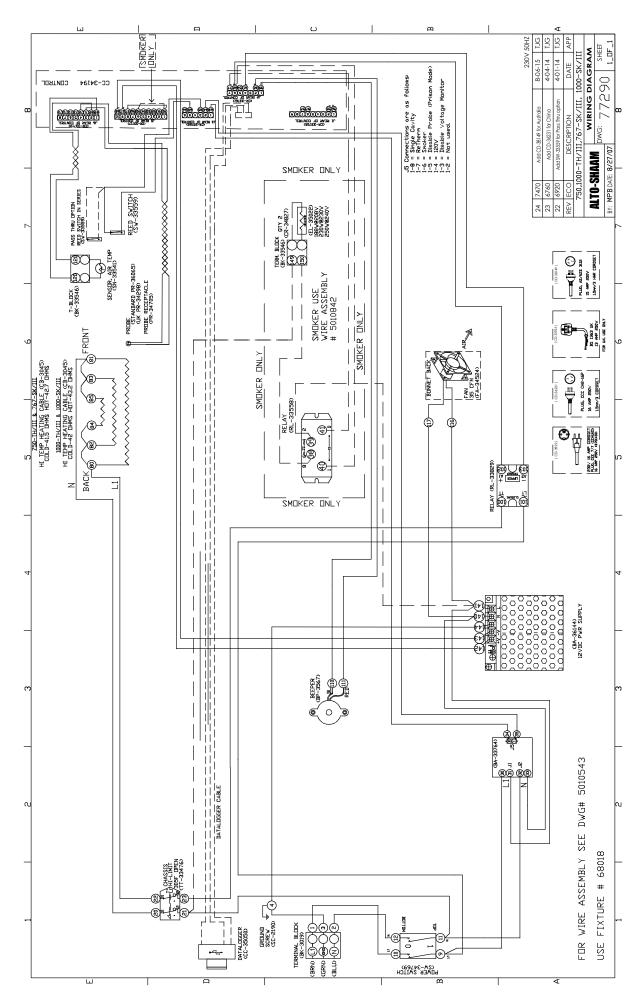
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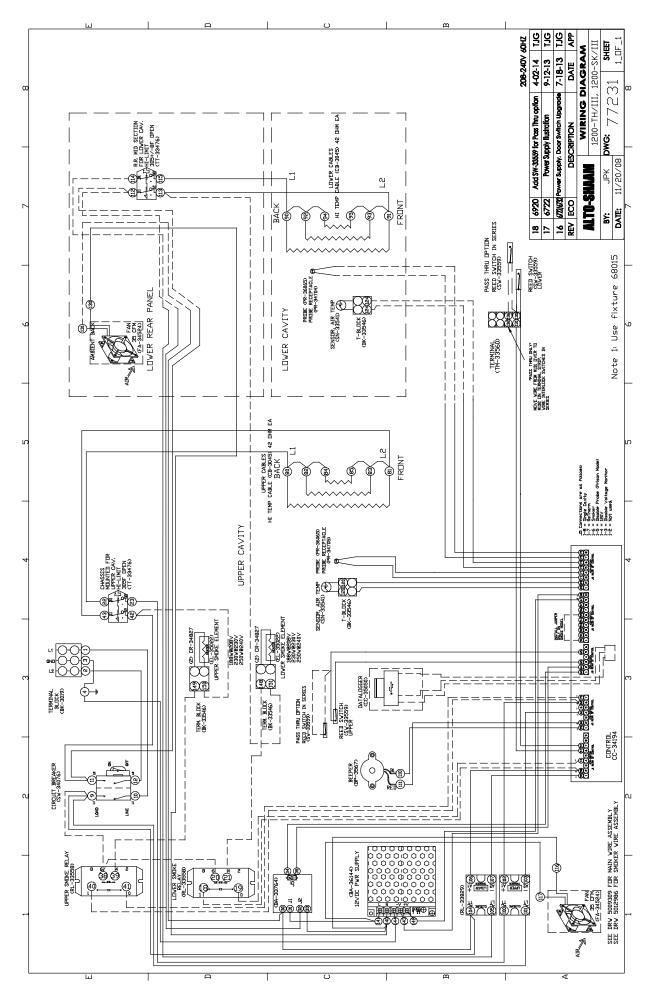
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 51



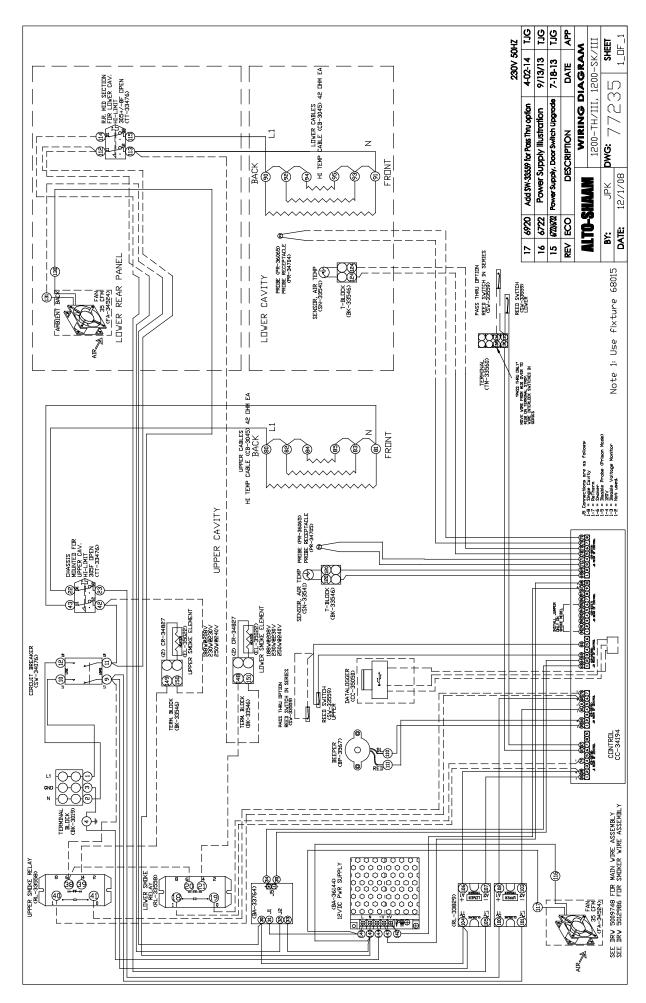
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 52



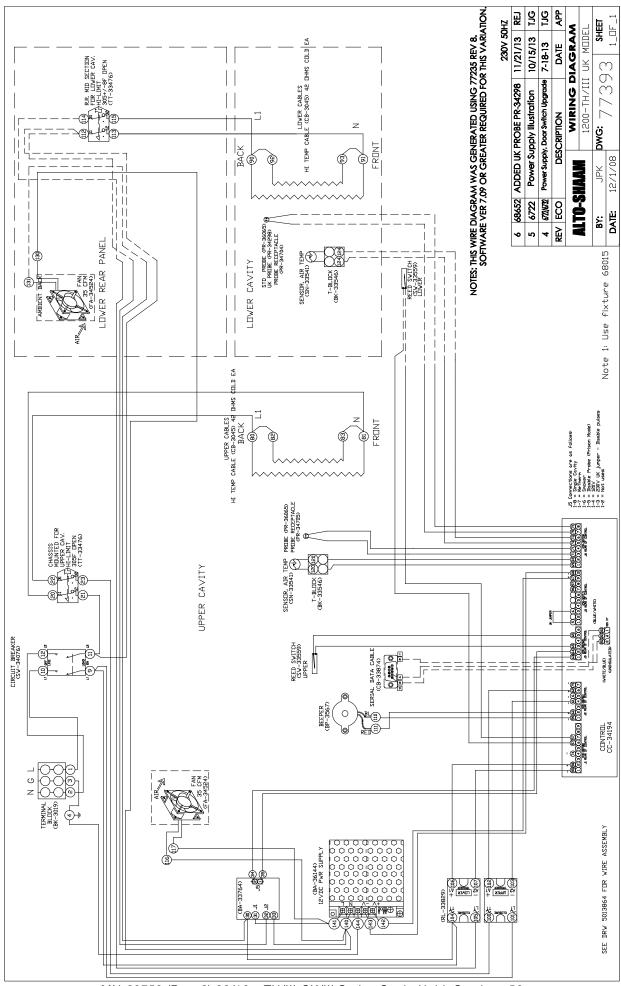
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 53



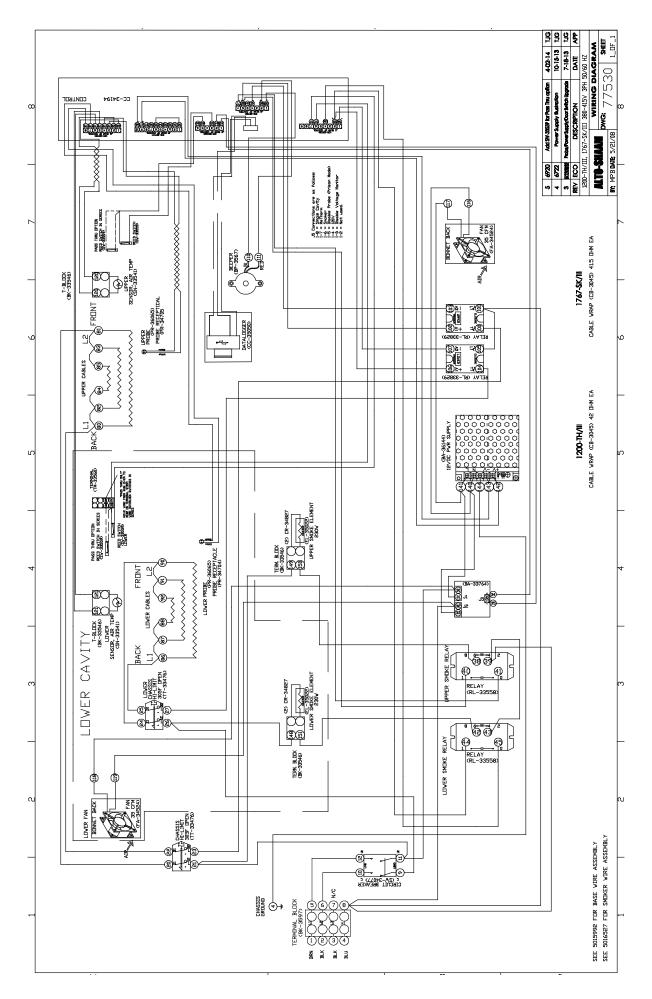
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 54



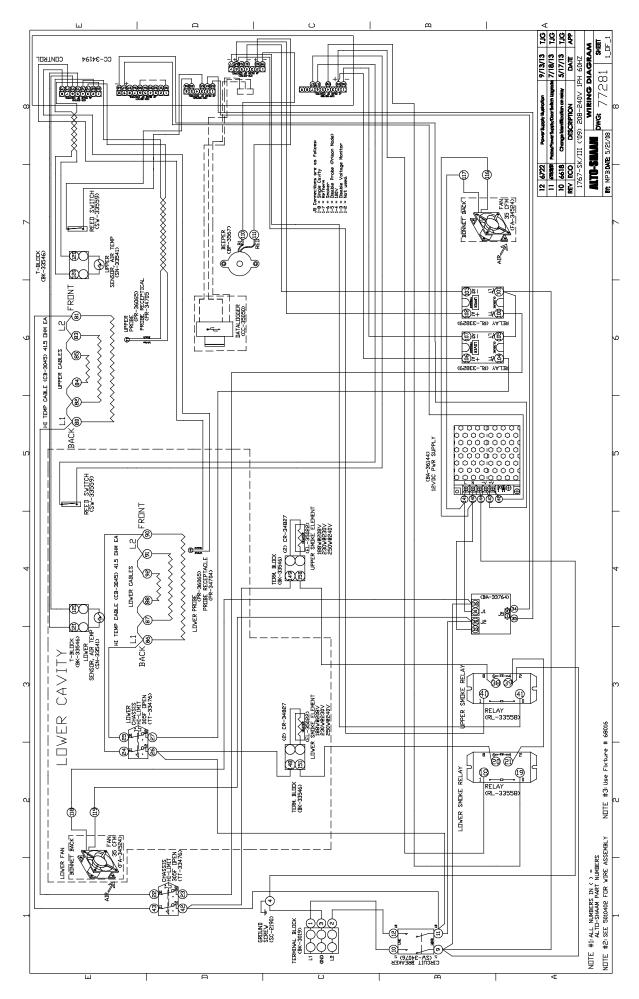
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 55



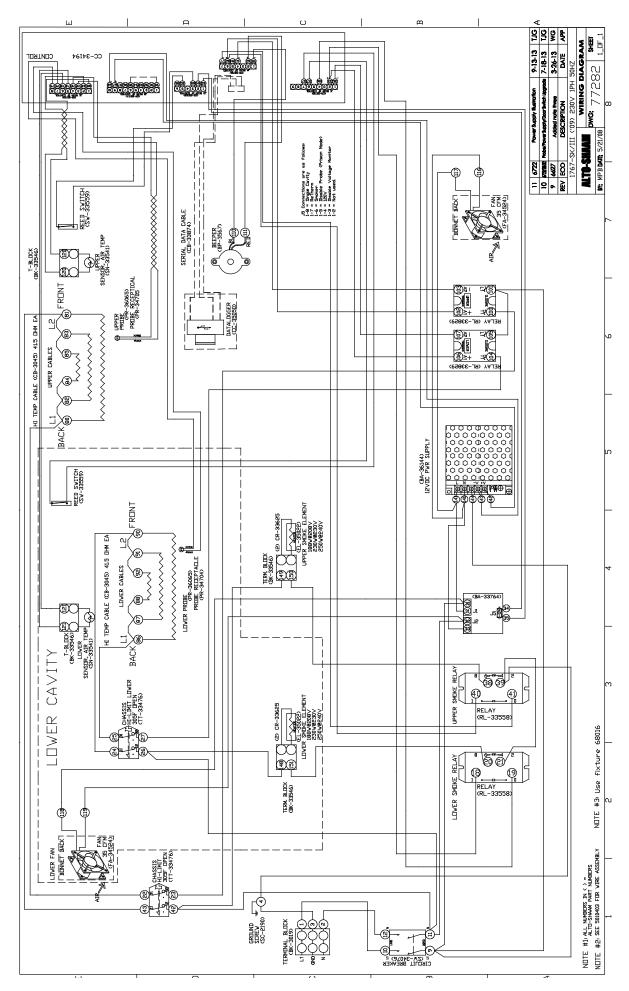
MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 56



MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 57



MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 58



MN-29758 (Rev. 8) 08/16 • TH/III-SK/III Series Cook, Hold, Smoke • 59

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, do not put the appliance into service until the damage has been inspected by an authorized Alto-Shaam service provider.

Should damage occur in shipment, do not put the appliance into service until the damage has been inspected by an authorized Alto-Shaam service provider.

Shipping damages are 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:

- 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.

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Effective November 1, 2012