

Boiler-FREE

COMBINATION OVEN/STEAMERS

INSTALLATION MAINTENANCE AND SERVICE MANUAL



MODELS:

6.05ML

6-10 i N M L

10.10iN

7 • 14i

ELECTRIC SMOKER

MODELS:

6.10iN/SK

10.10iN/SK

7 • 14 i/SK

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

PHONE: (262)251-3800 (800)558-8744 U.S.A./CANADA FAX: (262)251-7067 (800)329-8744 U.S.A.

www.alto-shaam.com

PRINTED IN USA

ALTO SHAAM. COMBITHERM. INSTALLATION

DELIVERY

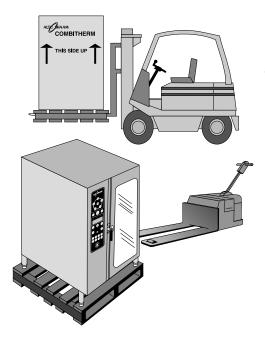
This Alto-Shaam appliance has been thoroughly tested and inspected to insure only the highest quality unit is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier. See Transportation Damage and Claims section located in this manual.

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

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to assure 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 service department if you have any questions concerning installation, operation, or maintenance.

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



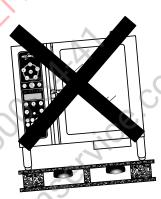
UNPACKING

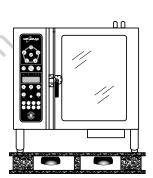
1. Carefully remove the appliance from the carton or crate.

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

The oven must remain on the pallet while being moved to the installation site by fork lift or pallet lift truck.

Note dimensions required for doorways and aisles for access of the oven and pallet to the installation site. Transport the oven in an upright and level position only. *Do not tilt the oven*.





With the oven on the original pallet, remove the carton and all packaging materials. Open the oven door and remove all documents and other materials from the oven interior. Remove the roll-in cart if so equipped.

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

DO NOT DISCARD THIS MANUAL.

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

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

SAFETY PROCEDURES AND PRECAUTIONS

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

A DANGER

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

AWARNING

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

ACAUTION

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

CAUTION

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

NOTE:

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

- 1. This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
- 2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
- 3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
- 4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

BASIC INSTALLATION SITE REQUIREMENTS

HOOD INSTALLATION IS REQUIRED

- Installation surface must be level.
- Do not install adjacent to flammable surfaces.
- Deep fat fryers or similar heat producing equipment must not be installed in the immediate vicinity of the hand shower.



The oven must remain on the pallet while being moved to the installation site with fork lift or pallet lift truck.

Do not tilt the oven.

VENTILATION REQUIREMENTS

A steam ventilation hood is mandatory for the operation of the oven. The ventilation hood must be installed in accordance with local building codes for steam exhaust and must protrude 12-inches to 20-inches (300mm to 500mm) over the front side of the oven. A grease filter must be located in the protruding area of the hood. Grease filters should be thoroughly cleaned on a regular basis following manufacturer's instructions. Ventilation hoods must ensure an adequate amount of incoming air during operation and must be operated whenever the combination oven/steamer is used in order to avoid the accumulation of condensation in the hood area.

Where automatically operated appliances are vented through a ventilating hood or exhaust system equipped with a damper or with a power means of exhaust, provisions shall be made to allow the equipment to operate only when the damper is open to a position to properly vent the appliance and when the power means of exhaust is in operation.

IN ACCORDANCE WITH NFPA 54 COMMONWEALTH OF MASSACHUSETTS ONLY.

N O T E



If a ventless hood is to be installed, we recommend the Combitherm Ventless Hood for the appropriate model oven.

VH_{ML}5

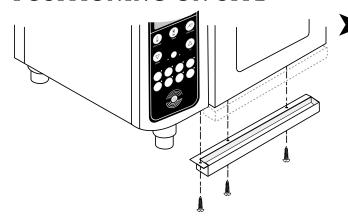
Combitherm model 6 • 05, 6 • 10iNML, and 10 • 10iN

VH_{ML}-10

Combitherm model 7•14i

MODEL	VHML-5	VHML-10		
Air Movement	530 CFM	1200 CFM		
Drain Connection	3/4" (19,1mm) NPT			
Electrical	208-240 V.A.C. –	208-240 V.A.C. — 50/60 Hz, 1 ph		
	100 watts, .50 amps	240 watts, 1.0 Amps		
Ship Weight	Weight 100 lb (45 kg) 126 lb (57 kg			
Replacement				
Filters GREASE	FI-24113	FI-23062		
CHARCOAL	FI-24114	FI-24102		

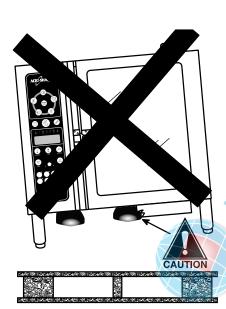
POSITIONING ON SITE

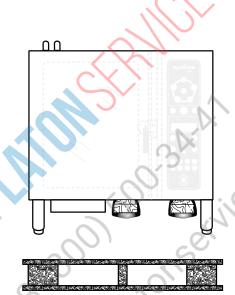


Before removing the oven from the pallet for positioning on site, it is important to remove the drip tray to prevent damage to the tray caused by the lifting forks. The drip tray is fastened to the bottom of the oven with three sheet metal screws as illustrated. This requirement pertains to the following models.

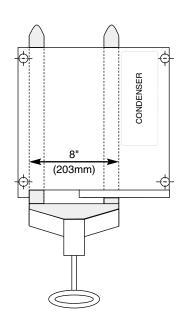
MODELS 6.05

6•10iNML 6•10iN/sk 10•10iN 10•10iN/sk 7•14i 7•14i/sk





Lift the oven from the pallet with a fork lift or pallet lift truck positioned at the front of the oven. To avoid damage, position the lift forks to the left of the condenser as indicated in one of the two diagrams shown below. For additional damage protection, the use of two wooden boards, placed between the bottom of the oven and the lifting forks, is strongly recommended.



MODEL	NET WEIGHT		
6•05	180 lb (82 kg)		
6•10iN	285 lb (129 kg)		
10•10iN	385 lb (175 kg)		
7•14i	405 lb (184 kg)		



After the oven is correctly positioned on site, reattach the drip tray.



INSTALLATION REQUIREMENTS

Do not install oven adjacent to flammable surfaces. Strictly observe all local fire safety regulations.

In order to ensure proper ventilation, a minimum distance of at least 6-inches (152mm) must be kept from the control panel side [LEFT] of the oven and any adjoining surfaces.

NOTE: In addition to ventilation requirements, additional clearance is needed for service access. A minimum distance of 18-inches (457mm) is strongly recommended. If adequate service clearance is not provided, it will be necessary to disconnect the gas, water, and drain to move the oven with a fork lift for service access. Charges in connection with inadequate service access is not covered under warranty.

Allow a minimum of 4-inches (102mm) from the right side of the oven to allow the door to open to at least a 90° angle. Fully opened, the door will extend up to a 225° angle. If the oven is furnished with the retractable door option, allow a minimum clearance of 6-1/2-inches (16cm).

Allow a minimum clearance of 4-inches (102mm) from the back of the oven for plumbing connections.

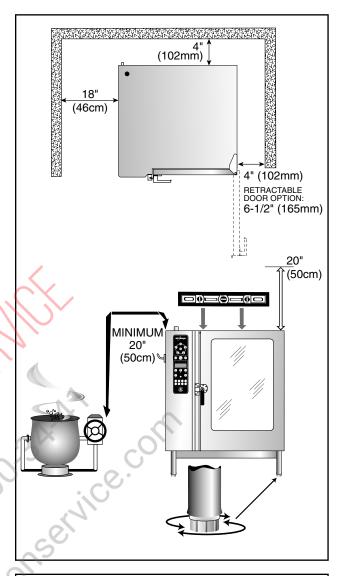
Allow a 20-inch (50cm) clearance at the top of the oven for free air movement and for the steam vent(s) located at the top [RIGHT-REAR].

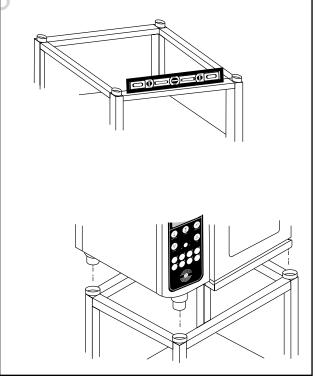
Do not install the oven adjacent to heat producing equipment such as fryers, broilers, etc. Minimum clearance recommended: 20-inches (50cm).

Place the Combitherm oven on a stable, non-combustible **LEVEL** horizontal surface. For counter-top models, the oven stand must be level. In addition, the overall height of the oven should be positioned so the operating controls and shelves may be conveniently reached from the front.

ALL INSTALLATION INSTRUCTIONS AND REQUIREMENTS MUST BE STRICTLY OBSERVED.



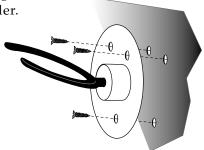




ASSEMBLY REQUIREMENTS

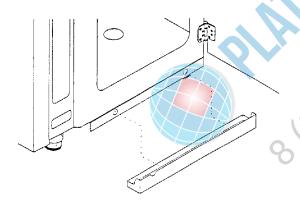
HAND SHOWER HOLDER

Fasten the hand shower holder in the holes provided on the oven using the three (3) screws packaged with the holder.



DRIP TRAY INSTALLATION

Hang the drip tray at the front of the oven as indicated on the drawing.







FAILURE TO PROPERLY INSTALL THE DRIP TRAY CAN OR WILL CAUSE MAJOR EQUIPMENT DAMAGE AND WILL RESULT IN A LEAKAGE HAZARD THAT CAN CAUSE PERSONAL INJURY.



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

WATER SUPPLY

CONNECT TO POTABLE (DRINKABLE) COLD WATER ONLY

A water conditioning system is recommended if the water supply is between 5 and 9 grains of hardness. If water tests over 9 grains of hardness, the installation of a water softener is strongly recommended. Without treated water and the use of Alto-Shaam's CombiGuardTM, the operation life of the unit will be diminished and affect the warranty.

WATER

COLD WATER INLET — DRINKING QUALITY

INDIRECT WASTE PIPE WITH AIR GAP: 1-1/4" NPT

INLET: 3/4" NPT LINE PRESSURE: 30 to 90 psi

2.8 to 6.2 bar

CHLORINE: less than 0.8 ppm CHLORIDE: less than 70 ppm

HARDNESS: 5 to 9 gpg PH RANGE: 7.0 to 9.0

85 to 154 ppm

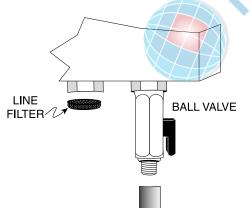
WATER SOFTENER SHOULD BE UTILIZED IN HARD WATER AREAS.

WATER OUTLET: 1-1/4" (33mm) DRAIN WITH AIR GAP

Flush the water line at the installation site before connecting the oven to the water supply. A shut-off valve and approved back-flow preventer must be installed when connecting the oven to the cold water intake. The water supply line must be a minimum of 3/4-inch NPT (19mm). Install the line filter at the cold water intake connection point.

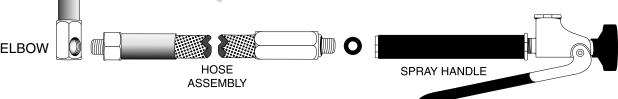
PIPE SEALING TAPE (TEFLON®) MUST BE USED AT ALL CONNECTION POINTS.

The use of a pipe sealing compound is not recommended.



THE MAIN WATER SHUT-OFF VALVE MUST BE IN THE OPEN POSITION WHEN THE OVEN IS BEING USED.

The hand shower spray hose is installed adjacent to the cold water intake connection. A ball valve is installed on the oven for hose connection to the **COLD** water source. Assemble the washer and the flexible hose on the ball valve and hang the spray handle on the holder previously installed on the oven.





MARNING

TO PREVENT WATER PIPES OR HOSES FROM BURSTING, INCOMING WATER SUPPLY SHOULD BE TURNED OFF WHEN THE APPLIANCE IS NOT IN USE.

AWARNING

WATER SUPPLY MUST BE OPEN WHEN CLEANING PROGRAM IS ACTIVATED.

VERIFY WATER SUPPLY BEFORE STARTING CLEANING PROGRAM.

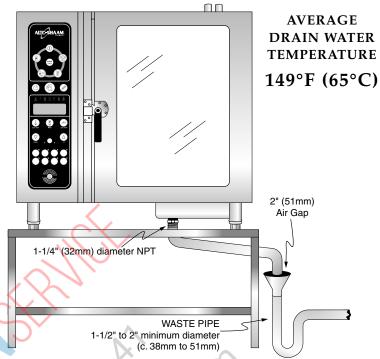
WATER DRAINAGE

The oven must discharge through an indirect waste pipe by means of an air gap. The drain thread is 1-1/4-inch (32mm) NPT.

A union is required. Install a 1-1/4-inch (32mm) diameter drain line. The drain line must always be a positive gradient away from the Combitherm oven and not more than 12-inches (305mm) before an air gap.

NOTE: In the U.S.A., this equipment is to be installed to comply with the Basic Plumbing Code of the Building Officials and Code Administrators International, Inc. [BOCA], and the Food Service Sanitation Manual of the Food & Drug Administration [FDA].

If several units are to be connected to one drain pipe, the dimensions of the pipe must be sufficient to allow an unobstructed water drain system.



ADDITIONAL TECHNICAL DATA						
MODEL ⇒	6•05ML	6•10-iNmL	10•10iN	7•14i		
Type of Oven	counter oven stand	counter oven stand	counter oven stand	counter oven stand		
Pan INCHES Capacity GASTRONORM	6: 12" x 10" 12: 12" x 6" 6: GN 1/2	6: 12" x 20" 6: 18" x 13" 12: 12" x 10" 6: GN 1/1	10: 12" x 20" 10: 18" x 13" 10: GN 1/1	14: 12" x 20" 7: 18" x 26" 14: GN 1/1		
Side Rack INCHES Spacing (MILLIMETERS)	12: GN 1/3 2-5/8 (65mm)	18: GN 1/3 2-5/8 (65mm)	2-5/8 (65mm)	2-5/8 (65mm)		
Interior INCHES Width (MILLIMETERS)	15-1/4 (596)	13-1/4 (387)	13-1/4 (387)	23-1/2 (596)		
Interior INCHES Depth (MILLIMETERS)	17-7/8 (455)	26-1/4 (665)	26-1/4 (665)	28-7/16 (722)		
Interior INCHES Height (MILLIMETERS)	17-3/4 (450)	17-3/4 (450)	27 (685)	20-5/16 (515)		
Noise Level	The noise emission level related to the workplace is lower than: 70 dBA					
Spray Hose Length	81-inches (2050mm)	81-inches (2050mm)	81-inches (2050mm)	81-inches (2050mm)		
Water Consumption (APPROX.)	3 - 5 gal/hr (12 - 20 l/hr)	4 - 6 gal/hr (15 - 25 l/hr)				

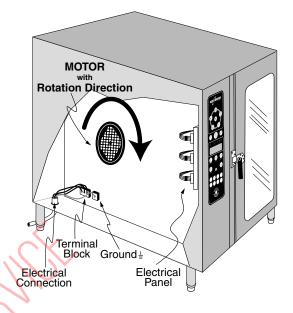
ELECTRICAL INSTALLATION



A DANGER

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

An electrical wiring diagram is located behind the control panel on the left side of the oven. The oven must be installed by a qualified electrician. This appliance must be branch circuit protected with proper ampacities, in accordance with the wiring diagram located in the electrical compartment of the oven. The oven must be properly grounded in accordance with the National Electrical Code and applicable local codes.





A DANGER

ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON APPLIANCE NAMEPLATE

Wire size for the main incoming power to the unit must match the minimum size listed in the specifications applicable to the specific oven model. For supply connections, locate the wire size posted on the label located on the electrical control box cover, behind the service panel or elsewhere listed in this manual.

When connecting to a Delta-B (wild leg) on a 3-phase system, the wild leg must be connected to line 3.



AWARNING

FOLLOWING ELECTRICAL CONNECTION, THE FAN <u>MUST</u> ROTATE IN THE SAME DIRECTION AS THE ARROW LOCATED ON THE OVEN FAN MOTOR.

THIS APPLIANCE <u>WILL NOT</u> FUNCTION PROPERLY AND DAMAGE CAN OCCUR IF THE MOTOR ROTATION IS NOT CORRECT.

TO CHANGE MOTOR DIRECTION, EXCHANGE TWO OF THE INCOMING PHASES.



A DANGER

To avoid electrical shock, this appliance <u>MUST</u> 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.

Before operating the oven, check all cable connections in the electrical connection area for tightness since connections can loosen during transport.

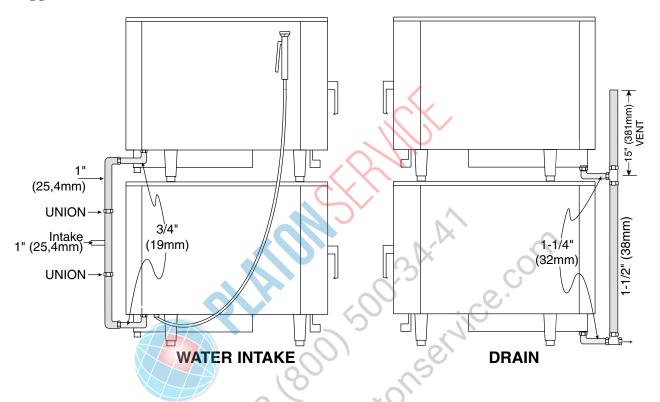
NOTE: After both water and electrical connections have been completed, operate the oven in any cooking mode for a period of 15 minutes and recheck the main power connections at the terminal block to make certain they remain tight.

STACKING INSTALLATION

Stacking Combitherm ovens require two (2) water connections, two (2) drain connections, and two (2) electrical connections.

If local code allows,

the water and drain may be manifolded as long as the size of the water inlet is increased to 1-inch (25,4mm) and the drains include an external vent. The drawing illustrates one suggested method of a manifold installation.



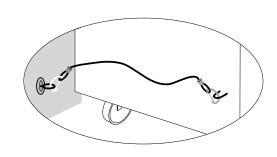
RESTRAINT REQUIREMENTS — MOBILE EQUIPMENT

Any appliance that is not furnished with a power supply cord but that includes a set of casters must be provided 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. Casters must be a maximum height of 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 lower back flange of the appliance chassis or on an oven stand, approximately 18" (457mm) from the floor. A flexible connector is not supplied by nor available from the factory.



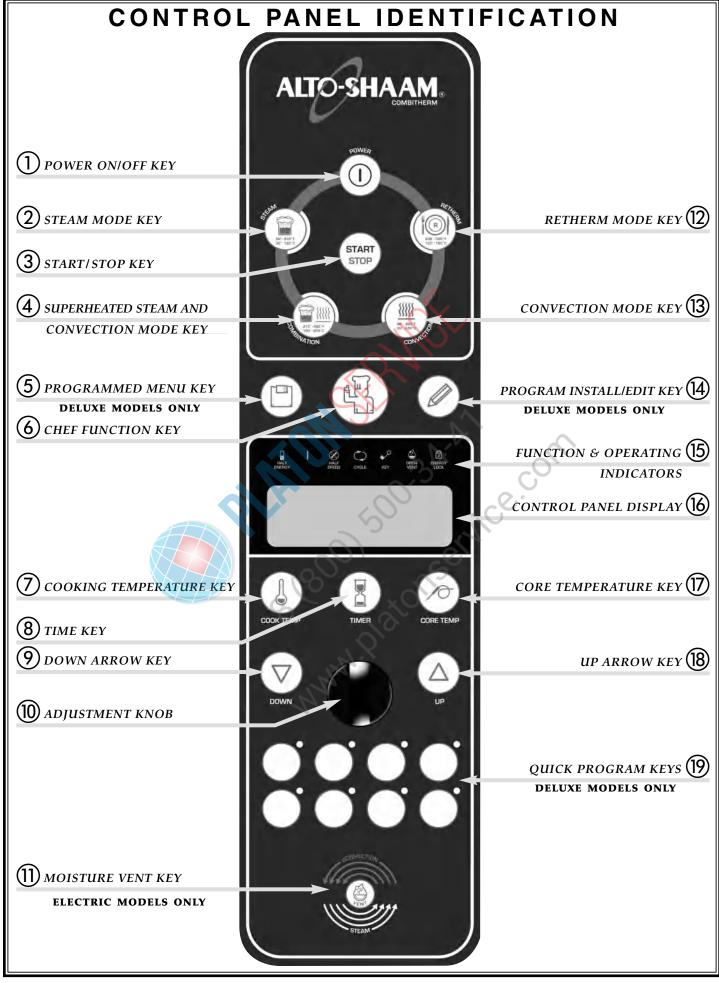


ELECTRIC COMBITHERM INSTALLATION CHECKLIST

ALTO SHAAM.

Use this list as a final check of oven installation conformance. Damage directly attributed to improper set up, installation, or cleaning can invalidate warranty claims.

		-		
CLEARANCES:		RIGHT SIDE CLI	EARANCE:	
All clearances must conform with the standards set by Alto-Shaam as the installation manual. Standards include a minimum 20" (50cm) clear		LEFT SIDE CLI	EARANCE:	
any heat-producing device such as an open burner range, flat top gril steamer, etc. Also make sure sufficient service access is provided on	-	REAR CLI	EARANCE:	
of the oven. There must be an allowance of free air access to all vents		UPPER CLI	EARANCE:	
WATER SUPPLY AND DRAINS:				
Verify hook-up to <u>cold</u> water supply with a ³ / ₄ " (19mm) single water con		WATER SUPPLY	LINE DIA:	
supply line. Verify inlet water pressure is at a minimum of 30 PSI (2 bar ovens. Maximum pressure is not to exceed 90 PSI (6 bar). Verify the ins	tallation of a	COL	D WATER: ☐ YES	□NO
water filter and the installation of a water conditioner if water supply is of hardness. Verify drain diameter of $1-\frac{1}{4}$ (32mm) with a positive descent		WATER INLET P	RESSURE:	
and with a 2" (51mm) air gap which is free of obstructions before connections		DRAIN	LINE DIA:	
drain. Verify $^{1}/8''$ (3,2mm) pitch to 10' (305cm) of drain line. After press adjusted, seal screw with enamel such as nail polish.	sure is	2" (51mm)	AIR GAP: □ YES	□NO
adjusted, sear serew with channel such as han ponsit.	1119			
ELECTRICAL CONNECTIONS	7			
ELECTRICAL CONNECTIONS: VOLTAGE:	LINE VOLTAG	E AT TERMINAL	BLOCK (TO GROUN	D):
Verify electrical power requirements for oven Verify voltage at terminal PHASE:	➡ LINE 1:	LINE 2:	LINE 3:	
for even verify vortage at terminal	LINE VOLTAG	E (phase to phasi	E): LINE 1 to 2:	
block. Verify correct power cable	- D:		LINE 2 to 3:	
size. Verify equipment disconnect per NEC or applicable local	$O_{\Lambda_{\Lambda}}$	℃O.,	LINE 3 to 1:	
codes. Motor direction should correspond with the direction of	ELECT	TRICAL SUPPLY I	LINE SIZE:	
the arrow on the motor. Verify clockwise motor rotation from	COR	RECT MOTOR RO	OTATION: ☐ YES	\square NO
the rear of the motor. Check all terminals for tightness.	ALL ELECTR	RICAL TERMINAI	LS TIGHT: ☐ YES	\square NO
	0.			
CONTROL BOARD CONNECTIONS & OPERATION:	ALL BOAR	D CONNECTION	IS TIGHT: ☐ YES	□NO
Verify all control board connections are tight including tightness	Al	LL FUNCTIONS L	IGHT UP: □ YES	□NO
and proper connection of ribbon/computer cables. Verify all buttons and lights illuminate. With the Power Key OFF, press and	, A	LL FUNCTIONS (OPERATE: □ YES	□NO
hold the Chef Function Key to access software version, and record		VERSION:		
Verify all functions operate.				
verify an functions operate.	BM	SM	KM	
				_
PHYSICAL CONDITION:				~
Bottom of oven has been checked for damage due to improper po	=			
Verify all gaskets, hoses, and carts are in place and function prop	=			
If oven includes a cart, verify proper installation of the rack guid	le			
Verify the installation of drip pans, racks, shelves, drain screen, s	spray hose			
Verify the oven is level and installed on a solid, water resistant fl	loor			□
SERVICE AGENCY: ST				
IN	STALLATION NA	AIVIE:		
TECH	USTOMER			
SIGNATURE:SIGNATURE	GNATURE:			



CONTROL PANEL IDENTIFICATION

POWER ON/OFF KEY



Activates power to the oven.

STEAM MODE KEY



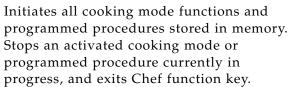
START

(5)

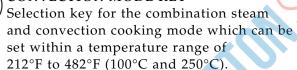
The oven will operate in the steam mode at a temperature range of 86°F to 248°F (30°C to 120°C).

- Automatic steaming at 212°F (100°C) FACTORY-SET DEFAULT
- Quick steaming between 213°F and 248°F (101°C and 120°C).
- Low Temperature Steaming between 86°F and 211°F (30°C and 99°C).

START/STOP KEY



SUPERHEATED STEAM AND **CONVECTION MODE KEY**



PROGRAMMED MENU KEY Shows a list menu in display 6 of all stored cooking programs and is also used to exit

the list menu display. **DELUXE MODELS ONLY.** CHEF FUNCTION KEY

Used to select programmed menu functions, various auxiliary functions, and several chef help instructions.

COOKING TEMPERATURE KEY Used to set the required cooking temperature, to recall the set cooking temperature, or to check the actual oven temperature in conjunction with the down arrow key (9), the up arrow key (8) or the adjustment knob 100.

(8) TIME KEY Used to set the required cooking time or recall the set cooking time in conjunction with the down arrow key (9), the up arrow

key ® or the adjustment knob ®.

DOWN ARROW KEY Used to decrease displayed cook temperature (7), time (8), or core temperature (7) and as a scrolling key for programming functions.

ADJUSTMENT KNOB



Serves the same function as the up and down arrow keys to increase or decrease the displayed cook temperature ⑦, time ⑧, or core temperature 17.

MOISTURE VENT KEY ELECTRIC MODELS ONLY Immediately vents steam and condensate from the oven compartment while cooking in the Convection mode (3) or in the Superheated Steam and Convection mode 4).

RETHERM MODE KEY



Food rethermalization or reheating mode will operate with automatic steam injection at a temperature range of 248°F and 320°F (120°C and 160°C).

CONVECTION MODE KEY



Selection key for convection cooking without steam at a temperature range of 86°F to 482°F (30°C and 250°C).

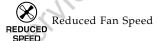
(14) PROGRAM INSTALL AND EDIT KEY Used to create, change, duplicate, and delete programmed menus. **DELUXE MODELS ONLY**.

(5) FUNCTION & OPERATING INDICATORS



Reduced Power







Moisture Vent



Confirmation of Oven Operation



Peak Power Use **ENERGY** Energy Protection

CONTROL PANEL DISPLAY

CORE TEMPERATURE KEY



Used to set the required internal product temperature, to recall the internal product temperature set by the operator, or to display the current internal temperature of the product in conjunction with the down arrow key (9), the up arrow key (8) or the adjustment knob (10).

(18) **UP ARROW KEY**



Used to increase displayed cook temperature (7), time (8), or core temperature (7) and as a scrolling key for programming functions.

(9) QUICK PROGRAM KEYS

Immediate access to frequently used operator set programs including cooking modes, cleaning, and other oven functions. **DELUXE MODELS ONLY.**

S-CONTROL PANEL IDENTIFICATION



(1) OFF POSITION

Maintains oven in a stand-by mode.

2 STEAM

The oven will operate at a fixed steam temperature of 212° F (100° C).

(3) COMBINATION

A combination of steam and convection heat to cook at a temperature between $86^{\circ}F$ and $482^{\circ}F$ ($30^{\circ}C$ to $250^{\circ}C$) to be set by the operator.

(4) CONVECTION

Convection heat to cook without steam at a temperature between 86°F and 482°F (30°C and 250°C) to be set by the operator.

5 LOW STEAM

Low temperature steaming within an operator set temperature range of 86°F to 210°F (30°C and 99°C).

6 CLEANING FUNCTION

An automatic cleaning cycle to heat the oven to the correct temperature, followed by a manual application of Combitherm Liquid Oven Cleaner and a 10 minute steam cleaning cycle. An automatic boiler flush is initiated on boiler equipped models and a vinegar decalcification can also be conducted.

(7) COOKING TEMPERATURE DIAL

To be manually set by the operator to the cooking temperature required.

(8) OVEN DISPLAY

Indicates time remaining or interior oven temperature.

(9) COOKING TIMER

- Turned to the left for continuous cooking time or to decrease time in increments of one minute.
- Turn to the right to set and increase time in increments of one minute.
- (10) OVEN TEMPERATURE

To be pressed to display interior oven temperature.

- (11) FULL SPEED FAN POSITION
- (12) HALF SPEED FAN POSITION
- (13) OVEN COOL-DOWN POSITION

Assists in cooling the oven at an accelerated pace when changing from high to lower temperature cooking. The oven door should be open when using this feature.





SMOKER CONTROL PANEL BASIC FUNCTION

POWER ON/OFF KEY (1)



Activates power to the oven and automatically fills the steam generator with water which will heat to a stand-by mode temperature of 150°F (65°C). The steam generator flush is also activated by pressing this key.

(2)

STEAM MODE KEY



The oven will operate in the steam mode at a temperature range of 86°F to 248°F (30°C

- Automatic steaming at 212°F (100°C) FACTORY-SET DEFAULT.
- Quick steaming between 213°F and 248°F (101°C and 120°C).
- Low Temperature Steaming between 86°F and 211°F (30°C and 99°C).



START/STOP KEY



Initiates all cooking mode functions and programmed procedures stored in memory. Stops an activated cooking mode or programmed procedure currently in progress, and exits Chef function key.



SUPERHEATED STEAM AND





Selection key for the combination steam and convection cooking mode which can be set within a temperature range of 212°F to 482°F (100°C and 250°C).



PROGRAMMED MENU KEY



Used to access and exit a menu list of all stored cooking programs which can be reviewed in display 16. DELUXE MODELS ONLY



CHEF FUNCTION KEY

Used to select programmed menu functions, various auxiliary functions, and several chef help instructions.



COOKING TEMPERATURE KEY

Used to set the required cooking temperature, to recall the set cooking temperature, or to check the actual oven temperature in conjunction with the down arrow key (9), the up arrow key (18) or the adjustment knob (10).



TIME KEY



Used to set the required cooking time or recall the set cooking time in conjunction with the down arrow key (9), the up arrow key 18, or the adjustment knob 10.



DOWN ARROW KEY



Used to decrease displayed cook temperature (7), time (8), or core temperature (17) and as a scrolling key for programming functions.

(10)

ADJUSTMENT KNOB

Serves the same function as the up and down arrow keys to increase or decrease the displayed cook temperature 7, time 8, or core temperature (7).



SMOKING MODE KEY

ELECTRIC MODELS ONLY Initiates the production of smoke from the wood chip container located at the bottom of the oven compartment. The smoking function operates in the convection mode and in the combination mode.



RETHERM MODE KEY



Food rethermalization or reheating mode will operate with automatic steam injection at a temperature range of 248°F and 320°F (30°C and 250°C).



CONVECTION MODE KEY

Selection key for convection cooking without steam at a temperature range of 86°F to 482°F (30°C and 250°C).



PROGRAM INSTALL AND EDIT KEY

Used to create, change, duplicate, and delete programmed menus. DELUXE MODELS ONLY.

FUNCTION & OPERATING INDICATORS



Reduced Power



Key Lock



Reduced Fan Speed



Smoking Indicator



SPEED

CYCLE

Confirmation of Oven Operation



Peak Power Use LOCK Energy Protection

.CONTROL PANEL DISPLAY

(17)

CORE TEMPERATURE KEY



Used to set the required internal product temperature, to recall the internal product temperature set by the operator, or to display the current internal temperature of the product in conjunction with the down arrow key 9, the up arrow key 18, or the adjustment knob 10.

(18)

UP ARROW KEY



Used to increase displayed cook temperature 7, time (8), or core temperature (7) and as a scrolling key for programming functions.

(19).....QUICK PROGRAM KEYS

Immediate access to frequently used operator set programs including cooking modes, cleaning, and other oven functions. DELUXE MODELS ONLY.

COMBITHERM SMOKER OPERATION

GENERAL OPERATION — SMOKERS

Load wood chips.

- Measure one container full of dry wood chips.
- Soak dry chips in water for 5 minutes.
- Shake excess water off wood chips.
- Place moistened chips back into the container and position the container in the holder located on the interior back panel of the smoker.



AWARNING

THE USE OF IMPROPER MATERIALS FOR THE SMOKING FUNCTION COULD RESULT IN DAMAGE, HAZARD, EQUIPMENT FAILURE OR COULD REDUCE THE OVERALL LIFE OF THE OVEN.

DO NOT USE SAWDUST FOR SMOKING.

DO NOT USE WOOD CHIPS

SMALLER THAN THUMBNAIL SIZE.



The smoking function can be used whenever the oven is operating in the convection mode or the combination mode. The smoking function cannot be operated when the oven is operating in steam mode or the retherm mode.

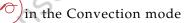
The smoking function can be programmed into a procedure with any of the

Duluxe Combitherm Smoker models. Press the smoking function



after setting time

or core temperature





or the Combination mode



A full container of wood chips will produce smoke for an approximate period of one hour. This time period will vary depending on the degree of cooking temperature used, however, by following the tested procedures set fourth in this manual, smoke production will be more than sufficient for complete product smoke penetration and full smoke flavor. Other procedures in the front portion of this manual can be adapted to a smoked product offering. If you need assistance, you are invited to contact an Alto-Shaam corporate chef for recommendations.



The Combitherm Smoker icon must be pushed again when the smoking function has been completed. This disengages the smoker elements.

The Combitherm Smoker can be operated without using the smoking function. After using the oven as a smoker, however, it is necessary to clean the oven in order to prevent a transfer of smoke flavor. Cleaning instructions are provided in a previous section of this manual.

AVAILABLE FROM ALTO-SHAAM

WOOD CHIPS

20 POUND BULK PACKS
APPLE WC-22543

THE TOTAL WEIGHT OF WOOD CHIP BULK PACKS MAY VARY DUE TO HIGH MOISTURE CONTENT WHEN PACKAGED.

HICKORY WC-2829

CHERRY WC-22541
SUGAR MAPLE WC-22545

PREHEAT THE OVEN BEFORE COOKING PRODUCT COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Beef Brisket, Fresh: 9 to 13 lb (4 to 6 kg)

MATERIALS

Stainless steel sheet pans or full-size pans Wire pan grids (optional) Vegetable release spray (optional) Seasoning

PRODUCT PREPARATION

Spray pans or wire pan grids with vegetable release spray if desired.

Place briskets in pans and season as desired.

Load pans in preheated oven.



FAN SPEED Full Speed



WOOD CHIP Full **CONTAINER**

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

OVEN MODE

1.

Steam Mode



OVEN MODE

Convection Mode



OVEN MODE

3.

Combination Mode



COOKING TEMPERATURE

180°F (82°C)



COOKING TEMPERATURE

90°F (32°C)



COOKING TEMPERATURE

225°F (107°C)



TIMER

APPROXIMATE COOK TIME

10 minutes



TIMER

APPROXIMATE COOK TIME

30 minutes



TIMER

APPROXIMATE COOK TIME

3 hours



PAN

SIZES

SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 5 full-size pans (GN 1/1)

MODEL 10·10iN/SK

9 full-size pans (GN 1/1)

MODEL 7•14i/SK

12 full-size pans (GN 1/1)

PAN SIZES

Full-size Pans: 20" x 12" x 2-1/2" Half-size Sheet Pans: 18" x 13" x 1"

(GN 1/1: 530mm x 325mm x 20mm)

FINAL INTERNAL PRODUCT TEMPERATURE

165°F (73°C)

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



Time and temperature settings are suggested guidelines only. Due to variations in product quality, weight, and desired degree of doneness the controls may require some adjustment from the time and temperatures shown. All cooking should be based on internal product temperatures.

BEEF RIBS

PREHEAT THE OVEN BEFORE COOKING PRODUCT COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Beef Ribs: 2 to 3 lb (1 to 1,3 kg)

MATERIALS

Stainless steel or aluminum sheet pans or full-size pans Vegetable release spray (optional Seasoning

PRODUCT PREPARATION

Spray pans with vegetable release spray if desired.

Place short ribs side-by-side in pans and season as desired.

Load pans in preheated oven.



FAN SPEED Full Speed



WOOD CHIP **CONTAINER**

Full

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

OVEN MODE

1.

Steam Mode



OVEN MODE

Convection Mode



OVEN MODE

3.

Combination Mode



COOKING TEMPERATURE

180°F (82°C)



COOKING TEMPERATURE

90°F (32°C)



COOKING TEMPERATURE

225°F (107°C)



TIMER

APPROXIMATE COOK TIME

10 minutes



TIMER

APPROXIMATE COOK TIME

30 minutes



TIMER

APPROXIMATE COOK TIME

2 hours



SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 5 full-size pans (GN 1/1)

MODEL 10•10iN/SK 9 full-size pans

(GN 1/1)

MODEL 7•14i/SK

12 full-size pans (GN 1/1)

PAN SIZES

Full-size Pans: 20" x 12" x 2-1/2"

Half-size Sheet Pans: 18" x 13" x 1" (GN 1/1: 530mm x 325mm x 20mm)

FINAL INTERNAL PRODUCT TEMPERATURE

190°F (88°C)

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



PAN

SIZES

PREHEAT THE OVEN BEFORE COOKING PRODUCT COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Pork back ribs: 1-3/4 down

MATERIALS

Stainless steel or aluminum sheet pans or full-size pans Seasoning Barbeque Sauce (optional)

PRODUCT PREPARATION

Place ribs side-by side on pans and season as desired. Load pans in preheated oven.

NOTE: When cooking for immediate service or hot food holding, brush with heated barbeque sauce after ribs are removed from the oven to prevent sauce from burning. As an alternative, ribs can be cooked in advance, rapidly chilled, and removed from refrigeration for reheating and service as required. Barbecue sauce can be used for the reheating process.



FAN SPEED Full Speed



WOOD CHIP **CONTAINER**

Full

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

OVEN MODE

1.

Steam Mode



OVEN MODE

Convection Mode



OVEN MODE

3.

Combination Mode



COOKING TEMPERATURE

160°F (71°C)



COOKING TEMPERATURE





COOKING TEMPERATURE

225°F (107°C)



TIMER

APPROXIMATE COOK TIME

10 minutes



TIMER

APPROXIMATE COOK TIME

30 minutes



APPROXIMATE COOK TIME

50 minutes



SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 5 full-size pans (GN 1/1)

MODEL 10·10iN/SK

9 full-size pans (GN 1/1)

MODEL 7•14i/SK

12 full-size pans (GN 1/1)

PAN SIZES

FINAL INTERNAL PRODUCT TEMPERATURE

PAN **SIZES**

Full-size Pans: 20" x 12" x 2-1/2" Half-size Sheet Pans: 18" x 13" x 1"

(GN 1/1: 530mm x 325mm x 20mm)

175° to 180°F (79° to 92°C)

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



PORK SHOULDER

PREHEAT THE OVEN BEFORE COOKING PRODUCT COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Pork Shoulder, Boston Butt, Bone-In or Boneless: 8 to 10 lb (4 to 5 kg)

MATERIALS

Stainless steel sheet pans or full-size pans Vegetable release spray (optional) Seasoning

PRODUCT PREPARATION

Spray pans with vegetable release spray if desired.

Place briskets in pans and season as desired.

Load pans in preheated oven.



FAN SPEED Full Speed



WOOD CHIP **CONTAINER**

Full

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

OVEN MODE

1.

Steam Mode



OVEN MODE

Convection Mode



OVEN MODE

3.

Combination Mode



COOKING TEMPERATURE

160°F (71°C)



COOKING TEMPERATURE

90°F (32°C)



COOKING TEMPERATURE

225°F (107°C)



TIMER

APPROXIMATE COOK TIME

10 minutes



TIMER

APPROXIMATE COOK TIME

30 minutes



APPROXIMATE COOK TIME

2 hours, 30 minutes



SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 5 full-size pans (GN 1/1)

MODEL 10·10iN/SK 9 full-size pans (GN 1/1)

MODEL 7•14i/SK 12 full-size pans

PAN SIZES

(GN 1/1)FINAL INTERNAL PRODUCT TEMPERATURE

PAN SIZES

Full-size Pans: 20" x 12" x 2-1/2"

Half-size Sheet Pans: 18" x 13" x 1" (GN 1/1: 530mm x 325mm x 20mm) 165°F to 170°F (74°C to 77°C)

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.





PREHEAT THE OVEN BEFORE COOKING PRODUCT COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Chicken, Whole: 2-1/4 to 2-3/4 lb (1 to 1,2 kg) each

MATERIALS

Seasoning

Vegetable release spray

Stainless steel or aluminum sheet pans with wire pan grids or Alto-Shaam chicken roasting racks with grease tray

PRODUCT PREPARATION

Place chicken on sprayed, grid-lined sheet pans or on roasting racks.

If desired, fold the wings and tuck under the back of the bird. Cross and secure legs.

Season as desired.

Load chicken in preheated oven.

NOTE: When using roasting racks, insert the grease tray before preheating or use rack with an attached grease tray. When using sheet pans, do not overload each pan. Chickens should not touch.



FAN SPEED Full Speed



WOOD CHIP CONTAINER

Full

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

OVEN MODE

1.

Steam Mode



OVEN MODE

Convection Mode



OVEN MODE

3.

Combination Mode



COOKING TEMPERATURE

160°F (71°C)



COOKING TEMPERATURE

90°F (32°C)



COOKING TEMPERATURE

225°F (107°C)



APPROXIMATE COOK TIME

10 minutes



TIMER

APPROXIMATE COOK TIME

30 minutes



APPROXIMATE COOK TIME

45 minutes



PAN

SIZES

SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 1 full-size pan

MODEL 10·10iN/SK 2 full-size pans (GN 1/1)(GN 1/1)

MODEL 7-14i/SK

4 full-size pans (GN 1/1)

FINAL INTERNAL PRODUCT TEMPERATURE

(79°C)

PAN SIZES

Full-size Pans: 20" x 12" x 2-1/2"

(GN 1/1: 530mm x 325mm x 20mm)

175°F

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



TURKEY BREAST

Fresh or Precooked, Boneless

PREHEAT THE OVEN BEFORE COOKING PRODUCT

COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT

Turkey breast, boneless: Fresh (raw) or precooked, 8 lb (4 kg) each

MATERIALS

Stainless steel or aluminum sheet pans Wire pan grids (optional) Vegetable release spray (optional) Seasoning

PRODUCT PREPARATION

Each breast should be relatively uniform in size to assure even heating and smoking from item to item. Place turkey breasts in pans and season as desired. Load pans in a preheated oven.

NOTE: When using CORE-TEMP mode, insert the probe so that the tip of the probe is centered in the breast. Approximate core temperature cut-off is 155° to 160°F (68° to 71°C).



FAN SPEED Half Speed



WOOD CHIP **CONTAINER**

Full

PRESS & SET EACH OPERATING FUNCTION IN SEQUENCE 2.

1. **OVEN MODE**

Steam Mode



OVEN MODE



OVEN MODE

3.

Convection Mode





COOKING TEMPERATURE



COOKING TEMPERATURE

180°F (82°C)



90°F (32°C)



225°F (107°C)



APPROXIMATE COOK TIME

30 minutes



APPROXIMATE COOK TIME

30 minutes



APPROXIMATE COOK TIME

1 hour, 45 minutes



SMOKING FUNCTION

DO NOT PRESS



SMOKING FUNCTION

Press to engage smoke



SMOKING FUNCTION

Press to engage smoke

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START



MAXIMUM CAPACITY

MODEL 6•10iN/SK 5 full-size pans (GN 1/1)

MODEL 10·10iN/SK

9 full-size pans (GN 1/1)

MODEL 7•14i/SK

12 full-size pans (GN 1/1) 6 full-size sheet pans

PAN SIZES

FINAL INTERNAL PRODUCT TEMPERATURE

PAN Full-size Pans: 20" x 12" x 2-1/2" SIZES Full-size Sheet Pans: 18" x 26" x 1" (GN 1/1: 530mm x 325mm x 20mm)

165°F (74°C)

STOP THE COOKING FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



Time and temperature settings are suggested guidelines only. Due to variations in product quality, weight, and desired degree of doneness the controls may require some adjustment from the time and temperatures shown. All cooking should be based on internal product temperatures.

COMBITHERM SMOKER OVEN PROCEDURE

PRODUCT Fresh Salmon Fillets: 2-1/2 - 4 lb (1 - 2 kg) each

MATERIALS

Clear Plastic Wrap Paper Toweling Wire Mesh Grids Tweezers

Ice: 3 to 4 lb (1 to 2 kg)



FAN SPEED Half Speed



WOOD CHIP CONTAINER

Full

PRESS & SET

1.



OVEN MODE

Convection Mode



COOKING TEMPERATURE

86°F (30°C)



TIMER

APPROXIMATE COOK TIME

10 to 30 minutes per smoke flavor preference



SMOKING FUNCTION

Press to engage

▼ PRODUCT PREPARATION **▼**

Remove bones from fillets with a tweezers to avoid rupturing tissue.



50% Sea Salt or Kosher Salt

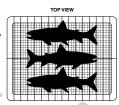
50% Granulated or Brown Sugar (FOR BEST COLOR)

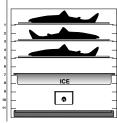
To remove moisture from the raw salmon, blend salt and sugar mixture thoroughly and pack firmly around each fillet. Cover salt-filled pans with clear plastic wrap and refrigerate for 24 hours. Following the 24 hour refrigeration period, remove fillets from salt/sugar mixture and rinse thoroughly under cold, running water. Pat dry with paper toweling. Place fillets side-by-side on a sheet pan and return, uncovered, to the refrigerator for a period of 6 hours for the final drying period.

OVEN MUST BE AT ROOM TEMPERATURE BEFORE BEGINNING PROCEDURE.

Soak wood chips in water according to directions (5 minutes). Fill wood chip container full and insert in chip holder located at the back of the oven.

Fill pan with ice and locate pan in shelf directly above wood chip container.





Place prepared salmon fillets on a wire

grid as indicated on the diagram and insert wire grid on oven shelf beginning with the top shelf position.

Insert probe probe into the center of the middle salmon fillet located in the top shelf position or central shelf position when smoking a full load (OPTIONAL). To maintain proper color, the internal temperature of the salmon must not exceed 77°F (25°C). For this reason, it is important to begin the smoking process with the oven at room temperature.

Close oven door and press the oven function keys to provide a smoking time period from 10 to 30 minutes depending on taste preference. When the timer cycles to the OFF position, the fillets must remain in the oven for a period of 30 minutes to 2 hours. Do not open the oven door during this period.

Following the required oven time, remove the fillets, cover with clear plastic wrap and refrigerate until fully chilled.

USE APPROXIMATE COOKING TIMES SHOWN FOR FULL OR PARTIAL LOADS

PRESS START

MAXIMUM CAPACITY

MODEL 6•10iN/SK

MODEL 10·10iN/SK

MODEL 7•14i/SK

5 half-size sheet pans

5 half-size sheet pans

9 half-size sheet pans

PAN SIZES

PAN SIZES

Half-size sheet pans: 18" x 13" x 1" Full-size sheet pans: 18" x 26" x 1"

NOT TO EXCEED 77°F (25°C)

FINAL INTERNAL PRODUCT TEMPERATURE

STOP OVEN FUNCTION AT ANY TIME BY PRESSING THE STOP KEY.



Time and temperature settings are suggested guidelines only. Due to variations in product quality, weight, and desired degree of doneness the controls may require some adjustment from the time and temperatures shown. All cooking should be based on internal product temperatures.

IMPORTANT SAFETY PRECAUTIONS

For safe release of the cooking compartment steam, initially open the door approximately 2" (50mm) only. Stand behind the door as the hot steam is released.

- **DO NOT** USE THE ATTACHED HAND-HELD HOSE TO SPRAY ANYTHING OTHER THAN THE INTERIOR OF THE COMBITHERM OVEN COMPARTMENT. AT NO TIME SHOULD THE EXTERIOR OF THE OVEN BE STEAM CLEANED, HOSED-DOWN WITH THE HAND-SPRAYER, FLOODED WITH WATER, OR FLOODED WITH LIQUID SOLUTION OF ANY KIND.
- **DO NOT** USE THE SPRAY HOSE IN A HOT COOKING COMPARTMENT. ALLOW THE OVEN TO COOL TO A MINIMUM OF 150°F (66°C).
- **DO NOT** USE HIGH PRESSURE WATER CLEANING METHODS ON THE INTERIOR OR EXTERIOR OF THE COMBITHERM OVEN.
- DO NOT HANDLE PANS CONTAINING
 LIQUID OR SEMI LIQUID
 PRODUCTS POSITIONED
 ABOVE EYE LEVEL OF THE
 OPERATOR. SUCH PRODUCTS
 CAN SCALD AND CAUSE
 SERIOUS INJURY.



CAUTION

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

USE AUTHORIZED COMBITHERM LIQUID OVEN CLEANER ONLY.

UNAUTHORIZED CLEANING AGENTS MAY DISCOLOR OR HARM INTERIOR SURFACES OF THE OVEN. READ AND UNDERSTAND LABEL AND MATERIAL SAFETY DATA SHEET BEFORE USING THE OVEN CLEANER.

FOR OPERATOR SAFETY

NOTE AND OBSERVE ALL SAFETY PRECAUTIONS LOCATED THROUGHOUT THIS MANUAL.

CLEANING AND PREVENTIVE MAINTENANCE

PROTECTING STAINLESS STEEL SURFACES



It is important to guard against corrosion in the care of stainless steel surfaces.

Harsh, corrosive, or inappropriate chemicals can completely destroy the

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

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

CLEANING AGENTS

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

CLEANING MATERIALS

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



COMBITHERM® CLEANING & MAINTENANCE

Preventive Maintenance

In addition to the routine cleaning and maintenance procedures, there are several additional steps to be taken for both sanitation purposes and to keep the oven running at top operating efficiency. These additional safeguards will help prevent inconvenient down time and costly repairs.

OO NOT DISPOSE OF GREASE, FAT, OR SOLID WASTE DOWN THE OVEN DRAIN.



SEVERE DAMAGE OR ELECTRICAL HAZARD COULD RESULT.

WARRANTY BECOMES VOID IF APPLIANCE IS FLOODED.

Fats and solids will eventually coagulate in the drain system, causing blockage. Consequently, water will back-up into the condenser and interior oven compartment, resulting in an oven that is inoperable.

- MAKE CERTAIN THE DRAIN SCREEN IS ALWAYS IN PLACE. REMOVE ANY SOLID WASTE MATERIAL FROM THE DRAIN SCREEN BEFORE IT ENTERS THE DRAIN SYSTEM. The routine removal of solids from the drain screen will help prevent blockage.
- **USE THE AUTHORIZED COMBITHERM OVEN CLEANER ONLY**. The use of unauthorized cleaning agents may discolor or harm the interior surfaces of the oven.
- TO PROLONG THE LIFE OF THE DOOR GASKET, REMOVE AND CLEAN THIS ITEM DAILY. The acids and related compounds found in fat, particularly chicken fat, will considerably weaken the composition of the gasket unless cleaned on a daily basis.
- TO ADDITIONALLY PROTECT GASKET LIFE, ALLOW OVEN DOOR TO REMAIN SLIGHTLY OPEN AT THE END OF THE PRODUCTION DAY. An open door will relieve the pressure on the door gasket.
- **ROUTINELY CLEAN DOOR HINGES.** Open oven door to relieve tension. Clean all parts of the hinge.

Routine Cleaning Requirements

DAILY OVEN CLEANING

To be performed at the end of each production day or between production shifts.

DAILY GASKET CLEANING

It is important to prolong the life of the oven gasket by cleaning this item on a daily basis. Routine cleaning will help protect the composition of the gasket from deterioration caused by acidic foods. After allowing the oven to cool, remove pull-out gasket and wash in hot, soapy water. *Do not* place in the dishwasher.

Always replace the gasket before cleaning the oven interior or operating the oven.





MONTHLY CLEANING

●WATER INTAKE FILTER

●DRAIN PIPE

● F A N

•FILTER BETWEEN HOSE AND HANDLE

OSPRAY HEAD

COMBITHERM® CLEANING & MAINTENANCE

NOTE

USE AUTHORIZED COMBITHERM LIQUID OVEN CLEANER ONLY.

DANGER

RUBBER GLOVES AND PROTECTIVE EYE WEAR MUST BE WORN WHEN USING THE OVEN CLEANER.

Unauthorized cleaning agents may discolor or harm interior surfaces of the oven. Read and understand label and material safety data sheet before using the oven cleaner.

Causes severe burns. Do not get in eyes, on skin, or on clothing. Do not wear contacts. Harmful or fatal if swallowed. Do not breathe mist. Use in well ventilated area. Keep out of reach of children. Do not use on aluminum. Do not mix with anything but water.

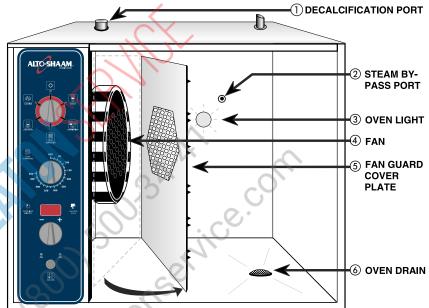
THOROUGHLY RINSE EMPTY CONTAINER WITH WATER AND SAFELY DISCARD.

AWARNING

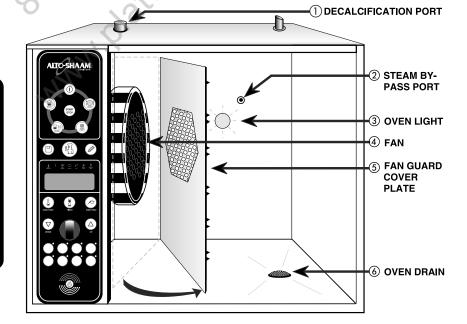
WATER SUPPLY MUST BE OPEN WHEN CLEANING PROGRAM IS ACTIVATED.

VERIFY WATER SUPPLY BEFORE STARTING CLEANING PROGRAM.





STANDARD CONTROL DELUXE CONTROL



COMBITHERM CLEANING & MAINTENANCE



DAILY OVEN CLEANING



The Combitherm automatic cleaning function selects the proper temperature for each step of the cleaning process.

Remove all food scraps and residue from the oven drain.

Close the oven door securely.

Rotate the power knob to the cleaning symbol.

THE OVEN WILL BEGIN THE FIRST STEP IN A TWO-STEP CLEANING CYCLE • 10 MINUTES at a steam temperature of 86°F (30°C)

- When the buzzer signals the end of the first step, open the oven door to deactivate the audible signal. **Cln** will appear in the display.
- Wearing safety glasses and rubber gloves, remove the drain screen and spray Combitherm liquid oven cleaner directly into the oven drain ⑥. Replace the drain screen.
- **4.** Generously spray the interior oven surfaces with an even coat of Combitherm Liquid Oven Cleaner. Spray all built-in components, shelves, side racks, and pans.
- Loosen the thumb screw(s) and swing Fan Guard Cover Plate (5) toward the back of the oven. Spray the back of the Fan Guard Cover Plate, the oven fan (4), and the left-hand side of the oven. Close the swing-out Cover Plate (5). Lock the cover into place and tighten thumb screw(s).
- 6. Insert the Combitherm Liquid Oven Cleaner spray nozzle directly into the Steam By-Pass Port ② and spray several times.
- 7. Securely close the oven door.

THE OVEN WILL BEGIN THE SECOND STEP IN THE TWO-STEP CLEANING CYCLE • 10 MINUTES at a steam temperature of 86°F (30°C)

- **8.** When the buzzer signals the end of the second step, open the oven door to deactivate the audible signal.
- **9.** Use the hand held hose and direct a stream of water into the Steam By-Pass Port (2) to rinse away oven cleaner residue.
- 10. Rinse the interior and all sprayed components with the hand-held hose. Make certain to thoroughly rinse all surfaces to remove any cleaning solution residue. Use a non-abrasive cleaning pad for any problem areas.
- 11. Loosen the thumb screw(s) and swing Fan Guard Cover Plate toward the back of the oven. Thoroughly rinse the back of the Fan Guard Cover Plate, the oven fan, and the left-hand side of the oven. Close the swing out Cover Plate. Lock the cover into place and tighten thumb screw(s).

COMBITHERM® CLEANING & MAINTENANCE

DAILY OVEN CLEANING

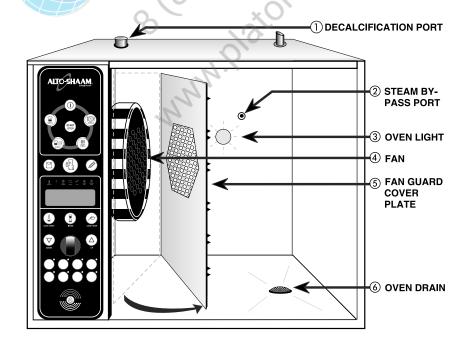
STANDARD CONTROL DELUXE CONTROL

DO NOT SPRAY CLEANER INTO A HOT OVEN.

ALLOW THE OVEN TO COOL TO 150°F (60°C).

The temperature in the display indicates the air temperature inside the oven compartment and not the interior walls of the oven. Always make certain to allow the oven walls to cool to a minimum of 150°F (60°C) before spraying the compartment with oven cleaner.

- **1.** Remove all food scraps and residue from the oven drain **(6)**.
- **2.** Wearing safety glasses and rubber gloves, remove the drain screen and spray Combitherm liquid oven cleaner directly into the oven drain **(6)**. Replace the drain screen.
- **3.** Generously spray the interior oven surfaces with an even coat of Combitherm Liquid Oven Cleaner. Spray all built-in components, shelves, side racks, and pans.
- **4.** Once a week, loosen the thumb screw(s) and swing Fan Guard Cover Plate ⑤ toward the back of the oven. Spray the back of the Fan Guard Cover Plate, the oven fan ④, and the left-hand side of the oven. Close the swing out Cover Plate ⑤. Lock the cover into place and tighten thumb screw(s).
- **5.** Insert the Combitherm Liquid Oven Cleaner spray nozzle directly into the Steam By-Pass Port ② and spray several times.
- **6.** Securely close the oven door.



COMBITHERM® CLEANING & MAINTENANCE

AUTOMATIC CLEANING PROGRAM

The Combitherm automatic cleaning function selects the proper temperature for each step of the cleaning process.

STANDARD CONTROL DELUXE CONTROL

With the oven power



PRESS THE CHEF FUNCTION KEY.

Rotate the adjustment knob until the clean symbol

is highlighted in the display.



PRESS THE CHEF FUNCTION KEY.

ightharpoonup Press the up \triangle and down ∇ arrow keys or rotate the adjustment knob to select YES for the automatic cleaning function.



PRESS THE CHEF FUNCTION KEY TO CONFIRM THE SETTING AND START THE CLEANING PROGRAM.



THE OVEN WILL BEGIN A 20 MINUTE, 2-STEP CLEANING CYCLE.

- 10 minutes at 86°F (30°C) to allow the cleaning agent to work
- 10 minutes at full steam temperature of 212°F (100°C) to clean the oven



FOR DELUXE OVENS WITH A PROGRAMMED MENU KEY

FOLLOW STEPS 1 THROUGH 6 ON THE PRECEDING PAGE.

With the oven power (1) on:



PRESS THE PROGRAMMED MENU KEY.

Rotate the adjustment knob to program 250 = CLEAN.



PRESS THE START KEY.

DELUXE MODELS CAN ALSO BE CLEANED AS SHOWN IN THE PREVIOUS INSTRUCTIONS.

- 7. When the buzzer signals the end of the cleaning process, press the start/stop key (START) to deactivate the audible signal or open the oven door.
- **8.** With the door open, use the hand held hose and direct a stream of water into the Steam By-Pass Port ② to rinse away oven cleaner residue.
- **9.** Rinse the interior and all sprayed components with the hand-held hose. Make certain to thoroughly rinse all surfaces to remove any cleaning solution residue. Use a non-abrasive cleaning pad for any problem areas.
- **10.** Loosen the thumb screw(s) and swing Fan Guard Cover Plate ⑤ toward the back of the oven. Thoroughly rinse the back of the Fan Guard Cover Plate, the oven fan, and the left-hand side of the oven. Close the swing out Cover Plate ⑤. Lock the cover into place and tighten thumb screw(s).

LEAVE DOOR SLIGHTLY OPEN AFTER CLEANING

CONTROL RESET

There is a remote possibility in the day-to-day operation of the Combitherm that the control could lock or freeze. If this occurs, the control is easy to reset.



PRESS AND HOLD the Power Key for a period of 5 seconds.

Release the Power Key.

The control will reset itself within approximately 15 seconds.

WHEN RESET, THE DISPLAY WILL INDICATE THE TIME AND DATE AND THE CONTROLS WILL BE FULLY FUNCTIONAL.

EMERGENCY OPERATION

In the event of an error code, operation of the Combitherm can be continued on a limited basis for a short duration. Cooking times may be longer than normal operation and close monitoring of the cooking process is recommended. Contact an authorized service agency immediately if the problem cannot be rectified with simple steps in the troubleshooting guidelines located in this manual. Error conditions under which continued operation can be conducted are indicated by YES in the chart shown below.

When the oven malfunctions, an error code will appear in the display.



PRESS THE START/STOP KEY TO ACKNOWLEDGE THE ERROR.

The keys for the usable operational modes will begin to flash and can be operated normally.







SELECT AND PRESS ONE OF THE COOKING MODES INDICATED. The oven control will only respond to the oven mode keys flashing.

SET THE OVEN CONTROLS AS IF OPERATING UNDER NORMAL CIRCUMSTANCES.

Depending on the error code involved, oven function, such as temperature range, may be limited.



PRESS THE START/STOP KEY TO BEGIN THE COOKING PROCESS.



PRESS THE START/STOP KEY WHEN THE TIMER EXPIRES.

WHEN THE OVEN FAULT IS CORRECTED, THE COMBITHERM WILL RETURN TO NORMAL OPERATION.

EMERGENCY OPERATION

ERROR CODE	DISPLAY MESSAGE	ELECTRIC	STEAM ¹ MODE	SUPERHEATED STEAM MODE	CONVECTION Mode	RETHERM Mode	DELTA-T MODE
E02	EL-temperature too high CONTROL COMPARTMENT TEMP	YES	YES	Up to 284°F (140°C)	Up to 284°F (140°C)	Up to 284°F (140°C)	Up to 284°F (140°C)
E03	Fan Fault	YES	Up to 212°F	NO	NO	NO	NO
	BLOWER FAN		(100°C)				
E04	EL-fan fault	YES	YES	Up to 284°F	Up to 284°F	Up to 284°F	Up to 284°F
	CONTROL COOLING FAN			(140°C)	(140°C)	(140°C)	(140°C)
E15	Condenser oven temperature	YES	NO	NO	Up to 356°F	NO	YES
	HIGH CONDENSATE TANK TEMP				(180°C)		
E21	Oven probe error	YES	212°F only	NO	NO	NO	NO
	TEMPERATURE PROBE		(100°C)				
E22	CTC error temperature probe	YES	YES	YES	YES	YES	YES
E23	SG-probe error	YES	YES	YES	YES	YES	YES
	STEAM GENERATOR PROBE B4			^			
E24	Bypass probe error	YES	Up to 210°F	NO	YES	NO	YES
			(99°C)	O.N.	00		
E25	Condenser probe error	YES	YES ²	Up to 356°F ²	Up to 356°F ²	Up to 356°F ²	YES ²
	B3 probe		(0)	(180°C)	(180°C)	(180°C)	
E81	Program memory error	YES	YES	YES	YES	YES	YES
E83	Algorithm error	YES	YES	YES	YES	YES	YES
E89	12C error	YES O	YES	YES	YES	YES	YES

¹Cooking time increases significantly. Food on the upper shelves is finished first.



Alto-Shaam has established a twenty-four hour emergency service call center to offer immediate customer access to a local authorized service agency outside of standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through the use of Alto-Shaam's toll-free number. Emergency service access is available seven days a week including holidays.

² Water injection into the condenser is activated for the entire cooking mode (high water consumption).

TROUBLESHOOTING

In the event of a Combitherm malfunction during operation, an error code and message will appear in the display to assist in finding a rapid solution to the problem. The following is a list of all error codes including the possible cause along with a solution.

CAUTION

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

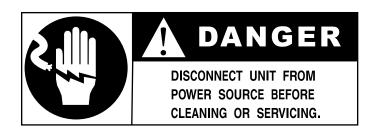
ERROR CODE	DESCRIPTION OF ERROR	POSSIBLE CAUSE/REMEDY
E02	Excessive temperature in service area: An additional fan will engage at a temperature of $113^{\circ}F$ ($45^{\circ}C$) and the error message will occur at a service area temperature of $176^{\circ}F$ ($80^{\circ}C$).	Auxiliary 12 V fan does not turn on due to defective thermostat or contactor. Ventilation vents are blocked due to inefficient distance from wall at installation site. Minimum distance to equipment such as fryers, grills, kettles, etc. has not been maintained.
E03	Fan motor shuts down from a tripped internal PTC.	A phase from the main power supply is missing. The fan motor is defective. Power phase reversed causing fan to run in reverse. A fuse is tripped.
E03	Motor shuts down fan.	Trip circuit has been set too low. Direction of motor rotation is wrong. A phase is missing from the main power supply. The motor protection switch is defective. Power phase reversed causing fan to run in reverse. The fan motor is defective.
E04	Auxiliary 120 fan motor not running.	Auxiliary fan is defective. Defective wiring or loose connection to auxiliary fan.
E11	Oven probe (N6 thermocouple) measures a temperature in excess of 572°F (300°C).	Convection contactors are burned and no longer disengage. Motor not operating due to two defective F10 fuses.
E15	Condenser probe (B3 thermocouple) measures a temperature in excess of 212°F (100°C).	Water tap is closed. Oven is connected to warm water supply. Inlet filter on solenoid valve is dirty. Condenser cooling solenoid valve or solenoid valve coil is defective.
E25	Condenser probe (B3 thermocouple) is interrupted.	Probe connection is bad at X6 on the control module. Condenser probe (B3) is interrupted or defective. Bad probe connection.
E26	Safety temperature probe (N8 thermocouple) is interrupted.	Probe connection is bad at X6 on the control module. STB steam generator probe (N8) is interrupted or defective. Bad probe connection.
E80	ID (identity) error.	The electronic control cannot differentiate between gas or electric operation and disconnects all circuit connections. Contact problem on X3 connection.
E81	Cooking procedure - programming error.	Unit has been changed from Fahrenheit to Celsius.
E82	Preset program or cleaning program has become corrupt.	The sequence must be deleted and reprogrammed.
E83	Communication problem between display and relay board.	Pres and hold the Chef function key while in the OFF mode and verify both the BM and SM software versions.
E96	Incompatability between software and hardware.	Communication cable is lose between relay board and display board. Communications cable defective.

Parts List • Combitherm ML Boiler-Free Electric						
PART DESCRIPTION	6 • 0 5	6•10iN	10 • 10 i N	7•14i		
DOOR PARTS:						
DOOR, ARM (MARINE MODELS ONLY)	CT-22887	CT-22887	CT-22887	CT-22887		
DOOR, ARM PLATE (MARINE MODELS ONLY)	CT-22885	CT-22885	CT-22885	CT-22885		
DOOR BUSHING, ARM (MARINE MODELS)	CT-22886	CT-22886	CT-22886	CT-22886		
DOOR, CLIP	LT-25080	LT-25080	LT-25080	LT-25080		
DOOR DRAIN, OUTER	DA-25073	DA-25073	DA-25073	DA-25073		
DOOR, GLASS, INNER	GL-25384	GL-25384	GL-25902	GL-25386		
DOOR, GLASS, OUTER	GL-25165	GL-25165	GL-25901	GL-25158		
DOOR, HANDLE INSERT	HD-23084	HD-23084	HD-23084	HD-23084		
DOOR HANDLE, RIGHT HAND	HD-2934	HD-2934	HD-2934	HD-2934		
DOOR LATCH, INNER GUARD PLATE	LT-25394	LT-25394	LT-25394	LT-25394		
DOOR LATCH, RIGHT HAND	LT-25058	LT-25058	LT-25058	LT-25058		
DOOR LATCH INSET, RIGHT HAND	LT-25836	LT-25836	LT-25836	LT-25836		
DOOR, LATCH MAGNET SWITCH	LT-3738	LT-3738	LT-3738	LT-3738		
DOOR LATCH MOUNTING HARDWARE	SC-22768	SC-22768	SC-22768	SC-22768		
DOOR, INNER BUMPER	BM-25072	BM-25072	BM-25072	BM-25072		
DOOR, INNER BUMPER STOP	BM-25089	BM-25089	BM-25089	BM-25089		
DOOR, FULL ASSEMBLY	5000612	5000612	5002486	5000282		
DOOR, MAGNET	MA-25081	MA-25081	MA-25081	MA-25081		
DRIP TRAY	5000582	5000582	5000582	5000294		
GASKET, DOOR	GS-25550	GS-25550	GS-26213	GS-23903		
GASKET, DOOR, ADHESIVE	GS-23622	GS-23622	GS-23622	GS-23622		
HINGE, ANCHOR	HG-25078	HG-25078	HG-25078	HG-25078		
HINGE, INNER DOOR HINGE HINGE, INNER DOOR TOP CORNER HINGE INNER DOOR BUTTON CORNER	HG-25111	HG-25111	HG-25111	HG-25111		
HINGE, INNER DOOR TOP CORNER	HG-25390	HG-25390	HG-25390	HG-25390		
HINGE, INNER DOOR BUTTON CORNER	HG-25391	HG-25391	HG-25391	HG-25391		
HINGE, LOWER PLATE	HG-25100	HG-25100	HG-25100	HG-25100		
HINGE, LOWER DOOR RATCHET	HG-25101	HG-25101	HG-25101	HG-25101		
HINGE, UPPER PLATE	HG-25099	HG-25099	HG-25099	HG-25099		
HINGE, UPPER DOOR RATCHET	HG-25079	HG-25079	HG-25079	HG-25079		
HINGE, UPPER PLATE MTG HARDWARE:						
— SCREW, AXIS	SC-25102	SC-25102	SC-25102	SC-25102		
— WASHER, COVERING	WS-25127	WS-25127	WS-25127	WS-25127		
— WASHER, ECCENTRIC BLOCK	WS-25124	WS-25124	WS-25124	WS-25124		
— WASHER, SCHMORR STYLE	WS-25478	WS-25478	WS-25478	WS-25478		
— HINGE, TOP STOP	HG-25077	HG-25077	HG-25077	HG-25077		

Parts List • Combitherm ML Boiler-Free Ele	ctric			
PART DESCRIPTION	6•05	6•10iN	10•10iN	7•14i
DOOR PARTS (CONTD.):				
MOUNT, RELAY BOARD	5000277	5000277	5000277	5000277
PANEL, CONTROL	5000287	5000287	5000287	5000287
ELECTRICAL/ELECTRONIC PARTS:				
BOARD, DISPLAY CONTROL	BA-33732	BA-33732	BA-33732	BA-33732
— ADJUSTING ROCKER (COMPLETE)	KN-33734	KN-33734	KN-33734	KN-33734
— ADJUSTING ROCKER KNOB	KN-33735	KN-33735	KN-33735	KN-33735
— BUSHING, DISTANCE	BU-25094	BU-25094	BU-25094	BU-25094
— NUT, KNURLED M3	NU-25095	NU-25095	NU-25095	NU-25095
BOARD, LED CLOSED SYSTEM	BA-33733	BA-33733	BA-33733	BA-33733
BOARD, POWER SUPPLY	BA-33554	BA-33554	BA-33554	BA-33554
BOARD, PROGRAM MODULE (DELUXE MODELS)	BA-33742	BA-33742	BA-33742	BA-33742
— CONNECTOR, X11/X12	CR-33743	CR-33743	CR-33743	CR-33743
BOARD, RELAY CONTROL	BA-33736	BA-33736	BA-33736	BA-33736
BUSHING, MOTOR SHAFT	BU-22213	BU-22213	BU-22213	BU-22213
CABLE, COMMUNICATION	O'IX	~O)		
— SM TO BM	CB-33750	CB-33750	CB-33750	CB-33750
CONNECTOR, 9 POLES	TM-33774	TM-33774	TM-33774	TM-33774
CONNECTOR, 16 POLES	TM-33773	TM-33773	TM-33773	TM-33773
CONTACTORS, TYPE # DL4K-01, K-51/52/53	CN-3652	CN-3652	CN-3652	CN-3652
CONTACTORS, TYPE # DL7K-4H, K-1	CN-3654	CN-3654	CN-3654	CN-3654
CONTACTORS, TYPE # DL15K-00, K-41/42	CN-3731	CN-3731	CN-3731	CN-3731
ELEMENT, HEATING, CONVECTION	EL-33573	EL-3854	EL-3761	EL-3761
ELEMENT, HEATING, CONVECTION MNTG HARDWARE				
— WASHERS, FLAT	WS-22294	WS-22294	WS-22294	WS-22294
— WASHERS, SPLIT LOCK	WS-22300	WS-22300	WS-22300	WS-22300
— HEX NUTS	NU-22286	NU-22286	NU-22286	NU-22286
— NUTS	_	NU-33062	NU-33062	NU-33062
EMI FILTERS, CONTACTOR (380-415v model only)	_	FI-33990	FI-33990	
EMI FILTERS, SOLENOID (380-415v model only)	_	FI-33989	FI-33989	
FAN, INTAKE, AUXILIARY DC4112NX	FA-3568	FA-3568	FA-3568	FA-3568
FAN, WHEEL	WH-33838	WH-33758	WH-33758	WH-33758

Parts List • Combitherm ML Boiler-Free Electric					
PART DESCRIPTION	6•05	6•10iN	10•10iN	7•14i	
ELECTRICAL/ELECTRONIC PARTS (CONTD.):					
FUSE, SLOW-BLO 2AMP, 250V	FU-33184	FU-33184	FU-33184	FU-33184	
FUSE, NEOZED 6.3AMP	FU-33452	FU-33452	FU-33452	FU-33452	
FUSE HOLDER, DIN RAIL MOUNT					
— WITH DISCONNECT	FU-33756	FU-33756	FU-33756	FU-33756	
— 380-415V ONLY	_	FU-33451	FU-33451		
FUSE HOLDER, 15AMP CLASS G (1PH ONLY)	FU-3772	FU-3772	FU-3772	FU-3772	
FUSE HOLDER, 60 AMP, 3POL, CLS G (440-480v 3ph only)	_	_	FU-33039	FU33039	
FUSE, 15AMP CLASS G	FU-3775	FU-3775	FU-3775	FU-3775	
FUSE HOLDER, 15AMP, 3POL, CLS G (208-240v 3ph only)	FU-3842	FU-3842	FU-3842	FU-3842	
FUSE HOLDER AND COVER, NEOZED (380-415v model only)	CX	FU-33444	FU-33444	_	
— ADAPTER RING, FUSE		FU-33448	FU-33448	_	
— SUPPORT, FUSE	7,-	FU-33445	FU-33445	_	
MOTOR CAPACITOR, 12MFD (208-240v, 1ph only)	FA-33499	FA-33499	FA-33499	FA-33499	
MOTOR CAPACITOR, 25MFD (208-240v, 1ph only)	FA-33465	FA-33465	FA-33465	FA-33465	
MOTOR, SUB ASSEMBLY (208-240v 3ph simple and standard controls)	5000465	- 6	_	_	
MOTOR, SUB ASSEMBLY (208-240v, 1ph/3ph)	5000276	5000276	5000276	5000276	
MOTOR, SUB ASSEMBLY (380-415V, 440-480V))	5000602	5000602	5000602	
NUT, KNURLED M3	NU-25095	NU-25095	NU-25095	NU-25095	
PANEL, CONTROL OVERLAY PROGRAM OPTIONS (DELUXE MODELS)	20)	PE-25345	PE-25345	PE-25345	
PANEL, CONTROL OVERLAY (STANDARD MODELS)	PE-25319	PE-25319	PE-25319	PE-25319	
PANEL, CONTROL OVERLAY (DELUXE MODELS)	PE-25048	PE-25048	PE-25048	PE-25048	
PANEL LOCK-DOWN SCREW	CL-24089	CL-24089	CL-24089	CL-24089	
PROBE, MULTI-POINT CTC	PR-33746	PR-33746	PR-33746	PR-33746	
PROBE, OVEN TEMPERATURE (1650mm wire length)	PR-33724	PR-33724	PR-33724	PR-33724	
PROBE, STEAM BYPASS	_	_	_	PR-33751	
PROBE SEAL, THERMOCOUPLE	SA-25061	SA-25061	SA-25061	SA-25061	
RELAY, PANEL MOUNT	RL-33483	_	_	_	
SWITCH, MOTOR PROTECTION					
(1PH ONLY)	SW-33500	SW-33500	SW-33500	SW-33500	
(3ph only)	SW-33378	SW-33378	SW-33378	SW-33378	
TERMINAL, GROUND, 4mm	TM-3781	TM-3781	TM-3781	TM-3781	
TERMINAL, GROUND, 10mm	TM-3932	TM-3932	TM-3932	TM-3932	
TERMINAL PARTITION, 4mm	TM-3783	TM-3783	TM-3783	TM-3783	

Parts List • Combitherm ML Boiler-Free Ele	ctric			
PART DESCRIPTION	6•05	6•10iN	10•10iN	7•14i
ELECTRICAL/ELECTRONIC PARTS (CONTD.):				
TERMINAL PARTITION, 16mm	TM-3785	TM-3785	TM-3785	TM-3785
TERMINAL, PLUG	TM-3926	TM-3926	TM-3926	TM-3926
TERMINAL BLOCK X1	TM-33747	TM-33747	TM-33747	TM-33747
TERMINAL BLOCK X2	TM-33748	TM-33748	TM-33748	TM-33748
TERMINAL BLOCK X3	TM-33749	TM-33749	TM-33749	TM-33749
TERMINAL BLOCK X10-X11, 4mm	TM-3778	TM-3778	TM-3778	TM-3778
TERMINAL BLOCK X10, 16mm	TM-3779	TM-3779	TM-3779	TM-3779
— TERMINAL JUMPER BAR (2 POLE)	TM-33675	TM-33675	TM-33675	TM-33675
— TERMINAL JUMPER BAR (3 POLE)	TM-33106	TM-33106	TM-33106	TM-33106
— TERMINAL JUMPER BAR (4 POLE)	TM-3787	TM-3787	TM-3787	TM-3787
THERMOSTAT, HIGH LIMIT	TT-3750	TT-3750	TT-3750	TT-3750
THERMOSTAT, HIGH LIMIT (1PH ONLY)	_	_	TT-3980	_
VALVE, SOLENOID	VA-25481	VA-25481	VA-25481	VA-25481
MECHANICAL PARTS:	- Din			
BOX, PRESSURE	5000585	5000585	5000585	5000585
BUSHING, MOTOR ASSEMBLY	BU-23894	BU-23894	BU-23894	BU-23894
BUSHING, SOCKET MEMBRANE, VENT	BU-22204	BU-22204	BU-22204	BU-22204
HOLDER, CTC PROBE	13412	13412	13412	13412
HOSE, CLEAR FLEX	HO-22255	HO-22255	HO-22255	HO-22255
HOUSING, SEAL, O-RING	SA-25139	SA-25139	SA-25139	SA-25139
LEGS, 2" (51mm) ADJUSTABLE	LG-23907	LG-23907	LG-23907	LG-23907
LAMP, COVER	CV-23896	CV-23896	CV-23896	CV-23896
LIGHT BULB	LP-3686	LP-3686	LP-3686	LP-3686
LIGHT, GLASS COVER	LP-33413	LP-33413	LP-33413	LP-33413
LIGHT SEAL	SA-23934	SA-23934	SA-23934	SA-23934
LIGHT, SOCKET RECEPTACLE	RP-3986	RP-3986	RP-3986	RP-3986



Parts List • Combitherm ML Boiler-Free Electric						
PART DESCRIPTION	6•05	6•10iN	10•10iN	7•14i		
MECHANICAL PARTS (CONTD.):						
PROBE PLUG ADAPTOR	PG-3826	PG-3826	PG-3826	PG-3826		
PROBE PLUG SEAL	SA-22199	SA-22199	SA-22199	SA-22199		
PROBE SEAL, INSERT	SA-22322	SA-22322	SA-22322	SA-22322		
PROBE SEAL, CONE	SA-22321	SA-22321	SA-22321	SA-22321		
PROBE SEAL, TOP	SA-22320	SA-22320	SA-22320	SA-22320		
SCREW COVER, M6 NATURAL	SC-23936	SC-23936	SC-23936	SC-23936		
SETUP, BOILERLESS						
— BOX, DISINTEGRATION	1001204	1001204	1001204	1001204		
— TUBE, INJECTION	5000709	5000618	5000618	5000618		
SHELVES	CX	SH-2903	SH-2903	SH-22584		
SIDERACKS	1/7,	SR-22525	SR-22267	SR-23942		
WASHER, CONICAL	_	13607	13607	13607		
PLUMBING PARTS:						
CONDENSER TANK ASSEMBLY	5000693	5000608	5000608	5000286		
CONDENSATE TANK COVER NUT	SC-24070	SC-24070	SC-24070	SC-24070		
CONDENSATE TANK COVER SCREW	SC-23936	SC-23936	SC-23936	SC-23936		
CONDENSER, INJECTION NOZZLE	5000284	5000284	5000284	5000284		
CONDENSER, O-RING	SA-22212	SA-22212	SA-22212	SA-22212		
CONDENSER, O-RING 8X2.5 EPDM	SA-23109	SA-23109	SA-23109	SA-23109		
DRAIN, CAP	CP-23895	CP-23895	CP-23895	CP-23895		
DRAIN SCREEN	DA-2943	DA-2943	DA-2943	DA-2943		
FILL LINE ASSEMBLY	5000606	5000606	5000606	5000316		
PIPE, DRAIN EXTENSION	PP-25137	PP-25137	_	_		
HAND SHOWER						
— FULL ASSEMBLY	5000731	14442	14442	14442		
— BRACKET	PB-23921	PB-23921	PB-23921	PB-23921		
— HOSE, BALL VALVE	VA-22684	VA-22684	VA-22684	VA-22684		
— VALVE, SPRAY	PB-25660	PB-23919	PB-23919	PB-23919		
— HANDLE	PB-23920	PB-23920	PB-23920	PB-23920		
— HOSE ASSEMBLY	PB-25661	PB-23922	PB-23922	PB-23922		
HOSE, CONNECTOR ELBOW WITH SEAL	HO-22116	HO-22116	HO-22116	HO-22116		
HOSE, MEASURING PIPE	5000708	5000708	5000620	5000301		
HOSE, PUMP	HO-25070	HO-25070	HO-25070	HO-25070		

Parts List • Combitherm ML Boiler-Free PART DESCRIPTION	6 • 05	6•10iN	10 • 10 i N	7•14i
PLUMBING PARTS (CONTD.):	0.03	0.1011	10 - 1011	7 - 141
HOSE, RADIATOR	HO-22254	HO-22254	HO-22254	HO-22254
HOSE, STEAM BYPASS	HO-2957	HO-2957	HO-2957	HO-2957
PROBE, MEASURE WELD	5000283	5000283	5000283	5000283
SCREEN FILTER	FI-2946	FI-2946	FI-2946	FI-2946
SEALS, O-RING	SA-22209	SA-22209	SA-22209	SA-22209
SEALS, O-RING, GAS VALVE	SA-23691	SA-23691	SA-23691	SA-23691
VALVE, FLOW CONTROL	VA-25549	VA-25549	VA-25549	VA-25549
WATER SUPPLY	5000617	5000617	5000617	5000617
S-CONTROL PARTS				
OVEN TEMPERATURE PROBE	PR-33724	PR-33724	PR-33724	PR-33724
S-CONTROL RELAY BOARD	BA-34031	BA-34031	BA-34031	BA-34031
POWER SUPPLY BOARD	BA-33554	BA-33554	BA-33554	BA-33554
CABLE, COMMUNICATION	CB-34033	CB-34033	CB-34033	CB-34033
PROGRAM BOARD	BA-34030	BA-34030	BA-34030	BA-34030
TEMPERATURE BOARD	BA-34029	BA-34029	BA-34029	BA-34029
TIMER/SPEED BOARD	BA-34028	BA-34028	BA-34028	BA-34028
PROGRAM/TEMPERATURE KNOB	KN-34037	KN-34037	KN-34037	KN-34037
TIMER KNOB	KN-34036	KN-34036	KN-34036	KN-34036
SPEED KNOB	KN-34035	KN-34035	KN-34035	KN-34035
PANEL, CONTROL	5002761	5002761	5002761	5002761
PLUG	PG-3827	PG-3827	PG-3827	PG-3827
FUSE, BUSSMAN		_	FU33581	
FUSE, 45AMP, CLASS G	_	_	FU-33040	_



Parts List • Combitherm ML Boiler-Free Smoker Electric					
PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK		
DOOR PARTS:					
DOOR, ARM (MARINE MODELS ONLY)	CT-22887	CT-22887	CT-22887		
DOOR, ARM PLATE (MARINE MODELS ONLY)	CT-22885	CT-22885	CT-22885		
DOOR BUSHING, ARM (MARINE MODELS)	CT-22886	CT-22886	CT-22886		
DOOR, CLIP	LT-25080	LT-25080	LT-25080		
DOOR DRAIN, OUTER	DA-25073	DA-25073	DA-25073		
DOOR, GLASS, INNER (for dr-25143)	GL-25383	GL-25902	GL-25386		
DOOR, GLASS, INNER (FOR DR-251640)	GL-25384	GL-25902	GL-25386		
DOOR, GLASS, OUTER (FOR DR-25143)	GL-25154	GL-25901	GL-25158		
DOOR, GLASS, OUTER (FOR DR-251640)	GL-25165	GL-25901	GL-25158		
DOOR, HANDLE INSERT	HD-23084	HD-23084	HD-23084		
DOOR HANDLE, RIGHT HAND	HD-2934	HD-2934	HD-2934		
DOOR LATCH, INNER GUARD PLATE	LT-25394	LT-25394	LT-25394		
DOOR LATCH, RIGHT HAND	LT-25058	LT-25058	LT-25058		
DOOR LATCH INSET, RIGHT HAND	LT-25836	LT-25836	LT-25836		
DOOR, LATCH MAGNET SWITCH	LT-3738	LT-3738	LT-3738		
DOOR LATCH MOUNTING HARDWARE	SC-22768	SC-22768	SC-22768		
DOOR, INNER BUMPER	BM-25072	BM-25072	BM-25072		
DOOR, INNER BUMPER STOP	BM-25089	BM-25089	BM-25089		
DOOR, FULL ASSEMBLY	5000439	5002486	5000282		
DOOR, FULL ASSEMBLY (208v MODEL ONLY)	5000612	_	_		
DOOR, MAGNET	MA-25081	MA-25081	MA-25081		
DRIP TRAY	5000582	5000582	5000294		
GASKET, DOOR	GS-25550	GS-26213	GS-23903		
GASKET, DOOR, ADHESIVE	GS-23622	GS-23622	GS-23622		
HINGE, ANCHOR	HG-25078	HG-25078	HG-25078		
HINGE, INNER DOOR HINGE	HG-25111	HG-25111	HG-25111		
HINGE, INNER DOOR TOP CORNER	HG-25390	HG-25390	HG-25390		
HINGE, INNER DOOR BUTTON CORNER	HG-25391	HG-25391	HG-25391		
HINGE, LIFT OFF WITH PIN	HG-2041	HG-2041	HG-2041		
HINGE, LIFT OFF WITHOUT PIN	HG-2429	HG-2429	HG-2429		
HINGE, LOWER PLATE	HG-25100	HG-25100	HG-25100		
HINGE, LOWER DOOR RATCHET	HG-25101	HG-25101	HG-25101		

Parts List • Combitherm ML Boiler-Free Smoker Electric					
PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK		
DOOR PARTS (CONTD.):					
HINGE, UPPER PLATE	HG-25099	HG-25099	HG-25099		
HINGE, UPPER DOOR RATCHET	HG-25079	HG-25079	HG-25079		
HINGE, UPPER PLATE MTG HARDWARE:					
— SCREW, AXIS	SC-25102	SC-25102	SC-25102		
— WASHER, COVERING	WS-25127	WS-25127	WS-25127		
— WASHER, ECCENTRIC BLOCK	WS-25124	WS-25124	WS-25124		
— WASHER, SCHMORR STYLE	WS-25478	WS-25478	WS-25478		
— HINGE, TOP STOP	HG-25077	HG-25077	HG-25077		
MOUNT, RELAY BOARD	5000277	5000277	5000277		
PANEL, CONTROL	5000287	5000287	5000287		
ELECTRICAL/ELECTRONIC PARTS:					
BOARD, DISPLAY CONTROL	BA-33732	BA-33732	BA-33732		
— ADJUSTING ROCKER (COMPLETE)	KN-33734	KN-33734	KN-33734		
— ADJUSTING ROCKER KNOB	KN-33735	KN-33735	KN-33735		
— BUSHING, DISTANCE	BU-25094	BU-25094	BU-25094		
— NUT, KNURLED M3	NU-25095	NU-25095	NU-25095		
BOARD, LED CLOSED SYSTEM	BA-33733	BA-33733	BA-33733		
BOARD, POWER SUPPLY (208v models)	BA-33554	BA-33737	BA-33737		
BOARD, POWER SUPPLY	BA-33554	BA-33554	BA-33554		
BOARD, PROGRAM MODULE (DELUXE MODELS)	BA-33742	BA-33742	BA-33742		
— CONNECTOR, X11/X12	CR-33743	CR-33743	CR-33743		
BOARD, RELAY CONTROL	BA-33736	BA-33736	BA-33736		
BUSHING, MOTOR SHAFT CABLE, COMMUNICATION — SM TO BM	BU-22213	BU-22213	BU-22213		
CABLE, COMMUNICATION					
— SM TO BM	CB-33750	CB-33750	CB-33750		
— SMOKE HEATER, 208-240V	CB-3538	CB-3538	CB-3538		
CONNECTOR, 9 POLES	TM-33774	TM-33774	TM-33774		
CONNECTOR, 16 POLES	TM-33773	TM-33773	TM-33773		
CONNECTOR, X11/X12 (COSTCO MODEL ONLY)	_	_	CR-33739		
CONTACTORS, TYPE # DL4K-01, K-51/52/53	CN-3652	CN-3652	CN-3652		
CONTACTORS, TYPE # DL7K-4H, K-1	CN-3654	CN-3654	CN-3654		
CONTACTORS, TYPE # DL15K-00, K-41/42	CN-3731	CN-3731	CN-3731		
CONVERSION WIRES	5003375	5003375	5003375		

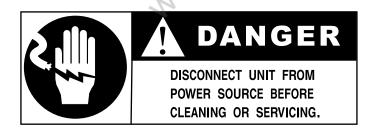
Parts List • Combitherm ML Boiler-Free Smoker Electric					
PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK		
ELECTRICAL/ELECTRONIC PARTS (CONTD.):					
ELEMENT, HEATING, CONVECTION	EL-3854	EL-3761	EL-3761		
ELEMENT, HEATING, CONVECTION MNTG HARDWARE					
— WASHERS, FLAT	WS-22294	WS-22294	WS-22294		
— WASHERS, SPLIT LOCK	WS-22300	WS-22300	WS-22300		
— HEX NUTS	NU-22286	NU-22286	NU-22286		
— NUTS	NU-33062	NU-33062	NU-33062		
EMI FILTERS, CONTACTOR (380-415v model only)	FI-33990	FI-33990	_		
EMI FILTERS, SOLENOID (380-415v model only)	FI-33989	FI-33989	_		
FAN, INTAKE, AUXILIARY DC4112NX	FA-3568	FA-3568	FA-3568		
FAN, WHEEL	WH-33758	WH-33758	WH-33758		
FUSE, SLOW-BLO 2AMP, 250V	FU-33184	FU-33184	FU-33184		
FUSE, NEOZED 6.3AMP	FU-33452	FU-33452	FU-33452		
FUSE HOLDER, DIN RAIL MOUNT					
— WITH DISCONNECT	FU-33756	FU-33756	FU-33756		
— 380-415V, 3PH ONLY	FU-33451		_		
FUSE HOLDER, 15AMP CLASS G (1PH ONLY)	0) <u>~</u>	FU-3772	FU-3772		
FUSE, 15AMP CLASS G	FU-3775	FU-3775	FU-3775		
FUSE, NEOZED 25AMP (380-415v 3ph only)	FU-33449	_	_		
FUSE HOLDER, 15AMP, 3POL, CLS G (208-240v 3ph only)	FU-3842	FU-3842	FU-3842		
FUSE HOLDER AND COVER, NEOZED (380-415v model only)	FU-33444	FU-33444	_		
— ADAPTER RING, FUSE	FU-33448	FU-33448	_		
— SUPPORT, FUSE	FU-33445	FU-33445	_		
MOTOR CAPACITOR, 12MFD (208-240v, 1ph only)	_	FA-33499	FA-33499		
MOTOR CAPACITOR, 25MFD (208-240v, 1ph only)	_	FA-33465	FA-33465		
MOTOR, SUB ASSEMBLY (208-240v, 1ph/3ph)	5000465	5000465	5000465		
— DETAIL SHAFT	5000276	5000276	5000276		
MOTOR, SUB ASSEMBLY (380v, 3ph)	5001093	5000602	_		
NUT, KNURLED M3	NU-25095	NU-25095	NU-25095		
PANEL, CONTROL OVERLAY PROGRAM OPTIONS (DELUXE MODELS)	PE-25345	PE-25345	PE-25345		
PANEL, CONTROL OVERLAY (STANDARD MODELS)	PE-25319	PE-25319	PE-25319		
PANEL, CONTROL OVERLAY (DELUXE MODELS)	PE-25048	PE-25048	PE-25048		
PANEL LOCK-DOWN SCREW	CL-24089	CL-24089	CL-24089		
PROBE, MULTI-POINT CTC	PR-33746	PR-33746	PR-33746		
PROBE, OVEN TEMPERATURE (1650mm wire length)	PR-33724	PR-33724	PR-33724		

ERECTRICALIZERECTRONIC PARTS (costs): FIRECURICALIZERECTRONIC PRESENTANT (COSTS): FIRECURICALIZERECTRONIC PRESENTANT (COSTS): FIRECURICALIZERECTRONIC PRESENTANT (COSTS): FIRECURICALIZERECTRONIC PARTS (COSTS):	Parts List • Combitherm ML Boiler-Free Smoker Electric						
PR-33751 PR-33550 RR-3483 RR-34	PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK			
PROBE SEAL, THERMOCOUPLE	ELECTRICAL/ELECTRONIC PARTS (CONTD.):						
RELAY, FANEL MOUNT REJAYAN SWITCH, MOTOR PROTECTION (208-24(0), The OKIY) — SW-33500 SW-33578 SW-3578 SW-	PROBE, STEAM BYPASS	PR-33751	PR-33751	PR-33751			
SWITCH, MOTOR PROTECTION C208 240v, Intronsp)	PROBE SEAL, THERMOCOUPLE	SA-25061	SA-25061	SA-25061			
C208-240V, IPH ONLY SW-33378 SW-3332 SW-3322 SW-3322 SW-3322 SW-3322 SW-3322 SW-3322 SW-3322 SW-3322 SW-3322 SW-3323 SW-3323 SW-3323 SW-3323 SW-3323 SW-3323 SW-3323 SW-3323 SW-3324	RELAY, PANEL MOUNT	RL-33483	RL-33483	RL-33483			
SW-33378 TERMINAL, GROUND, 4mm TM-3781 TM-3781 TM-3782 TM-3932 TM-3938 TM-3783 TM-3783 TM-3783 TM-3783 TM-3783 TM-3783 TM-3785 TM-3785 TM-3785 TM-3785 TM-3785 TM-3785 TM-3785 TM-3774 TM-33747 TM-33747 TM-33747 TM-33747 TM-33747 TM-33747 TM-33747 TM-33748 TM-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-3778 TM-3778 TM-3778 TM-3778 TM-3778 TM-3778 TM-3779 TM-3765 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33787 TM-3787 TM-3787 TM-3787 TM-3787 TM-3787 TM-3787 TM-3789 TM-3	SWITCH, MOTOR PROTECTION						
TERMINAL, GROUND, 4mm TM-3781 TM-3781 TM-3782 TERMINAL, GROUND, 10mm TM-3932 TERMINAL PARTITION, 4mm TM-3783 TERMINAL PARTITION, 4mm TM-3785 TERMINAL PARTITION, 16mm TM-3785 TERMINAL, PLUG TM-3926 TERMINAL, PLUG TM-3926 TERMINAL, PLUG TM-3926 TERMINAL BLOCK X1 TM-3777 TM-33747 TERMINAL BLOCK X2 TR-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-33749 TM-33778 TM-33778 TM-33778 TM-33778 TM-33778 TM-33778 TM-33778 TM-33778 TM-33778 TM-3778 TM-3778 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3787 TM-378 TM	(208-240v, 1ph only)	_	SW-33500	SW-33500			
TERMINAL PARTITION, 4mm	(3ph only)	SW-33378	SW-33378	SW-33378			
TERMINAL PARTITION, 4mm TM-3783 TM-3785 TERMINAL PARTITION, 16mm TM-3785 TERMINAL PARTITION, 16mm TM-3785 TERMINAL PARTITION, 16mm TM-3785 TERMINAL PARTITION, 16mm TM-3785 TERMINAL PLUG TM-3926 TM-3926 TM-3926 TM-3927 TM-33747 TM-33747 TM-33747 TM-33747 TM-33747 TM-33748 TM-33748 TM-33748 TM-33748 TM-33748 TM-33749 TM-33749 TM-33749 TM-33778 TM-33779 TM-3778 TM-3778 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3787 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33787 TM-3787 TM-3789 TM-3789 TM-3789 TM-3780 TM-3887 TM-3789 TM-3789 TM-3789 TM-3789 TM-3789 TM-3789 TM-3789 TM-3789 TM-3789 TM-3889 TM-38898 TM-38898 TM-38898 TM-3878 TM-3878 TM-3878 TM-3878 TM-3879 TM-3799 TM-3779 TM	TERMINAL, GROUND, 4mm	TM-3781	TM-3781	TM-3781			
TERMINAL PARTITION, 16mm TM-3785 TERMINAL, PLUG TM-3926 TM-33747 TM-33747 TM-33747 TM-33747 TM-33747 TM-33748 TM-33748 TM-33748 TM-33748 TM-33748 TM-33748 TM-33749 TM-33749 TM-33749 TM-33749 TM-33778 TM-33778 TM-3778 TM-3778 TM-3778 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-3779 TM-33675 TM-33675 TM-33675 TM-33675 TM-33675 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-3787 TM-3789 TM-3289 TM-328	TERMINAL, GROUND, 10mm	TM-3932	TM-3932	TM-3932			
TERMINAL PLUG TM-3926 TM-3926 TM-3926 TERMINAL BLOCK X1 TM-33747 TM-33747 TM-33747 TERMINAL BLOCK X2 TM-33748 TM-33748 TM-33748 TERMINAL BLOCK X3 TM-33749 TM-33749 TM-33749 TERMINAL BLOCK X10-X11, 4mm TM-3778 TM-3778 TM-3778 TERMINAL BLOCK X10, 16mm TM-3779 TM-3779 TM-3779 — TERMINAL JUMPER BAR (2 POLF) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (2 POLF) TM-33106 TM-33106 TM-33106 — TERMINAL JUMPER BAR (4 POLE) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODEL ONLY) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BUSSURE 5002674 5002674 5002674 BUSSURE 5002674 5002674 500	TERMINAL PARTITION, 4mm	TM-3783	TM-3783	TM-3783			
TERMINAL BLOCK X1 TM-33747 TM-33747 TM-33747 TERMINAL BLOCK X2 TM-33748 TM-33748 TM-33748 TERMINAL BLOCK X3 TM-33749 TM-33749 TM-33749 TERMINAL BLOCK X10-X11, 4mm TM-3778 TM-3778 TM-3778 TERMINAL BLOCK X10, 16mm TM-3779 TM-3779 TM-3779 — TERMINAL JUMPER BAR (2 POLE) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (3 POLE) TM-33106 TM-33106 TM-33106 — TERMINAL JUMPER BAR (4 POLE) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (costco Model Only) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BU-23894 BU-23894 BU-23894 BU-23894 BUSING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 500	TERMINAL PARTITION, 16mm	TM-3785	TM-3785	TM-3785			
TERMINAL BLOCK X2 TM-33748 TM-33748 TM-33748 TERMINAL BLOCK X3 TM-33749 TM-33749 TM-33749 TERMINAL BLOCK X10-X11, 4mm TM-3778 TM-3778 TM-3778 TERMINAL BLOCK X10, 16mm TM-3779 TM-3779 TM-3779 — TERMINAL JUMPER BAR (2 POLF) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (3 POLF) TM-33406 TM-33106 TM-33106 — TERMINAL JUMPER BAR (4 POLF) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODEL ONLY) — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 BU-23894 BU-23894 BU-23894 BU-23894 BU-23894 BU-23894 BU-34894 BU-23894 BU-22204 CHIP TRAY 5002674 5002674 BRACKET BT-25900 BT-25900 BT-25900	TERMINAL, PLUG	TM-3926	TM-3926	TM-3926			
TERMINAL BLOCK X3 TM-33749 TM-33749 TM-33749 TERMINAL BLOCK X10-X11, 4mm TM-3778 TM-3778 TM-3778 TERMINAL BLOCK X10, 16mm TM-3779 TM-3779 TM-3779 — TERMINAL JUMPER BAR (2 POLE) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (3 POLE) TM-33106 TM-33106 TM-33106 — TERMINAL JUMPER BAR (4 POLE) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODIEL ONLY) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-22894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 <td< td=""><td>TERMINAL BLOCK X1</td><td>TM-33747</td><td>TM-33747</td><td>TM-33747</td></td<>	TERMINAL BLOCK X1	TM-33747	TM-33747	TM-33747			
TERMINAL BLOCK X10, 16mm TM-3778 TM-3778 TM-3778 TERMINAL BLOCK X10, 16mm TM-3779 TM-3779 TM-3779 — TERMINAL JUMPER BAR (2 POLE) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (3 POLE) TM-33106 TM-33106 TM-33106 — TERMINAL JUMPER BAR (4 POLE) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODEL ONLY) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-223894 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 5002674 5002674 5002674 BR-25900 BT-25900	TERMINAL BLOCK X2	TM-33748	TM-33748	TM-33748			
TERMINAL BLOCK X10, 16mm TM-3779 TM-33675 TM-33675 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-3787 TM-3779 TM-3787 TM-3106 TM-3787 TM-387 TM-3787 TM-3787 TM-3787 TM-378 TM-3787 TM-3787 TM-3787	TERMINAL BLOCK X3	TM-33749	TM-33749	TM-33749			
— TERMINAL JUMPER BAR (2 POLE) TM-33675 TM-33675 TM-33675 — TERMINAL JUMPER BAR (3 POLE) TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-3787 TM-3750 TT-3750 TT-3750 TT-3750 TT-3750 TT-3750 TT-3750 TT-3750 TM-37404 TM-3741 TM-3741 TM-3741 TM-3741 TM-3741 TM-3741 TM-3741 TM-3741	TERMINAL BLOCK X10-X11, 4mm	TM-3778	TM-3778	TM-3778			
— TERMINAL JUMPER BAR (3 PQ15) TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-33106 TM-3787 TM-3750 TM-3750 TT-3750 TT-3750 TT-3750 TT-3750 TM-34045 VA-34045 VA-24045 DV-225884 BU-23894 BU-23894	TERMINAL BLOCK X10, 16mm	TM-3779	TM-3779	TM-3779			
— TERMINAL JUMPER BAR (4 POLE) TM-3787 TM-3787 TM-3787 THERMOSTAT, HIGH LIMIT TT-3750 TT-3750 TT-3750 VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODEL ONLY) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-23894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	— TERMINAL JUMPER BAR (2 POLE)	TM-33675	TM-33675	TM-33675			
THERMOSTAT, HIGH LIMIT TT-3750 TT-3764 VA-34045 VA-3404 VA-34045 VA-	— TERMINAL JUMPER BAR (3 POLE)	TM-33106	TM-33106	TM-33106			
VALVE, TRIPLE SOLENOID VA-34045 VA-34045 VA-34045 VALVE, SOLENOID (COSTCO MODEL ONLY) — — VA-25481 MECHANICAL PARTS: BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-23894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	— TERMINAL JUMPER BAR (4 POLE)	TM-3787	TM-3787	TM-3787			
VALVE, SOLENOID (COSTCO MODEL ONLY) — — VA-25481 MECHANICAL PARTS: — — VA-25481 BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-23894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	THERMOSTAT, HIGH LIMIT	TT-3750	TT-3750	TT-3750			
MECHANICAL PARTS: 5000585 5000585 5000585 BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-23894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	VALVE, TRIPLE SOLENOID	VA-34045	VA-34045	VA-34045			
BOX, PRESSURE 5000585 5000585 5000585 BUSHING, MOTOR ASSEMBLY BU-23894 BU-23894 BU-23894 BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907	VALVE, SOLENOID (COSTCO MODEL ONLY)	_	_	VA-25481			
BUSHING, MOTOR ASSEMBLY BU-23894 BU-2204 B	MECHANICAL PARTS:						
BUSHING, SOCKET MEMBRANE, VENT BU-22204 BU-22204 BU-22204 BU-22204 CHIP TRAY 5002674 5002674 5002674 BT-25900 BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 LG-23907 LG-23907	BOX, PRESSURE	5000585	5000585	5000585			
CHIP TRAY 5002674 5002674 5002674 — BRACKET BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907	BUSHING, MOTOR ASSEMBLY	BU-23894	BU-23894	BU-23894			
— BRACKET BT-25900 BT-25900 BT-25900 HOLDER, CTC PROBE 13412 13412 13412 HOSE, CLEAR FLEX HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	BUSHING, SOCKET MEMBRANE, VENT	BU-22204	BU-22204	BU-22204			
HOLDER, CTC PROBE 13412 13412 13412 13412 HO-22255 HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907	CHIP TRAY	5002674	5002674	5002674			
HOSE, CLEAR FLEX HO-22255 HO-22255 HOUSING, SEAL, O-RING SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907	— BRACKET	BT-25900	BT-25900	BT-25900			
HOUSING, SEAL, O-RING SA-25139 SA-25139 SA-25139 LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907	HOLDER, CTC PROBE	13412	13412	13412			
LEGS, 2" (51mm) ADJUSTABLE LG-23907 LG-23907 LG-23907	HOSE, CLEAR FLEX	HO-22255	HO-22255	HO-22255			
	HOUSING, SEAL, O-RING	SA-25139	SA-25139	SA-25139			
LAMP, COVER CV-23896 CV-23896 CV-23896	LEGS, 2" (51mm) ADJUSTABLE	LG-23907	LG-23907	LG-23907			
	LAMP, COVER	CV-23896	CV-23896	CV-23896			

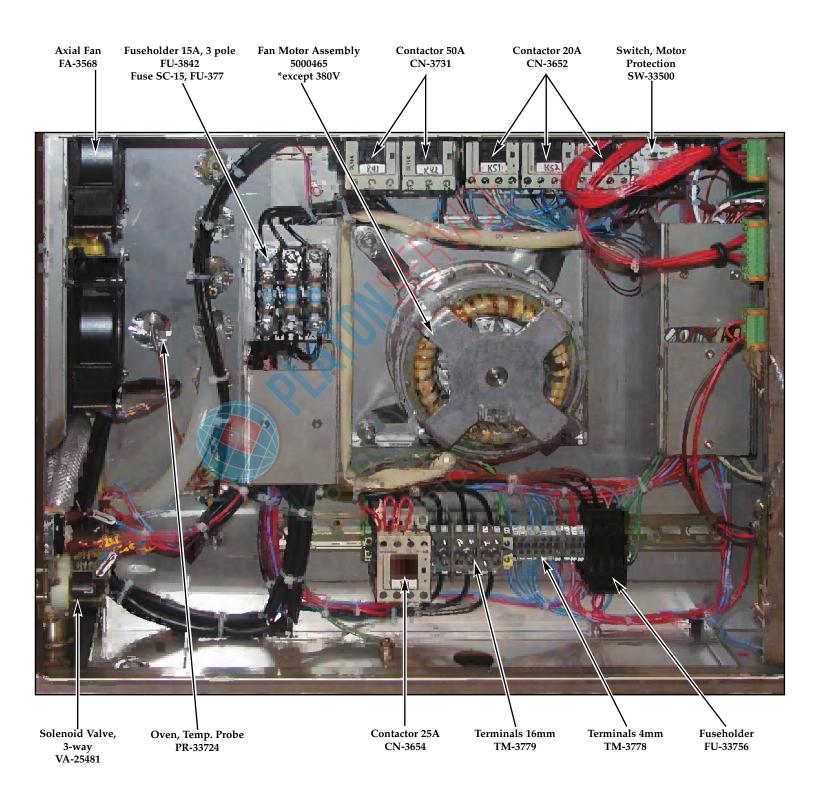
PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK
MECHANICAL PARTS (CONTD.):	0 101117511	10 10111/010	, 111,51
LIGHT BULB	LP-3686	LP-3686	LP-3686
LIGHT, GLASS COVER	LP-33413	LP-33413	LP-33413
LIGHT SEAL	SA-23934	SA-23934	SA-23934
LIGHT, SOCKET RECEPTACLE	RP-3986	RP-3986	RP-3986
PROBE PLUG ADAPTOR	PG-3826	PG-3826	PG-3826
PROBE PLUG SEAL	SA-22199	SA-22199	SA-22199
PROBE SEAL, INSERT	SA-22322	SA-22322	SA-22322
PROBE SEAL, CONE	SA-22321	SA-22321	SA-22321
PROBE SEAL, TOP	SA-22320	SA-22320	SA-22320
SCREW COVER, M6 NATURAL	SC-23936	SC-23936	SC-23936
SETUP, BOILERLESS			
— BOX, DISINTEGRATION	1001204	1001204	1001204
— TUBE, INJECTION	5000618	5000618	5000618
— TUBE, INJECTION (WW MODELS ONLY)	5003511	_	_
SHELVES	SH-2903	SH-2903	SH-22584
SIDERACKS	SR-22525	SR-22267	SR-23942
WASHER, CONICAL	13607	13607	13607
PLUMBING PARTS:	7,3		
CONDENSER TANK ASSEMBLY	5000608	5002774	5002790
CONDENSER TANK ASSEMBLY (208v MODELS ONLY)	5002774	_	_
CONDENSER TANK ASSEMBLY (WW MODELS ONLY)	5003510	_	_
CONDENSATE TANK COVER NUT	SC-24070	SC-24070	SC-24070
CONDENSATE TANK COVER SCREW	SC-23936	SC-23936	SC-23936
CONDENSER, INJECTION NOZZLE	5000284	5000284	5000284
CONDENSER, O-RING	SA-22212	SA-22212	SA-22212
CONDENSER, O-RING 8X2.5 EPDM	SA-23109	SA-23109	SA-23109
DRAIN, CAP	CP-23895	CP-23895	CP-23895
DRAIN SCREEN	DA-2943	DA-2943	DA-2943



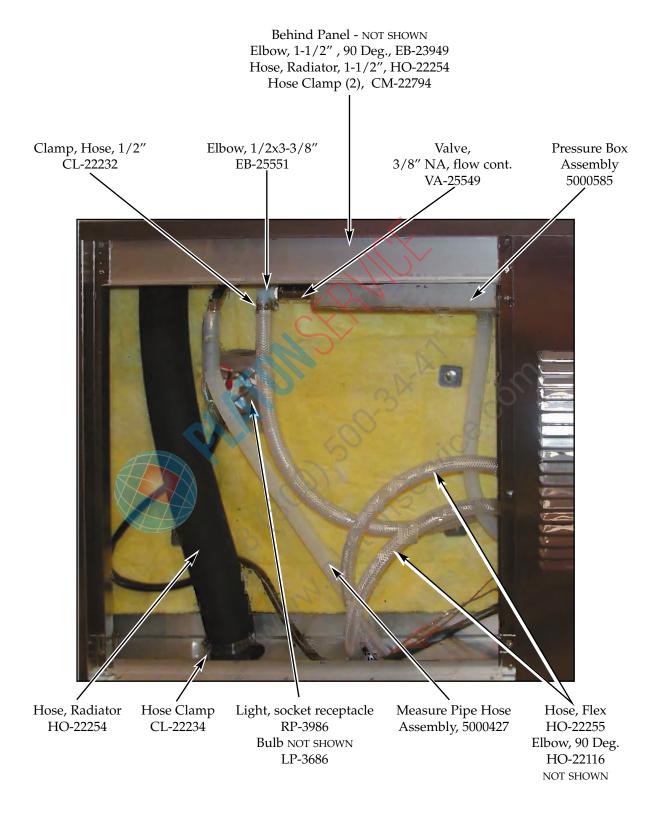
Parts List • Combitherm ML Boiler-Free S	moker Electr	ic	
PART DESCRIPTION	6•10iN/SK	10•10iN/SK	7•14i/SK
PLUMBING PARTS (CONTD.):			
FILL LINE ASSEMBLY	5002791	5002775	5002791
FILL LINE ASSEMBLY (208v models only)	5002775	_	_
PIPE, DRAIN EXTENSION	PP-26308	PP-26308	PP-26308
PIPE, DRAIN EXTENSION (380-450v, non-npe models only)	PP-25137	_	_
HAND SHOWER			
— FULL ASSEMBLY	14442	14442	14442
— BRACKET	PB-23921	PB-23921	PB-23921
— HOSE, BALL VALVE	VA-22684	VA-22684	VA-22684
— VALVE, SPRAY	PB-23919	PB-23919	PB-23919
— HANDLE	PB-23920	PB-23920	PB-23920
— HOSE ASSEMBLY	PB-23922	PB-23922	PB-23922
HOSE, CONNECTOR ELBOW WITH SEAL	HO-22116	HO-22116	HO-22116
HOSE, MEASURING PIPE	5000708	5000620	5000301
HOSE, PUMP	HO-25070	HO-25070	HO-25070
HOSE, RADIATOR	HO-22254	HO-22254	HO-22254
HOSE, STEAM BYPASS	HO-2957	HO-2957	HO-2957
PROBE, MEASURE WELD	5000283	5000283	5000283
SCREEN FILTER	FI-2946	FI-2946	FI-2946
SEALS, O-RING	SA-22209	SA-22209	SA-22209
SEALS, O-RING, GAS VALVE	SA-23691	SA-23691	SA-23691
VALVE, FLOW CONTROL	VA-25549	VA-25549	VA-25549
WATER SUPPLY	5000617	5000617	5000617



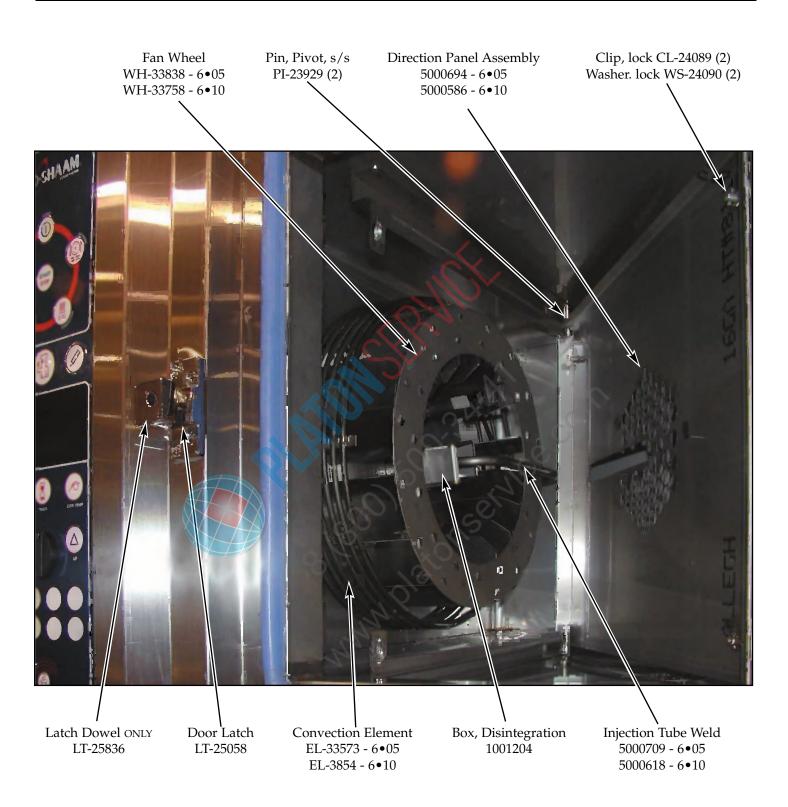
SERVICE VIEW • SIDE PANEL ACCESS Model 6•10iNml



SERVICE VIEW • BACK PANEL ACCESS Model 6•10iNml



SERVICE VIEW • OVEN INTERIOR





M. ORIGINAL EQUIPMENT LIMITED WARRANTY

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

The labor warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first. Alto-Shaam will bear normal labor charges performed during standard business hours, and excluding overtime, holiday rates or any additional fees.

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

THIS WARRANTY DOES NOT APPLY TO:

- 1. Replacement of light bulbs.
- 2. Equipment damage caused by accident, shipping, improper installation or alteration.
- Steam generator or steam generating system damage as a direct result of inadequate routine maintenance and cleaning. Required maintenance and cleaning of steam generating equipment is the responsibility of the owner/operator.
- 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 and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator. The installation and use of Alto-Shaam's CombiGuard™ Water Filtration System is highly recommended.

ALTO-SHAAM COMBITHERM WATER QUALITY RECOMMENDATIONS			
CONTAMINANT	INLET WATER REQUIREMENTS WITHOUT COMBIGUARD WATER FILTER	INLET WATER REQUIREMENTS WITH COMBIGUARD WATER FILTER*	
Free Chlorine	Less than 0.1 ppm (mg\L)	Less than 2.5 ppm (mg\L)	
Hardness	Less than 3 gpg (52 ppm)	Up to 16 gpg (274 ppm)	
Chloride	Less than 30 ppm (mg\L)	Less than 150 ppm (mg\L)	
рН	7.0 to 8.5	7.0 to 9.0	
Alkalinity	Less than 50 ppm (mg\L)	Up to 150 ppm (mg\L)	
Total Dissolved Solids (TDS)	Less than 125	Up to 500	
*COMBI-GUARD FILTER REPLACEMENT MUST BE MADE AT REQUIRED INTERVALS.			

- 6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm_® Oven 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 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, expressed 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 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.

Alto-Shaam, Inc.



M. TRANSPORTATION DAMAGE AND CLAIMS



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

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

- 1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
- 2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
- 3. Note all damage to packages directly on the carrier's delivery receipt.
- 4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
- 5. If the driver refuses to allow inspection, write the following on the delivery receipt:

Driver refuses to allow inspection of containers for visible damage.

- 6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
- 7. Save any packages and packing material for further inspection by the carrier.
- 8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

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

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE. ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

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

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

Alto-Shaam has established a twenty-four hour emergency service call center to offer immediate customer access to a local authorized service agency outside of standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through the use of Alto-Shaam's toll-free number. Emergency service access is available seven days a week including holidays.

W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • U.S.A. PHONE: 262.251.3800 • 800.558-8744 USA/CANADA FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY