Operator's Manual

Self-Cleaning Rotisserie Oven

Including Optional Holding Cabinet

AR-7T AR-7HT





MN-39404-EN

ALTO-SHAAM

REV.02 6/19

Manufacturer's Information

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Trademarks	All trademarks referenced in this documentation are the property of their respective owners.		
Manufacturer	Alto-Shaam, Inc.		
	P.O. Box 450		
	W164 N9221 Water Street		
	Menomonee Falls, WI 53052		
Original instructions	The content in this manual is written in American English.		



Enjoy your Alto-Shaam Rotisserie Oven!

Exclusive cleaning and grease collection systems	This rotisserie oven features a hands-free, self-cleaning design that saves time and uses 35% less water than traditional models during the automatic cleaning process. The oven's cleaning system also has no moving parts, which makes it more reliable.	
	The built-in grease collection system pumps grease into jugs that are easily removed for safe and quick disposal.	
Various cooking options	Obtain perfect crispiness and even browning with flexibility to choose from seven browning levels and four cooking levels.	
Attractive design	The oven has an illuminated interior to highlight the food for your customers to help boost impulse sales.	

Extend Your Manufacturer's Warranty

Register

Register your Alto-Shaam appliance online. Registering your appliance ensures prompt service in the event of a warranty claim. You will also receive direct notifications of software updates and additional product information.

Your personal information will not be shared with any other company.

www.alto-shaam.com/warranty

Alto-Shaam 24/7 Emergency Repair Service

Call Call 800-558-8744 to reach our 24-hour emergency service call center for immediate access to local authorized service agencies outside standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through Alto-Shaam's toll free number.

Availability Emergency service access is available seven days a week, including holidays.



Foreword



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The Meaning of Signal Words

This manual contains signal words where needed. These signal words must be obeyed to reduce the risk of death, personal injury, or equipment damage. The meaning of these signal words is explained below.



DANGER

Danger indicates a hazardous situation which, if not avoided, will result in serious injury or death.



WARNING

Warning indicates a hazardous situation which, if not avoided, could result in serious injury or death.



CAUTION

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



Notice indicates a situation which, if not avoided, could result in property damage.



NOTE: Note indicates additional information that is important to a concept or procedure.



Appliance Description and Intended Use

Appliance Description	This Alto-Shaam rotisserie oven is an electric-powered oven with programmable touchscreen control that includes multi-level cooking for preheat, cooking, holding, and cool-down stages. It includes a self-cleaning wash system with built-in sanitizing cycle. Seven angled spits are included; a variety of spits are offered as options. Double-pane glass door available in curved or flat options. USB port for recipe upload and download.
Intended use	The rotisserie oven is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized.
Residual risks	This appliance is manufactured using ISO-certified processes. The appliance is designed with maximum safety in mind; however, there are residual risks to operators of this oven. Residual risks include exposure to heat and exposure to hot food products.
Possible misuse	Misuse of this appliance includes cooking food containing flammable materials (such as food with alcohol). Substances with a low flash point can ignite spontaneously and cause a fire.



Safety Precautions

Before you begin	Read and understand all instructions in this manual.				
Electrical precautions	Obey these electrical precautions when using the appliance:				
	 Various electrical configurations of the rotisserie are available. Always match the power source with the power rating on the rotisserie's data tag. 				
	Use one (1) dedicated circuit per rotisserie.				
	Use a junction box or electrical disconnect within 3' (914mm) of rotisserie.				
	Keep the cord away from hot surfaces.				
	 Electrical connections and circuit breakers must meet all applicable federal, state and local codes. 				
	Do not let the cord hang over the edge of a table or counter.				
Usage precautions	Obey these usage precautions when using the appliance:				
	Only use this appliance for its intended use of cooking or heating.				
	Do not load liquids, or foods that can become liquid when heated, into the rotisserie.				
	Use utensils and protective clothing when loading and unloading the appliance.				
	 Use caution when using the appliance. Floors adjacent to the appliance may become slippery. 				
	 Use caution when opening the appliance door. Escaping hot vapors or steam can cause serious injury. 				
	Do not open the door of the rotisserie during the cleaning cycle.				
	Do not cover or block any of the openings of this appliance.				
	Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.				
Maintenance	Obey these maintenance precautions when maintaining the appliance:				
precautions	 Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance. 				
	The appliance must be cleaned thoroughly to prevent deposits of grease and food residue inside the appliance that may catch fire.				
	Do not place combustible materials in the appliance.				
	Do not store the appliance outdoors.				
	Do not clean the appliance with metal scouring pads.				
	Do not store or use any flammable substances near the appliance.				
	For users only: Do not remove the top cover or side panels. There are no user- serviceable components inside.				



SAFETY

Caster precautions	Obey these precautions if the appliance is installed on casters.			
	 Restrict movement of the appliance with a tether so that utility connections (water and electricity) are not damaged. 			
	Disconnect all utility connections when moving the appliance.			
	Only use this appliance when it is stationary.			
	Use caution when using the appliance on uneven floors. Mobile appliances and accessories can roll or tip over and cause serious injury or property damage.			
	Lock the caster brakes on mobile appliances or accessories when they are not being moved.			
Operator training	All personnel using the appliance must have proper operator training. Before using the appliance:			
	Read and understand the operating instructions contained in all the documentation delivered with the appliance.			
	Know the location and proper use of all controls.			
	Keep this manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels with the appliance if the appliance is sold or moved to another location.			
	Contact Alto-Shaam for additional training if needed.			
Operator qualifications	Only trained personnel with the following operator qualifications are permitted to use the appliance:			
	Have received proper instruction on how to use the appliance.			
	 Have demonstrated their ability with commercial kitchens and commercial appliances. 			
	The appliance must not be used by:			
	Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.			
	People impaired by drugs or alcohol.			
	Children should be supervised to ensure that they do not play with the appliance.			
	Children shall neither clean nor maintain the appliance.			
Condition of	Only use the appliance when:			
appliance	All controls operate correctly.			
	The appliance is installed correctly.			
	The appliance is clean.			
	The appliance labels are legible.			





Servicing the appliance
 Only trained personnel are permitted to service or repair the appliance. Repairs that are not performed by an authorized service partner or trained technician, or the use of non-factory parts, will void the warranty and relieve Alto-Shaam of all liability.
 To prevent serious injury, death or property damage, have the appliance inspected and convised at least even twolve (12) months by an authorized service.

inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.

Wear the following Personal Protective Equipment (PPE) while cleaning the

Contact Alto-Shaam for the authorized service partner in your area.

Personal Protective Equipment (PPE)

Protective gloves

appliance:

- Protective clothing
- Eye protection
- Face protection



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Label Locations







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Dimension Drawings





How to Receive the Appliance

Responsible parties	When an Alto-Shaam preferred carrier is used, shipping damage is a matter between Alto-Shaam and the carrier. In such cases, contact Alto-Shaam customer service.			
	When an Alto-Shaam non-preferred carrier is used, shipping damage 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 part of the shipper.			
Receive the appliance	When receiving the appliance, do the following.			
	Step	Action		
	1.	Inspect the equipment while it is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the equipment is moved to a storage area.		
	2.	Inspect and count all merchandise received. Do not sign a delivery receipt or a freight bill until you have done so.		
	3.	Note all damage to packaging and to the equipment on the carrier's receipt.		
	4.	Request the driver sign the delivery receipt. If the driver refuses to sign, make a note of this refusal on the delivery receipt.		
	5.	Write the following on the delivery receipt if the driver refuses to allow an inspection: Driver refuses to allow inspection of containers for visible damage.		
	6.	Contact the carrier immediately upon finding damage, and request an inspection. Follow the carrier's policies and procedures.		
Alto-Shaam policy	It is the been pro damage deductio	policy of Alto-Shaam to assist customers in collecting claims that have operly filed and actively pursued. Alto-Shaam cannot, however, file claims, assume the responsibilities for damage claims, or accept ons in payment for damage claims.		



How to Unpack the Oven

Before you begin	Make sure you have:				
	An appropriate lifting device and enough personnel to safely move and position the weight of the oven.				
	□ A	R7T: 361 lb (164 kg)			
	Cutti	ing tools to remove the packaging.			
Unpack the oven	To unpack the oven, do the following.				
	Step	Action			
	1.	Remove banding before lifting the oven. Only lift the oven from the front.			
	2.	Remove the appliance from the carton or crate. Save all packing materials for inspection by the carrier.			
		NOTE: Examine the appliance for damage. If the appliance has been damaged, do not use the appliance until it has been inspected by an authorized service provider. Contact your carrier or Alto-Shaam customer service.			
	3.	Remove all protective film, packaging materials, and items from inside the appliance.			
Clean the oven	4.	Clean any detachable parts such as spits, baskets, and drip trays with hot, soapy water. Dry with a clean, lint-free cloth.			
	5.	Clean the interior and exterior of the appliance with a mild soap and water solution. Remove any detergent residue with a clean, damp cloth. Dry with a clean, lint-free cloth.			
	6.	Clean the appliance glass with glass cleaner or distilled vinegar.			
	7.	Re-install the spits and baskets.			
Result	The over	n is now unpacked.			



Rotisserie Pre-Installation Checklist

Installation of the oven is to be completed only by an authorized Alto-Shaam service partner.

Place this form with the oven's records.



WARNING: Electric shock and arc flash hazard. Use caution when measuring line voltage and line current. Wear Personal Protective Equipment (PPE).

Site survey date:	Installation company name:
Location name:	Survey technician name:
Location address:	
Contact name:	Contact phone number:
	Contact email:

Appliance model number(s):	Appliance serial number(s):		
Number of units to be installed:			

Appliance visual inspection (outside)			
	Yes	No	
Is the exact location of the oven known?			
Is the location of the oven on a level surface?			
Measure the door/entranceway clearance.	Door 1	Door 2	Door 3
			Hall 2
Neasure the hallway clearance.	ΠάΠ Τ		
Measure the elevator opening.		1	1
Measure the elevator internal dimensions	Height	Width	Depth
Is there room to move the oven through hallways, doors,	Yes	No	
and paths to reach its destination?			
Based on the oven's location, will the oven be accessible for servicing?			
Is a ventilation hood installed above where the oven will be installed?			

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Oven Clearances:	Record	Pass	Fail
Right side:			
Rear:			
Left side:			
Тор:			
	Yes/No		
Is the oven accessible for service?			
If NO, comment on the issue:			
Other comments:			

Water supply:			
	Yes	No	
Is there a 3/4" cold water supply line per oven within 3'			
(914mm) of where the oven(s) are to be installed.			
Is there a 3/4" NPT male fittings with shut offs			
connected to each of the oven(s) to be installed?			
Is the dynamic water pressure from the 3/4" cold			
water supply line a minimum of 30 psi for each oven?			
Is the static water pressure from the 3/4" cold water			
supply line less than 90 psi for each oven?			
If yes, note the system here.	Brand name:		Model:
Measured rate of flow:			
(2 GPM required)	GPM:		
Measured water pressure:			
(30-90 PSI required)	PSI:	BAR:	
	Ves	No	
	103		
Does the water supply line(s) have a shutoff valve(s)	105		
Does the water supply line(s) have a shutoff valve(s) for each oven?	105		
Does the water supply line(s) have a shutoff valve(s) for each oven? Can this site contact provide evidence that a			

Electrical:	Record		
Rated oven voltage/phase:	Voltage:	Phase:	
Actual main voltage provided:	Voltage:	Phase:	
What is the measured voltage on site?	1 PH L1-N:	L2-N:	
	3 PH L1-N:	L2-N:	L3-N:
	3 PH L1-L2:	L1-L3:	L2-L3:
Recommended breaker size:	Breaker size on site:		·
Is there a disconnect or junction box within 3 feet of where the oven is being installed?			



Drain:	Yes	No
Is the drain located within 3 feet (914mm) of the oven?		
If no, what is the distance?		
Is the drain located directly beneath the oven?		
	Yes	No
Are there any challenges for a successful installation?		
If so, please explain in detail.		÷

Signoff:	Date:
Site contact name and signature:	
Technician name and signature:	



Rotisserie Post-Installation Checklist

Installation of the oven is to be completed only by an authorized Alto-Shaam service partner.

Place this form with the oven's records.



WARNING: Electric shock and arc flash hazard. Use caution when measuring line voltage and line current. Wear Personal Protective Equipment (PPE).

Installation date:	Start up date:
Location name:	Location address:
Contact name:	
Contact phone number:	Appliance model number:
Contact email:	Appliance serial number:
	Appliance rated voltage:

Oven physical condition	Dam	aged	
	Yes	No	Record any damage
Front of oven			
Left side			
Back of oven			
Right side			
Top and bottom/legs			

Appliance visual inspection (outside)	Yes	No
Is there room to move the oven through hallways, doors, and paths to reach its destination?		
Is there adequate air flow and ventilation around the oven?		
Is the water collection tray installed correctly?		
Is the power cord in good condition?		
Can the power cord reach the wall supply without the use of an extension cord?		
Is the oven level? Check front to back and side to side.		

Appliance visual inspection (internal)		Loose/Damaged		
Appliance visual hispection (internal)	Yes	No		
Check all wiring for any loose connections.				
Check the overall system for any damage from shipping or installation.				



Oven Clearances:	Record	Pass	Fail
Right side:			
Rear:			
Left side:			
Top:			
	Yes/No		
Is the oven accessible for service?			·
If NO, comment on the issue:			
Other comments:			

Water supply:			
	Yes	No	
Is there a 3/4" cold water supply line per oven within 3'			
(914mm) of where the oven(s) are to be installed.			
Is there a 3/4" NPT male fittings with shut offs			
connected to each of the oven(s) to be installed?			
Is the dynamic water pressure from the 3/4" cold			
water supply line a minimum of 30 psi for each oven?			
Is the static water pressure from the 3/4" cold water			
supply line less than 90 psi for each oven?			
Is water treatment being used?			Туре:
If yes, note the system here.	Brand name:		Model:
Are all exterior water connections tight?			
Measured rate of flow:	GPM:		
Measured water pressure:	PSI:	BAR:	
	Yes	No	
Is the line treated water?			
Has the water analysis been completed?			
Does the water meet minimum quality standards?			

Electrical:	Record		
Rated oven voltage/phase:	Voltage:	Phase:	
Actual main voltage provided:	Voltage:	Phase:	
Actual voltage:	1 PH L1-N:	L2-N:	
	3 PH L1-N:	L2-N:	L3-N:
	3 PH L1-L2:	L1-L3:	L2-L3:
Breaker size:		· · · ·	·



Drain:	Yes	No	
Is the drain located within 3 feet (914mm) of the oven?			
If no, what is the distance?			
Is the drain located directly beneath the oven?			
If yes, can the drain be moved?			
Can other accommodations for the drain be made?			
	Comme	Comments	
If the drain cannot be moved, or other accommodations			
made, contact Alto-Shaam.			
	Yes	No	
		1	
Will all materials for drain plumbing be available at the time of installation?			



How to Connect the Wiring



WARNING: Electric shock hazard. This procedure to be done only by qualified personnel familiar with local electrical codes.

 Before you begin
 Make sure the oven is disconnected from power.

 Procedure
 To connect the wiring to the oven, do the following.

 Step
 Action

 1.
 Remove the left side service panel.

 Image: Ima

Continued on next page

AR-TS-005557





Result

The wiring is now connected to the oven.



How to Install the Water Supply and Drain

Before you begin

NOTE: Refer to the detailed instructions that come with the installation kit.

NOTICE Si ex m

Significant damage to the appliance cavity, elements, or heat exchanger could result from improper water quality. Failure to meet the water quality requirements will void the warranty.

Make sure:

- The supply lines are flexible to allow the oven to be moved when service or cleaning is needed.
- The incoming water supply is shut off when the oven is not being used.

Requirements

Water requirements for automatic cleaning option:

- One (1) water inlet, drinking quality (treated)
- Treated water line: 3/4" NPT connection
- Water temperature range: 50°–140°F (10°–60°C)
- Line pressure min. 30 psi (200 kPa) dynamic, max. 90 psi (600 kPa) static
- Two (2) gallons per minute minimum flow
- One (1) 3/4" ID water supply shut-off valve and back-flow preventer per rotisserie where required by local code
- Water drain: 3/4" NPT connection with air gap at floor. Materials must withstand temperatures up to 200°F (93°C)
- Floor drain within 3' (914mm) of rotisserie. Drain may not be directly below rotisserie.

It is the responsibility of the operator to make sure the incoming water supply is tested and meets the compliance requirements with the published water quality standards listed below. Non-compliance could damage the oven and void the warranty. Alto-Shaam recommends using OptiPure products to treat the water.

Contaminant	Inlet water requirement
Free Chlorine	less than 0.2 ppm (mg/L)
Hardness	30–170 ppm
Chloride	less than 50 ppm (mg/L)
рН	7.0–8.5
Silica	less than 12 ppm (mg/L)
Total Dissolved Solids (TDS)	50–125 ppm
Chloramine	less than 0.2 ppm (mg/L)



Installing the water supply

To install the water supply, do the following.

supply			
	Step	Action	
	1.	Flush the water line at the installation site.	
	2.	Install adequate backflow protection to comply with applicable federal, state, and local codes.	
	3.	Apply Teflon® tape at all connection points.	
		NOTE: It is not recommended to use a pipe sealing compound.	
	4.	Install a manual water shut-off valve between the water supply line and the rotisserie.	
	5.	Connect the water supply to the water inlet.	
Water inlet requirements	50 ftBend	. (15.24m) maximum run ds	
	$_{ m \square}~$ 4 at 90° maximum, 2 at 45° maximum		
	Hori	zontal runs	
	□ 1	" (25mm) per 10 ft. (3,048mm)	
	No a	ir vent required	
	1" (2	5mm) air gap at drain	
	Do n	ot block the access panel	

- Do not block the grease valve
- Piping materials must withstand temperatures up to 200°F (93°C)



Installing the water drain

- To install the water drain, do the following.
 - 6. **Install** the 45° elbow onto a piece of pipe.

Cut the pipe to a length that places the elbow in-line with the rear corner panel of the oven.

Install the pipe assembly into the 90° elbow.



7. **Cut** a piece of pipe to a length that places the end of the pipe below the bottom of the oven.

Install the pipe assembly into the 45° elbow.





Result

The water supply and drain are now installed.



How to Install the Liquid Cleaner

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner.

Procedure

Step	Action		
1.	Mount the cleaner support tray on the left exterior panel of the oven. Slide the slotted openings on the cleaner support tray ① over the mounting studs.		
	Image: Construction of the second		
	The cleaner support tray holds a 2-1/2-gallon (9.5 liter) bottle.		
2.	Place the liquid cleaner bottle ② inside the support tray.		
3.	Pull the cleaner cap and tubing assembly (3) from the rear of the oven and screw the cleaner cap onto the liquid cleaner bottle.		
4.	Position the cleaner cap so that the tubing assembly is not kinked after the cleaner cap is tightened.		
	The liquid cleaner is automatically pumped through the system during each liquid cleaning cycle.		



Result

How to Install the Grease Collection System

Before you begin The grea

The grease collection valve requires 6" (152mm) of vertical clearance. For counter-top installations, the legs should be set to a height of 6" (152mm).

The handle of the grease collection valve must be parallel to the side of the oven. Use enough Teflon® tape for a tight seal at the correct angle.

Procedure To install the grease collection system, do the following.

Step Action

- 1. **Unpack** the grease collection valve assembly and the grease collection container assembly.
- Apply Teflon® tape to the fittings on the grease collection hose ① and valve ②.



3. **Insert** the valve into the elbow (3).











The grease collection system is now installed.


How to Install the Carousel

Before you begin

Allow the oven to cool.

Obtain protective gloves and wear them throughout the procedure.

Installation

To install the carousel, do the following.

Step Action

1. **Align** the pin (1) in the drive hub (2) with the slot in the drive shaft.



2. **Insert** the bushing (3) into the cup (4).



Be sure that the lip (5) of the cup is installed between the bushing and the disc (6).





3. **Align** the pin of the shaft coupler ⑦ with the hole in the drive hub coupler ⑧ and connect the coupler halves.



4. **Slide** the collar **9** over the coupler.



Slide the retaining ring 0 over the coupler and push it into the groove. Note that the retaining ring fits loosely in the groove and it may move as the carousel rotates.

Result

The carousel is now installed.



How to Remove the Carousel

Before you begin

Allow the oven to cool.

Obtain protective gloves and wear them throughout the procedure.

Removal

To remove the carousel, do the following.

Step Action

1. **Pull the retaining ring** (8) out of the groove and slide it away from the coupler.



Slide the collar (7) off the coupler (6).

2. Disconnect the coupler halves.



3. **Remove** the bushing ③ from the cup ④ and lift the carousel out of the oven.



4. **Slide** the disk ② off the drive hub.



Result

The carousel is now removed.



How to Turn On and Turn Off the Oven

Before you begin	The oven must be connected to electric power.		
Turning on the oven	To turn on the oven, do the following.		
	Step	Action	
	1.	Set the power switch to the ON (I) position $①$.	
		A-TS-006091	
	The over	n is now on.	
Turning off the oven	To turn o	off the oven, do the following.	
	2.	Set the power switch to the OFF (0) position.	
	The over	n is now off.	



Before you begin

How to Preheat the Oven for Professional Cooking Mode

Make sure:

	The The	oven is turned on. oven door is closed.
Procedure	To prehe	eat the oven, do the following.
	Step	Action
	1.	Touch the professional cooking mode icon ①. The professional cooking mode screen displays.
		450°F 1:00:00 160°F
		AR-TS-005641

Touch the preheat icon ②. The enter preheat temperature screen displays.
 Enter the temperature using the number pad.

Touch the green check mark. The oven starts the preheat process.





Preheat progress

The screen indicates the progress towards reaching its set temperature.



The screen displays the actual temperature and its set temperature. Touch the cancel icon 3 to cancel the preheat process, if necessary.



Result

The oven is preheating. When the preheat process is complete, the oven sounds an alert.



How to Use Professional Cooking Mode

Before you begin

- Make sure the oven is preheated. See topic How to Preheat the Oven for Professional Cooking Mode.
- Be sure your food is prepared and ready to cook.

Procedure

To cook in professional cooking mode, do the following.

Step Action

1. **Touch** the professional cooking mode icon (1). The professional cooking mode screen displays.



2. **Touch** the temperature setting **(2)**. **Enter** the cooking temperature using the number pad.

Touch the green check mark.





Touch the time setting ③. Enter the cooking time using the number pad.
 Touch the green check mark.



4. **Touch** the hold temperature setting **(4)**. **Enter** the hold temperature using the number pad. **Touch** the green check mark.



Touch the browning level icon (5). The browning screen displays.
 Touch the browning level; 1 through 6 or "X" for no browning.





6.	Touch the start icon (6) to begin of	cooking.	
	<		
	4	450°F	
	Ó	1:00:00	
		160°F	
	₿ î		
	ĥ		AR-TS-005750

During the cooking process

The remaining time appears next to the cook time icon. Touch the cook time icon to view the set cook time. The set time displays in green for five (5) seconds.

Press and hold the red stop icon O for three (3) seconds before the time expires to stop the cooking process, if necessary.



AR-TS-005753

Result

At the end of the cooking process, the oven sounds an alert. Then, the oven holds the food at the set holding temperature.



Spit Configurations

Before you begin

Make sure:

- You have identified two matching disks.
- The disks are installed into the oven.

All-Options 7-spit disk







OPERATION

Continued from previous page

Standard 7-spit disk



This is the typical spit-disk combination that is shipped with the unit. The spits fit into the disks as follows:



Large V-spit disk



The spits fit into the disks as follows:



7-spit piercing only



The spits fit into the disks as follows:



Baskets only



The spits fit into the disks as follows:



Baskets and piercing



The spits fit into the disks as follows:



How to Load the Spits

Before you begin	Make s	sure:	
	The oven is turned on.		
	The oven has completed preheating.		
	You	have food products ready to be cooked.	
Standard angled V-spits	To load	standard angled V-spits, do the following.	
	Step	Action	
	1.	Insert whole chickens with the legs facing the square end of the spit.	
		Load three (3) 3-1/2 lb (1,6 kg) chickens per spit for a maximum capacity of 21 whole chickens or load four (4) 2-1/2 lb (1,1kg) chickens for a maximum capacity of 28 whole chickens.	
		AR-TS-005826	
		NOTE: When loading less than maximum capacity, chickens must be staggered evenly on the spits.	
	2.	Insert the two-prong, square end \bigcirc into the two holes \bigcirc on the drive disk.	
		Arts-05529	
	3.	Insert the tapered, ridged-prong end $\textcircled{3}$ into the top hole $\textcircled{4}$ on the opposite	
		side.	



Load the spits one at a time and every disk location. This is done to maintain balance within the rotisserie.



To load optional piercing spits, do the following.

5. **Load** a maximum of three (3) 3-1/2 lb (1,6 kg) or four (4) 2-1/2 lb (1,1 kg) whole chickens per piercing spit.



6. **Insert** the spits (6) in the drive disk (7).

to maintain balance within the rotisserie.



Continued on next page



Optional piercing spits



How to Create a Recipe

Before you begin

Make sure:

- The oven is turned on.
- The oven is idle and not in cook or clean sequence.

Creating a new recipe

To create a recipe, do the following. Action Step **Touch** the professional cooking mode icon (1). The professional cooking 1. mode screen displays. < A 450°F 1:00:00 \$\$\$ 160°F 11 AR-TS-005641 **Touch** the write recipe icon **(2)**. The write recipe screen displays. 2. < < J Ą 450°F 450°F 0 1:00:00 1:00:00 555 160°F 160°F 11 0 AR-TS-006131 **NOTE:** When the number of recipes has reached the i) maximum, the create recipe icon will be grayed out. An

existing recipe must be deleted to create a new recipe.





Adding a preheat step

To add a preheat step to the recipe, do the following.

3. **Touch** the preheat icon ③. The enter preheat screen displays. **Enter** the preheat temperature using the number pad.

Touch the green check mark icon.



Adding recipe settings

To add recipe settings, do the following.

4. **Touch** the temperature setting **(4)**. **Enter** the cooking temperature using the number pad.

Touch the green check mark.





5. Touch the time setting (5). Enter the cooking time using the number pad.Touch the green check mark.



6. **Touch** the hold temperature setting **(6)**. **Enter** the hold temperature using the number pad.

Touch the green check mark.



7. Touch the browning level icon ⑦. The browning screen displays.Touch the browning level 1-6 or X for no browning.







Programing a multistage recipe

OPERATION

To program a multi-stage recipe, do the following.

8. **Touch** the multi-stage icon **(8)**. **Select** a stage.

Set the time, temperature, and browning level for each stage.

Touch the cancel icon (9) to return to the single stage recipe settings.



Saving the recipe

To save the recipe, do the following.

9. **Touch** the save icon **(1)**. **Enter** the recipe name. **Touch** the green check mark to save the recipe.



Result

You have now created a recipe.



How to Cook with Programmed Recipes

Before you begin

Make sure:

- The oven is turned on.
- There is a recipe saved on the oven.
- Be sure your food is prepared and ready to cook.

Procedure

To cook using a programmed recipe, do the following.







During the cooking process

The screen displays the details on the current cook setting.



AR-TS-005762

Touching and holding the back arrow 4 for three (3) seconds stops the cooking process.

Result

At the end of the cooking process, the oven sounds an alert.



How to Cool Down the Oven

Before you begin

The cool down feature allows you to lower the temperature of the oven cavity at an accelerated rate. This is useful when you want to change from a high temperature cooking function to a lower temperature function or to prepare for cleaning. The minimum setting is 85°F (29°C).

Make sure:

- The oven is turned on.
- The oven door is open.

Procedure

To cool down the oven, do the following.

Step Action

1. **Touch** the professional cooking mode icon (1). The professional cooking mode screen displays.



2. **Touch** the cool down icon **(2)**. The enter cool down temperature screen displays.

Enter the temperature using the number pad.

Touch the green check mark. The oven starts the cool down process.







Cool down progress

The screen indicates the progress towards reaching the cool down temperature.



AR-TS-005765

The screen displays the actual temperature and its set temperature. Touch the cancel icon (3) to cancel the cool down process.



NOTE: If the oven door is closed, the screen will display in reverse. The cool down process will not begin until the oven door is opened.

Result

The oven is cooling down.



How to Delete a Recipe

Before you begin

Make sure:

- The oven is turned on.
- The oven is idle and not in cook or clean sequence.

Procedure

To delete a saved recipe, do the following.

Step Action

1. **Touch** the cookbook icon ①. The recipe screen will display.



2. **Touch** the delete recipes icon **(2)**. The delete recipes screen will display.

< CHICKEN BEEF	
PORK	PORK
	AR-TS-0057



3.	Touch the recipe ③ you w Touch the delete icon ④. Touch the save icon ⑤.	ant to delete.	
		CHICKE BEEF PORK (4) (4) (5)	AR-TS-005771
4.	Touch the home icon to ref	turn to the home screen.	

Result

The recipe is now deleted.



How to Upload or Download Recipes

Before you begin

Make sure:

- The oven is turned on.
- The oven is idle and not currently in a cook or clean sequence.
- You have a USB drive.

Procedure

To upload or download recipes, do the following.



Continued on next page

AR-TS-005602

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Result

You have uploaded or downloaded recipes.



How to Update the Software

Before you begin

Make sure:

- The oven is turned on.
- The oven is idle and not currently in a cook or clean sequence.
- You do not remove the USB drive during the update process.
- You have a USB drive with the updated firmware.

Procedure

To update the software, do the following.

- Step
 Action

 1.
 Touch the utilities icon ①. The utilities screen displays.
 - 2. **Touch** the upload/download icon **(2)**. The upload/download screen displays.







Result

The oven's software has been updated.



How to Calibrate the Screen

Step	Action
1.	Touch the utilities icon (1) . The utilities screen displays.
	AR-TS-005599
2.	Touch the settings icon ②. The settings screen displays.
	Touch the arrow icon (3) to view the second settings screen.





Result

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How to Force Calibrate the Screen

Before you begin	Make su	Make sure the oven is turned off.		
lioccure	Sten	Action		
	1.	Touch and hold the touch screen (1) and set the power switch to the ON (I) position (2) at the same time.		
	2.	Touch the plus sign icon ③ as it appears in each corner of the screen. When all four corners have been touched, the start-up screen will appear briefly, then the display will return to the home screen.		
		AR-TS-006283		

Result

The screen has been calibrated.



How to Restore Factory Defaults

Before you begin	Make sure the oven is turned on.	
Procedure	To resto	re factory defaults, do the following.
	Step	Action
	1.	Touch the utilities icon (1). The utilities screen displays.
		AR-TS-005599
	2.	Touch the settings icon ②. The settings screen displays.
		Touch the arrow icon (3) to view the second settings screen.

3.	Touch the restore factory defaults icon $\textcircled{4}$. The restore factory defaults screen displays.
	AR-TS-005633
4.	Touch the green check mark icon (5).
	NOTE: All saved recipes will be deleted.
	The screen will go blank for a moment. The start-up screen will appear briefly, then the display will return to the Home screen.
The fac	tory defaults have been restored.

Result



How to Select the Cleaning Method

Before you begin Make sure the oven is turned on. Procedure To select the cleaning method, do the following. Step Action **Touch** the utilities icon (1). The utilities screen displays. 1. 1 ¥ AR-TS-005599 **Touch** the settings icon (2). The settings screen displays. 2. Touch the tablet cleaner icon (3) to clean using tablet cleaner or the liquid cleaner icon (4) to clean using liquid cleaner. AR-TS-005625 3. Touch the green check mark icon. NOTE: This will set the cleaning method. The oven will not start a cleaning sequence. The cleaning method has been selected.

Result


How to Change the Sound Settings

Before you begin	Make sure the oven is turned on.		
Turning the sound	To turn the sound on/off, do the following.		
	Step	Action	
	1.	Touch the utilities icon ①. The utilities screen displays.	
		Arts-005599	
	2.	Touch the settings icon $\textcircled{0}$. The settings screen displays.	
		Touch the sound on icon (3) to turn the sound on.	
		Touch the sound off icon (4) to turn the sound off.	
		Artsootot	
	3.	Touch the green check mark icon.	
	The sou	nd is now on/off.	
Changing the sound	To chan	ge the sound tone, do the following.	
Lone	4.	Make sure the sound on/off setting is turned on.	
		Continued on next page	





Result



How to Sort Recipes

Before you begin	Make sure the oven is turned on.				
Procedure	To sort the recipes, do the following.				
	Step	Step Action			
	1.	Touch the utilities icon (1) . The utilities screen displays.			
		AR-TS-005599			
	2.	Touch the settings icon (2) . The settings screen displays.			
		Touch the sort recipes A-Z icon $\textcircled{3}$ to sort recipes by alphabetical order.			
		Touch the sort recipes by most recent icon $\textcircled{3}$ to sort recipes by most recently created.			
		Arts-006127			
	3.	Touch the green check mark icon.			

Result

The recipes have now been sorted.



How to Turn On and Turn Off the Holding Cabinet

Before you begin

The holding cabinet must be connected to electric power.

Turning on the holding cabinet

To turn on the holding cabinet, do the following.



The holding cabinet is now on.

Turning off the holding cabinet

To turn off the holding cabinet, do the following.

2. **Set** the power switch to the OFF (0) position.

The holding cabinet is now off.



How to Operate the Holding Cabinet



How to Change the Temperature Scale

Procedure

To change the temperature scale from °F to °C and vice versa, do the following.



Result

The temperature scale has now been changed.



Maintenance Schedule

Requirements	 Make sure the oven is under 140°F (60°C) before cleaning. Do not use a hose or water jet on external and technical parts of the appliance.
Daily	For daily maintenance, do the following.
	Clean all grease and debris from the bottom of the oven. Do not wipe debris into the drain.
	Clean the drip tray.
	Clean the glass and outside of the oven.
	Clean the door gasket.
	Remove debris from the drain screen.
	Run automatic cleaning cycle.
	Empty the grease collection container, if needed.
Weekly	For weekly maintenance, do the following.
	Inspect the door gaskets for tears.
	Clean the outside of the oven with a stainless steel cleaner.
	Inspect grease collection hoses and containers for damage.
	Make sure all lights are working.
	Inspect the oven for grease or carbon build up.
	Inspect the oven for scale buildup.
Monthly	For monthly maintenance, do the following.
	Descale the oven using Alto-Shaam's ScaleFree descaling powder.
	 Inspect the drain piping for leaks.
	 Clean the convection fan box.

Inspect the touchscreen for damage.





How to Run a Rinse Cycle

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the wash or rinse cycle.

NOTICE Do not use steel pads, wire brushes, or scrapers when cleaning.

Procedure

To run a rinse cycle, do the following.

Step	Action
1.	Make sure the oven is cool—oven is less than 140°F (60°C).
2.	Remove food debris, solid wastes, poultry skin and bones from the drain screen.
3.	Touch the cleaning icon (1) . The cleaning screen displays.
	AR-TS-005859



Result



How to Clean the Oven Using Liquid Cleaner

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the wash or rinse cycle.

NOTICE Do not use steel pads, wire brushes, or scrapers when cleaning.

Make sure:

- The liquid cleaner is installed. See topic *How to Install the Liquid Cleaner*.
- You have set the cleaning method to liquid cleaning. See topic *How to Select the Cleaning Method*.
- Vou have enough liquid cleaner (CE-36457) to clean the oven.

Procedure To clean the oven using liquid cleaner, do the following.

Step	Action
1.	Make sure the oven is cool—oven is less than 140°F (60°C).
2.	Remove food debris, solid wastes, poultry skin and bones from the drain screen.
3.	Touch the cleaning icon $\textcircled{1}$. The cleaning screen display.





Result

The oven has completed a wash cycle using liquid cleaner.

How to Clean the Oven Using Tablets

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the wash or rinse cycle.

NOTICE Do not use steel pads, wire brushes, or scrapers when cleaning.

Make sure:

- You have set the cleaning method to tablet cleaning. See topic *How to Select the Cleaning Method*.
- You have enough CombiClean® CombiTabs™ tablets (CE-36354) to clean the oven.

Procedure To clean the oven using CombiTabs[™] tablets, do the following.

Step	Action
1.	Make sure the oven is cool—oven is less than 140°F (60°C).
2.	Remove food debris, solid wastes, poultry skin and bones from the drain screen.





4. **Touch** the cleaning icon **(2)**. The cleaning screen display.







Result

The oven has completed a wash cycle using tablets.



How to Descale the Oven

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the wash or rinse cycle.

NOTICE Do not use steel pads, wire brushes, or scrapers when cleaning.

Make sure you have Alto-Shaam ScaleFree Descaling Powder (CE-27889).

Procedure

To descale the oven, do the following.

Step Action

- 1. **Make sure** the oven is cool—oven is less than 140°F (60°C).
- 2. **Clean** the oven with a full wash cycle. See topic *How to Clean the Oven Using Liquid Cleaner or How to Clean the Oven Using Tablets*.
- 3. **Place** 7 oz. (198 g) of Alto-Shaam ScaleFree Descaling Powder into the cavity drain (1).

Close the drain screen.





4.	Run a rinse cycle. See topic <i>How to Run a Rinse Cycle</i> .
5.	Run a wash cycle. See topic <i>How to Clean the Oven Using Liquid Cleaner or How to Clean the Oven Using Tablets</i> .

Result

The oven is now descaled.



How to Clean the Door Gasket and Glass

Before you begin



Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner.



Make sure you have glass cleaner or distilled vinegar.

WARNING: Burn hazard.

Procedure

To clean the door gasket and glass, do the following.

Step Action

- 1. **Make sure** the oven is cool—oven is less than 140°F (60°C).
- 2. **Clean** the door gasket ① with soap and water.



Result

The oven door is now clean.



How to Clean the Convection Fan Box

Before you begin



WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the wash or rinse cycle.

NOTICE Do not use steel pads, wire brushes, or scrapers when cleaning.

Procedure

To clean the rotisserie convection fan box, do the following.

Step Action 1. Make sure the oven is cool—oven is less than 140°F (60°C). 2. **Clean** the oven with a full wash cycle. See topic *How to Clean the Oven Using* Liquid Cleaner or How to Clean the Oven Using Tablets. 3. Set the ON/OFF power switch to the OFF position or disconnect the oven from power. 4. **Remove** the drive tube assembly and disk drive. 5. Flip the tabs (1) on the fan panel to the open position using a flathead screwdriver. Remove the fan guard cover plate. (1)(1)• [] • [AR-TS-006094

6. **Spray** Combitherm[™] Cleaning Liquid inside of the fan convection box. Allow the cleaner to soften the grease for 10 minutes.



7.	Clean hard deposits with a plastic scouring pad, if necessary.	
8.	Clean grease deposits accumulated in the area surrounding the convection element and fan blade using a damp sponge and a plastic scouring pad.	
	NOTICE Use caution to avoid bending the convection element or the fan blades.	
9.	Re-install the fan panel.	
10.	Run a wash cycle. See topic <i>How to Clean the Oven Using Liquid Cleaner or How to Clean the Oven Using Tablets</i> .	
The convection fan box is now clean.		

Result



MAINTENANCE

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AR-7T Error Codes

Code	Description	Possible Cause
PROG	Fatal error, call service.	Programmer error.
EADC	ADC is out of range.	Microprocessor on the control board (CB) may be failing. May have cold solder joint on the CB.
E-BC	Bootloader Chip is bad. Software updates cannot be performed.	Chip may have cold solder joint or other electrical distress.
E-CB	Control board and interface board software do not match. Update the software.	Control board or Interface board version is not current.
E-B0	PCB temperature sensor is short-circuited.	Board failure.
E-B1	PCB temperature sensor is open-circuit.	Board failure.
Е-В2	PCB is over-temperature of 70°C.	Possible cooling fan failure in the control area.Possible runaway heater.Possible that we are too close to another piece of equipment or have inadequate ventilation.
E-I0	Short circuit in-line water heater sensor.	Sensor wires damaged.
E-I1	Open circuit in-line water heater sensor.	Sensor wires damaged.
E-I2	Water heater sensor over temperature	Sensor above 200°F (93.3°C)
E-SD	SD card is not detected.	SD card slot is bad.
E-10	N6 cavity sensor is short-circuit.	Error at sensor input. Wrong RTD type (100Ω vs. 1000Ω). Check wiring. Board may be bad at sensor input
E-11	N6 cavity sensor is open-circuit.	Error at sensor input. Wrong RTD type (100Ω vs. 1000Ω). Check wiring. Board may be bad at sensor input.
E-12	Water heater sensor over temperature	Sensor above 200°F (93.3°C)
E-41	Touch driver is detected, but not responding to queries.	Touch chip error on board.
E-43	Touch driver is missing.	Touch chip error on board.
E-44	Touch driver is detected, but not responding to queries.	Touch chip error on board.
E-53	Motor high-limit is open.	Motor is too hot, and high-limit is legitimately open. Wiring to motor is incorrect. Board issues reading motor high-limit input switch.
E-55	Vent valve error, contact service.	Vent valve malfunction.
E-66	Control board reset but interface board did not.	Electrical noise.
E-70	Personality wiring is incorrect, does not equate to a supported configuration.	Personality wiring is incorrect. Broken wire. Board issues reading personality jumpers. Old software with new configuration.



TROUBLESHOOTING

Code	Description	Possible Cause
E-71	Control ID is not what is expected.	Control board is programmed for a different software than what is intended.
	The control board and interface board can talk, but are meant for different controls, a CB or IB update is required.	Example: Rotisserie is plugged into a Cook and Hold or QuickChiller control board.
E-80	Control settings have been reset to factory defaults because EEPROM checksum was incorrect.	Software has new features installed (post updated, this may be expected after the first restart and is normal). Continuous E-80 may be failing EEPROM.
E-83	EEPROM is not responding.	Failing EEPROM.
E-84	User options have been reset to factory defaults because user options EEPROM checksum was incorrect.	Software has new features installed (post updated, this may be expected after the first restart and is normal). Continuous E-84 may be failing EEPROM.
E-94	Communications has not occurred for 4 attempts.	Electrical noise. Communication cable not properly seated, not plugged in.
E-109	N7 or N9 high-limit is open.	Unit is too hot, and N7 is legitimately open. Water heater is too hot, and N9 is legitimately open Wiring to N7 or N9 is incorrect.
		Board issues reading N7 or N9 input switch.



Warranty

Introduction	Alto-Shaam, Inc. warrants to the original purchaser only, that any original part found to be defective in material or workmanship will be replaced with a new or rebuilt part at Alto-Shaam's option, subject to provisions hereinafter stated.
Warranty Period	The original parts warranty period is as follows:
	For all other original parts, one (1) year from the date of installation of appliance or fifteen (15) months from the shipping date, whichever occurs first.
	The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.
	 Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.
	For the refrigeration compressor, if installed, the warranty period is five (5) years from the date of original installation of the appliance.
	 For heating elements on Halo Heat[®] Cook and Hold ovens, the warranty period is for as long as the original owner owns the oven. This warranty period applies to units sold after 2/1/2009 and excludes holding-only ovens.
	To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.
Exclusions	This warranty does not apply to:
	Calibration.
	 Replacement of light bulbs, rubber gaskets, grease filters, air filters, racks, jet plates, and/or the replacement of glass due to damage of any kind.
	 Equipment damage caused by accident, shipping, improper installation or alteration.
	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.
	 Equipment damage caused by use of any cleaning agents other than those recommended by Alto-Shaam, including but not limited to damage due to chlorine or other harmful chemicals.
	 Any losses or damage resulting from malfunction, including loss of food product, revenue, or consequential or incidental damages of any kind.
	 Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, unauthorized removal of any parts including legs, or unauthorized addition of any parts.
	Continued on next page

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- Equipment damage incurred as a direct result of poor water quality*, inadequate maintenance of steam generators and/or surfaces affected by water. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
- Equipment damage incurred as a result of not following the required maintenance schedule published in the manuals for the equipment.

Conclusion

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. 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.

*Refer to the product spec sheet for water quality standards.





ALTO-SHAAM ASIA Shanghai, China Phone +86-21-6173 0336

ALTO-SHAAM CANADA Concord, Ontario Canada Toll Free Phone 866-577-4484 Phone +1-905-660-6781

ALTO-SHAAM CENTRAL & SOUTH AMERICA Miami, FL USA Phone +1-954-655-5727 ALTO-SHAAM MIDDLE EAST & AFRICA Dubai, UAE Phone +971 4 321 9712

ALTO-SHAAM MEXICO Phone +52 1 477-717-3108 ALTO-SHAAM FRANCE, L.L.C. Aix en Provence, France Phone +33(0)4-88-78-21-73

ALTO-SHAAM GMBH Bochum, Germany Phone +49(0)234-298798-0

ALTO-SHAAM RUSSIA Moscow, Russia Phone +7-903-793-2331

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Menomonee Falls, WI 53052-0450, U.S.A. Telephone 800-558-8744 | +1-262-251-3800 | alto-shaam.com