

Vector® Multi-Cook Oven

Deluxe Control

VMC-H2
VMC-H3
VMC-H4

VMC-H2H
VMC-H3H
VMC-H4H

VMC-H2HW
VMC-H3HW



Structured Air Technology®

MN-46295-EN

REV.07
6/22

EN

For the most current manual, visit alto-shaam.com
Die neueste Fassung des Handbuchs finden Sie auf alto-shaam.com
Pour la dernière version du manuel, visitez alto-shaam.com
Para obtener el manual más actual, visite alto-shaam.com
Ga voor de meest recente handleiding naar alto-shaam.com
За самой последней версией руководства обращайтесь на сайт alto-shaam.com
要查看当前最新手册，请访问 alto-shaam.com



Manufacturer's Information

Copyright	© Copyright 6/22 by Alto-Shaam, Inc. All rights reserved. This manual or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Alto-Shaam, Inc.
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 Vector Oven!

Structured Air Technology®

The Alto-Shaam Vector Oven features Structured Air Technology, giving you two, three or four ovens in one. It gives you the flexibility to simultaneously cook a variety of menu items with no flavor transfer. It provides the ability to control temperature, fan speed, and time in each individual oven chamber.

Cook up to twice the food than a traditional convection oven, with no microwaves, and no water.

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.

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

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.

This page is intentionally left blank.

Manufacturer's Information	2
Foreword	3
Enjoy your Alto-Shaam Vector Oven!	3
Extend Your Manufacturer's Warranty	3
Alto-Shaam 24/7 Emergency Repair Service	3
Table of Contents	5
Safety	7
The Meaning of Signal Words	7
Appliance Description and Intended Use.	8
Safety Precautions.	9
Labels	13
Label Locations	13
Installation	17
Dimension Drawings	17
How to Receive the Appliance	19
How to Unpack the Oven	20
ChefLinc Installation Checklist.	21
How to Install the Oven (60 Hz Cord and Plug Models).	23
How to Install the Oven (60 Hz Models Without Cords or Plugs)	26
How to Install the Oven (50/60 Hz Models Without Cords or Plugs).	32
How to Install the Oven on a Stand (VMC-H2/H2H, VMC-H3/H3H, VMC-H4/H4H)	39
How to Install the Oven on a Stand (VMC-H2HW, VMC-H3HW)	41
How to Install the Oven on Casters (if required).	46
How to Install the Jet Plates (VMC-H2HW, VMC-H3HW).	48
How to View and Set up Network Connections	51
How to Set up an Ethernet Connection	53
Operation	55
How to Turn On and Turn Off the Oven	55
How to Preheat the Oven.	56
How to Cook with Programmed Recipes	58
How to Cook in Manual Mode	60
How to Lock and Unlock the Screen.	63
How to Cool Down the Oven.	64
How to Create a Recipe.	65
How to Modify, Duplicate, or Delete a Recipe	69
How to Backup or Restore Settings with a USB Drive.	72
How to Load Recipes from a USB Drive.	74

How to Save Recipes to a USB Drive	76
How to Update Software with a USB Drive	78
How to Change the Home Screen	80
How to Change the Temperature Scale	82
How to Enable the Handle Light	84
How to View Oven Information	85
How to Download HACCP Data	86
Maintenance	89
Maintenance Schedule	89
How to Clean the Oven.	91
Troubleshooting	95
Error Codes	95
What to do if the Fan Indicator Light Illuminates	96
What to do if the High Limit Screen Displays	97
Cheflinc.alto-shaam.com is Not Available on Your Device	98
Cannot Connect to cheflinc.alto-shaam.com	99
The Oven is not Displayed on the Dashboard	100
Unable to Assign Recipes from the Dashboard to Ovens in the Field	101
Notifications	103
Notifications	103
Conditions for Ovens Installed in New York City	106
Warranty	107
Warranty	107
Declaration of Conformity	109

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

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

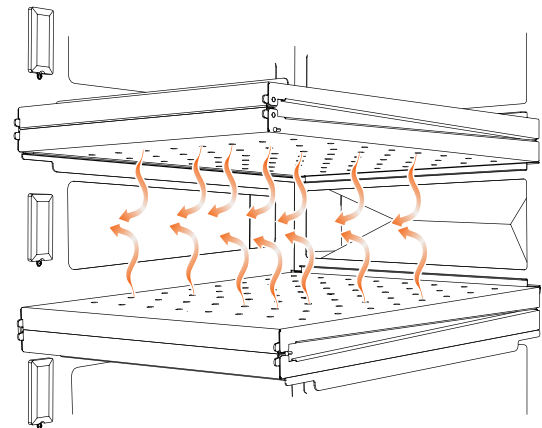
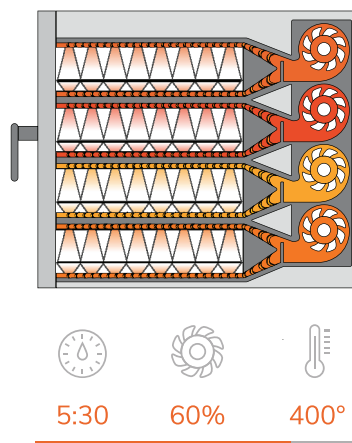


NOTE: Note indicates additional information that is important to a concept or procedure.

Appliance Description and Intended Use

Structured Air Technology®

Alto-Shaam Vector's Structured Air Technology system allows for multiple, unique cooking chambers within the same oven. Air is delivered by a blower located in the rear of each cooking chamber. Air travels vertically through the jet plates into each chamber. The food product is blown with hot air from above and below. Structured Air plates at the top and bottom of the oven complete the upper and lower cooking chambers. Each cooking chamber is independent from the other and includes its own blower and heat source. The operator can select the optimal cooking temperature, air velocity, and cook time for each chamber either manually or through programmed recipes.



VMC-TS-000271

Configurations

The Vector H Series is available in three configurations: two-, three-, and four-chamber.

Intended use

The Vector series ovens are intended to cook and warm food only. Any other use is prohibited.

Residual risks

This oven is manufactured using ISO-certified processes. The oven 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 oven includes loading the oven with anything other than a food product. Misuse also includes heating or cooking any food product that contains alcohol or other flammable substance.

Safety Precautions

Before you begin

Read and understand all instructions in this manual.

Electrical precautions

Obey these electrical precautions when using the appliance:

- Connect the appliance to a properly grounded outlet. Do not use the appliance if it is not properly grounded. Consult an electrician if there is any doubt that the outlet used is properly grounded.
 - Keep the cord away from hot surfaces.
 - Do not attempt to service the appliance or its cord and plug.
 - Do not operate the appliance if it has a damaged cord or plug.
 - Do not immerse the cord or plug in water.
 - Do not let the cord hang over the edge of a table or counter.
 - Do not use an extension cord.
-

Usage precautions

Obey these usage precautions when using the appliance:

- Only use this appliance for its intended use of heating or cooking.
 - Always keep liquids, or foods that can become liquid when heated, level and at or below eye level where they can be seen.
 - Use utensils and protective clothing such as dry oven mitts when loading and unloading the appliance.
 - Use caution when using the appliance. Floors adjacent to the appliance may become slippery.
 - Do not cover or block any of the openings of this appliance.
 - Do not cover racks or any other part of this appliance with metal foil.
 - Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.
 - Do not unplug or disconnect the appliance immediately after cooking. The cooling fans must stay on to protect electrical components.
-

Maintenance precautions

Obey these maintenance precautions when maintaining the appliance:

- Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.
- Only clean the appliance when oven is OFF.
- Do not store the appliance outdoors.
- Do not clean the appliance with metal scouring pads.
- Do not use corrosive chemicals when cleaning the appliance.
- Do not use a hose or water jet to clean the appliance.
- Do not use the appliance cavity for storage.
- Do not leave flammable materials, cooking utensils, or food inside the appliance when it is not in use.
- Do not remove the top cover or side panels. There are no user-serviceable components inside.

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 appliance

Only use the appliance when:

- 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 will void the warranty and relieve Alto-Shaam of all liability. Original manufacturer's replacement parts may be substituted; however, these parts must be of equal quality and specifications as those provided by Alto-Shaam.
- To prevent serious injury, death or property damage, have the appliance inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- Contact Alto-Shaam for the authorized service partner in your area.

Sound power

The A-weighted sound pressure level is below 70 dB(A).

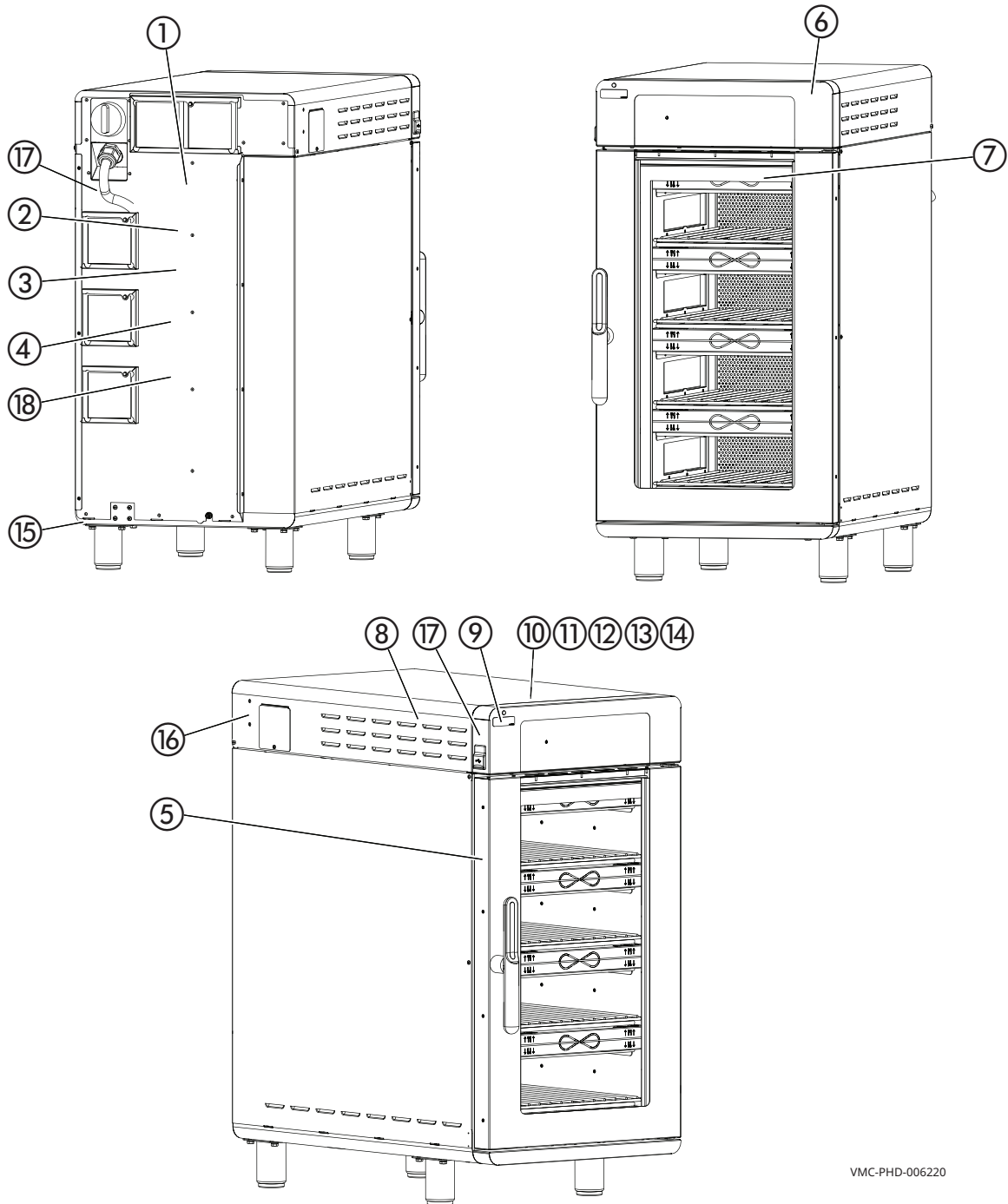
Personal Protective Equipment (PPE)

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

- Protective gloves
- Protective clothing
- Eye protection
- Face protection

This page is intentionally left blank.

Label Locations



VMC-PHD-006220

LABELS

1

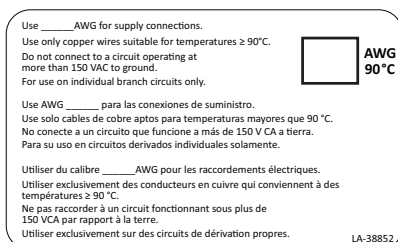


WARNING

Electric shock hazard

To reduce the risk of electric shock, do not remove or open the cover. No user-serviceable parts inside. Refer servicing to qualified personnel. Qualified personnel: Disconnect power before servicing.

2



Note: This label is only used on UL-certified appliances that have 120V to ground wiring.

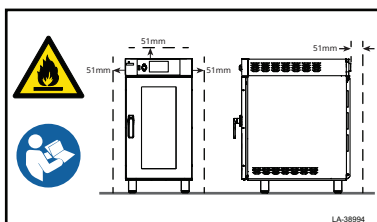
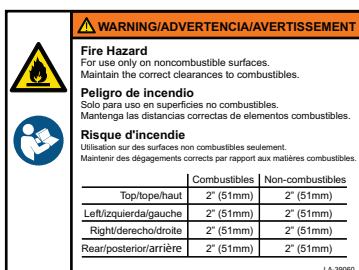
Use ____ AWG for supply connections.

Use only copper wires suitable for temperature less than or equal to 90°C.

Do not connect to a circuit operating at more than 150 VAC to ground.

For use on individual branch circuits only.

3



WARNING

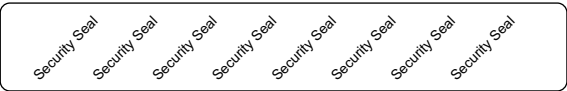
Fire hazard

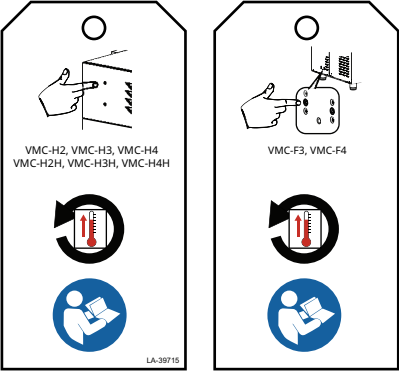
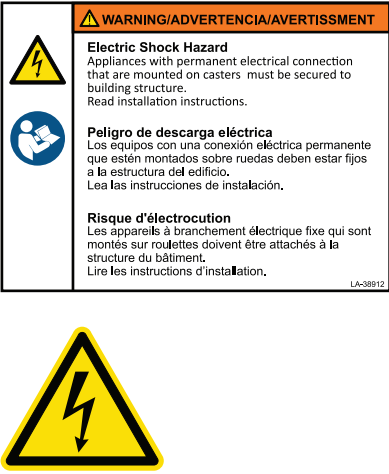
For use only on noncombustible surfaces. Maintain the correct clearances to combustibles.

4

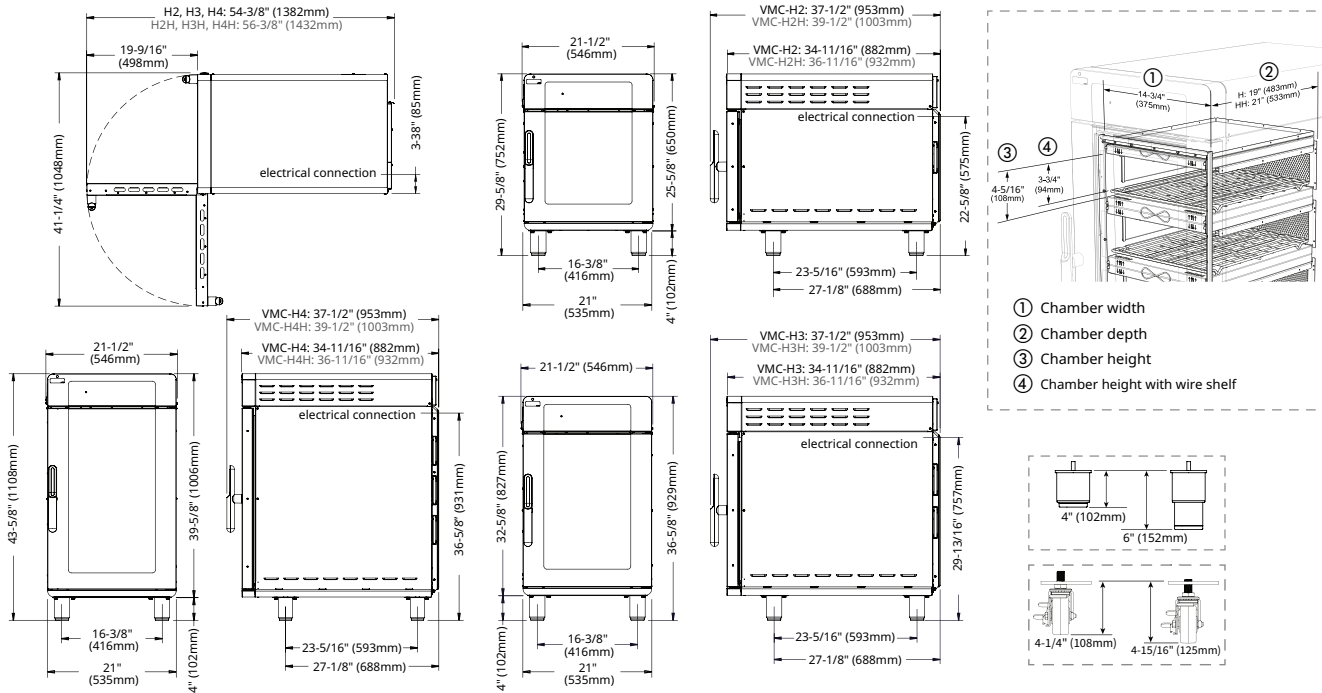


Every Alto-Shaam product is precision calibrated prior to release from the factory to ensure accurate temperature control.

5		WARNING Hot surface
6		Made in U.S.A.
7	 WARNING / ADVERTENCIA / AVERTISSEMENT Burn hazard. Always load liquids, or foods that can become liquid when heated, at an eye level where they can be seen. Peligro de quemaduras. Siempre coloque líquidos, o alimentos que se puedan volver líquidos cuando se calientan, a nivel de los ojos donde se puedan ver. Risque de brûlure. Toujours charger les liquides, ou les aliments qui deviennent liquides au chauffage, à hauteur des yeux où ils peuvent être vus. LA-39123	WARNING Burn hazard Always load liquids, or foods that can become liquid when heated, at an eye level where they can be seen.
8		Security seal
9	Check fans Compruebe los ventiladores Vérifiez les ventilateurs LA-39033  LA-39280	Check fans
10	 LA-36443-L1	Line 1 supply terminal
11	 LA-36443-L2	Line 2 supply terminal
12	 LA-36443-L3	Line 3 supply terminal

13		Neutral
14		Ground terminal
15		Equipotential terminal
16		Press and release the high limit temperature reset button(s).
17		Certificate of Approval number, Fire Department - City of New York.
18		WARNING Electric Shock Hazard Appliances with permanent electrical connection that are mounted on casters must be secured to building structure. Read installation instructions.

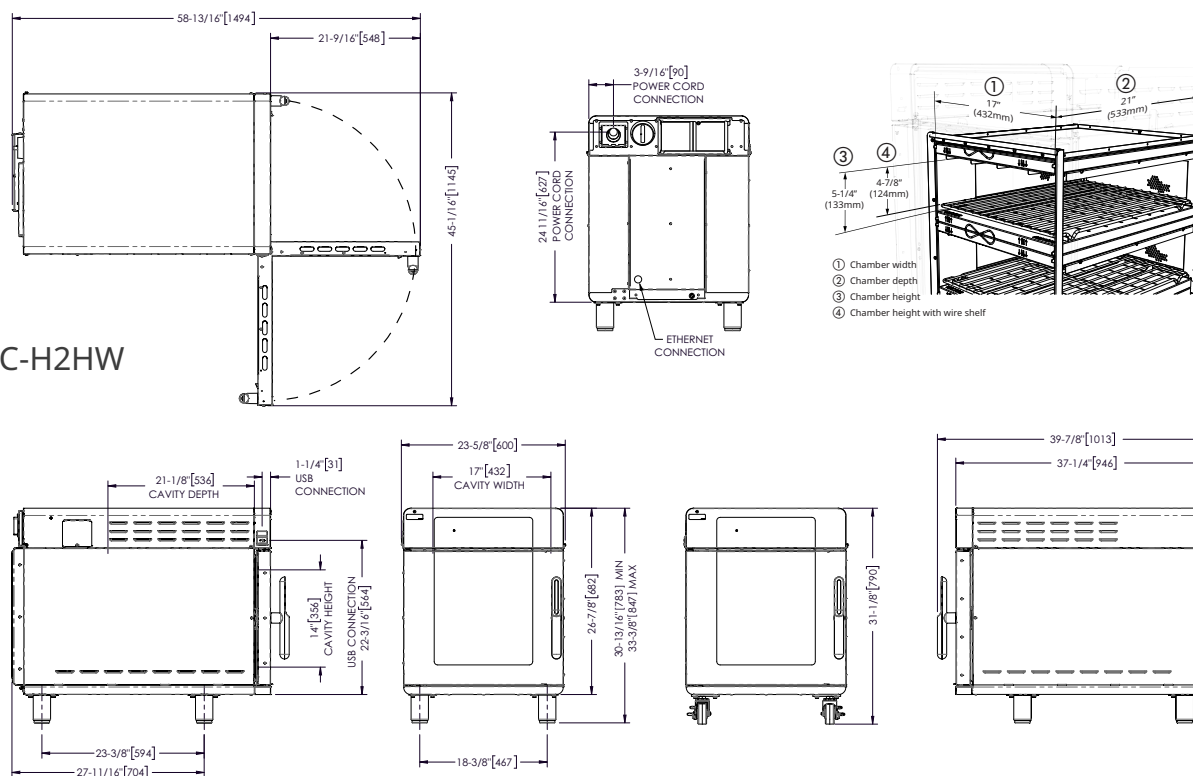
Dimension Drawings



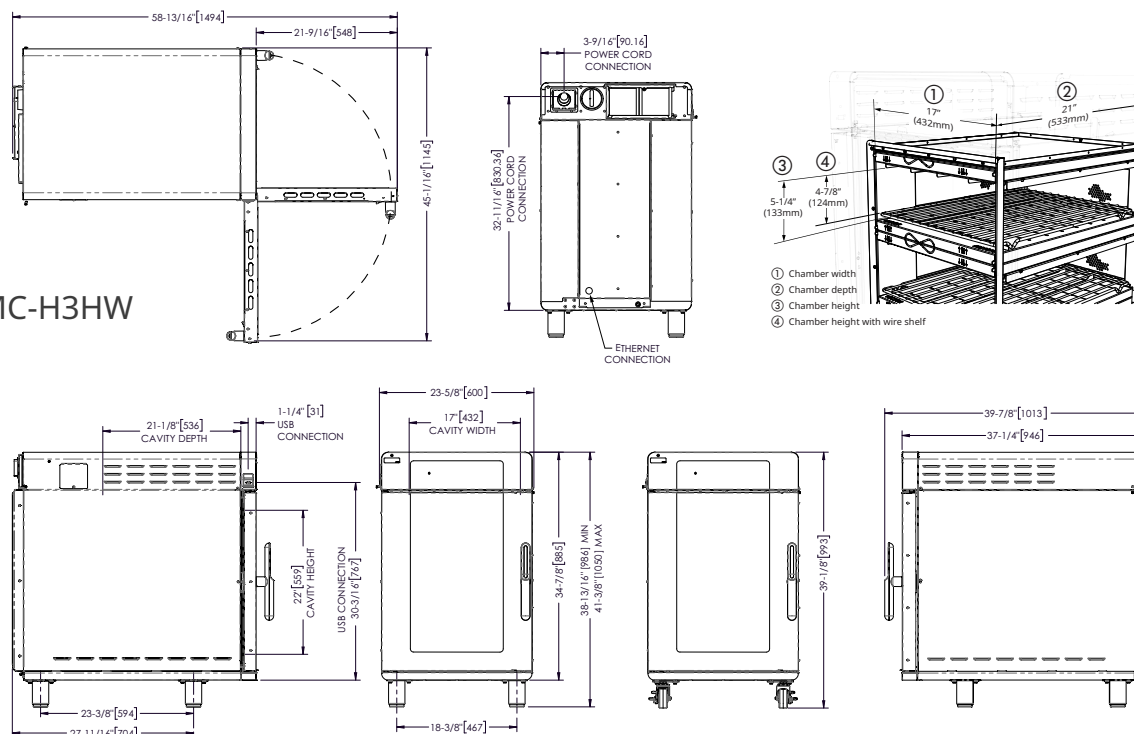
INSTALLATION

INSTALLATION

VMC-H2HW



VMC-H3HW



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 policy of Alto-Shaam to assist customers in collecting claims that have been properly filed and actively pursued. Alto-Shaam cannot, however, file damage claims, assume the responsibilities for damage claims, or accept deductions in payment for damage claims.

How to Unpack the Oven

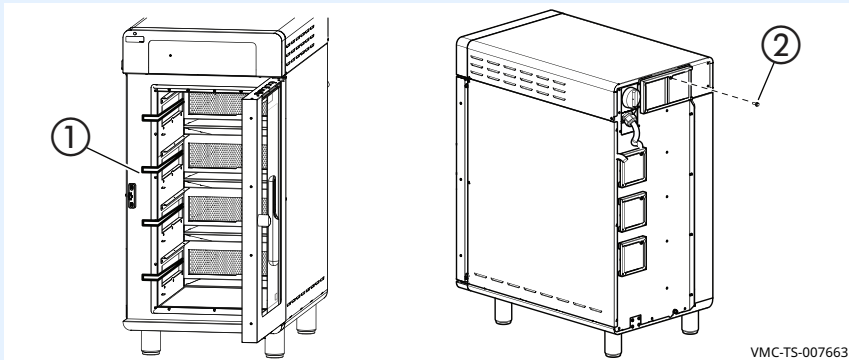
Before you begin

Make sure you have:

- An appropriate lifting device and enough personnel to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)
- Cutting tools to remove the packaging.

Unpack the oven

To unpack the oven, do the following.

Step	Action
1.	Remove the box. 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.
2.	Remove the shrink wrap.
3.	Cut the restraining straps.
4.	Remove the tape ① that holds the filters (if equipped). Remove the screws ② that holds the filters (if equipped).
	
5.	Remove the foam from each chamber.
6.	Remove the oven from the pallet.

Result

The oven is now unpacked.

ChefLinc Installation Checklist

Place this form with the oven's records.

Connectivity Pre-Installation Checklist

Will you connect the oven to the Internet using Wi-Fi or Ethernet?	Wi-Fi	Ethernet	Unable to answer
--	-------	----------	------------------

Wi-Fi Connections

Is the Wi-Fi network that is to be used a WPA2 secured network?	Yes	No	Unable to answer
Is this network also used to send and receive point of sale information (credit card data, register receipts)? This is NOT recommended for any installation.	Yes	No	Unable to answer
Have you been provided with the network name (SSID) for the oven to connect to?	Yes	No	Unable to answer
Have you been provided the password for the Wi-Fi network to be used?	Yes	No	Unable to answer
At the final location that the oven will be installed, can you connect to the Wi-Fi system with your phone?	Yes	No	Unable to answer
Using your phones Wi-Fi connection, are you able to connect to alto-shaam.com? You are testing for any additional security on the network to block access to external sites. You will need to turn off your cellular service on your phone to make sure you're using the Wi-Fi network.	Yes	No	Unable to answer

Ethernet Connections

At the final location that the oven will be installed, is there an open Ethernet port conveniently located?	Yes	No	Unable to answer
Is the Ethernet port live (providing Internet access)?	Yes	No	Unable to answer
Is the Ethernet harness accessory ordered with the unit?	Yes	No	Unable to answer

Is there site action required?	Yes	No
Action required:		

Continued on next page

Continued from previous page

Connectivity Installation Checklist

Refer to Network Status screen

What is your connection type?	Wi-Fi	Ethernet
What color is the network status icon?	Red Yellow Green	
What is the Internet status?	Connected	Not connected
What is the cloud status?	Connected	Not connected
What is the update server status?	Connected	Not connected
What is the SSID (network name)?		
What is the password?		
What is the IP address?		
What is the Front End (FE) software version number?		
What is the Back End (BE) software version number?		
What is the Control Board (CB) software version number?		
Is this the latest software version?		
Validate via: https://www.alto-shaam.com/en/customer-support/software-downloads	Yes	No

How to Install the Oven (60 Hz Cord and Plug Models)

Before you begin

Make sure you have:

- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)

Requirements

- The oven must be installed on a level surface.
- The oven must not be installed in any area where it may be affected by steam, grease, dripping water, high temperature, or any other severely adverse conditions.
- The oven is not intended for built-in installation.

Voltages

	V	Ph	Hz	A	Breaker*	kW	Plug Configuration
VMC-H2/ VMC-H2H	208 240	1 1	60 60	25 28	30 30	5.2 6.7	NEMA 6-30P NEMA 6-30P
VMC-H3/ VMC-H3H	208 240 208 240	1 1 3 3	60 60 60 60	38 43 22 25	50 50 30 30	7.9 10.3 7.9 10.3	NEMA 6-50P NEMA 6-50P NEMA 15-30P NEMA 15-30P
VMC-H4/ VMC-H4H	208 240	3 3	60 60	33 38	40 40	10.6 13.9	NEMA 15-50P NEMA 15-50P
VMC-H2HW	208 240 208 240	1 1 3 3	60 60 60 60	33 38 19 22	50 50 40 40	6.9 9.1 6.9 9.1	NEMA 6-50P NEMA 6-50P NEMA 15-30P NEMA 15-30P
VMC-H3HW	208 240	3 3	60 60	29 33	50 50	10.5 13.6	NEMA 15-50P NEMA 15-50P

*Electrical connections must meet all applicable federal, state, and local codes.

Continued on next page

Continued from previous page

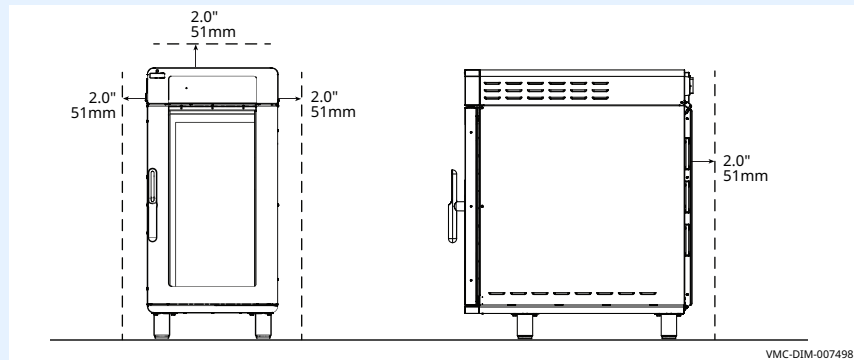
Position the oven

To position the oven, do the following.

Step	Action
1.	Make sure that: - The location where the oven is being installed is rated to support the weight of the oven; - The oven is within five feet (1.5m) of the appropriate electrical outlet; - You follow the oven clearance guidelines.

1. **Make sure** that:

- The location where the oven is being installed is rated to support the weight of the oven;
- The oven is within five feet (1.5m) of the appropriate electrical outlet;
- You follow the oven clearance guidelines.



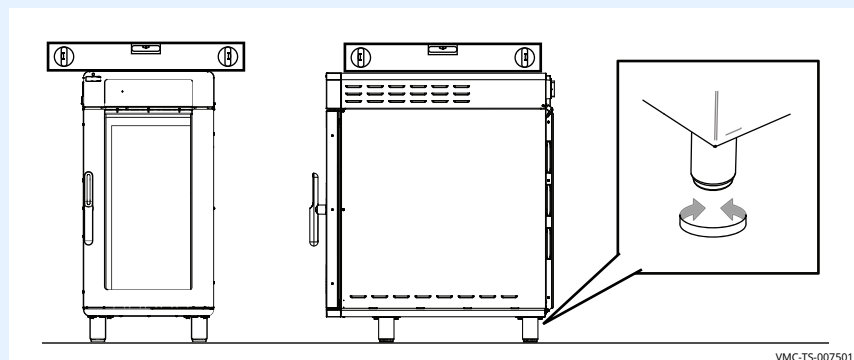
2. **Move** the oven to the installation location and onto the final resting surface.

The oven is now correctly positioned.

Level the oven

To level the oven, do the following.

3. **Check** the level of the oven using a spirit (bubble) level. Check front to back and side to side.



Adjust the legs, if necessary, to achieve levelness.

The oven is now correctly positioned.

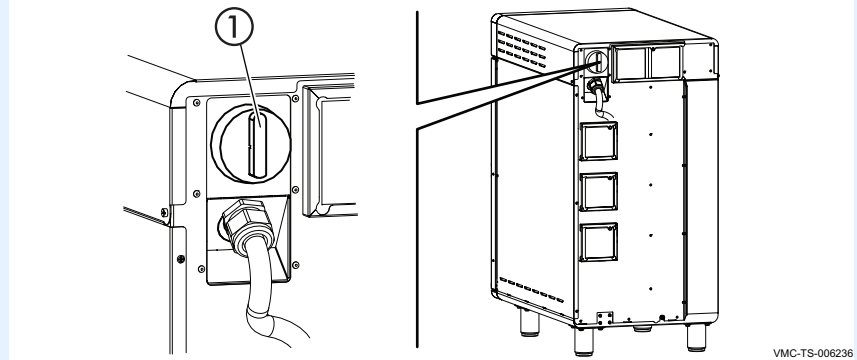
Continued on next page

Continued from previous page

Connect power

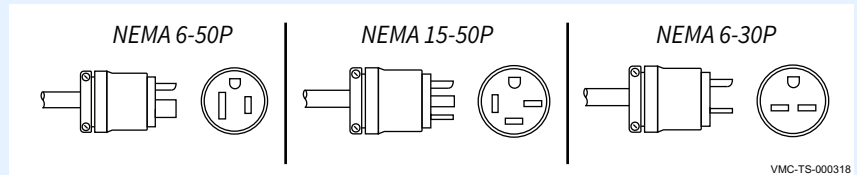
To connect electric power to the oven, do the following.

4. **Set** the main disconnect switch ① to the OFF position.



VMC-TS-006236

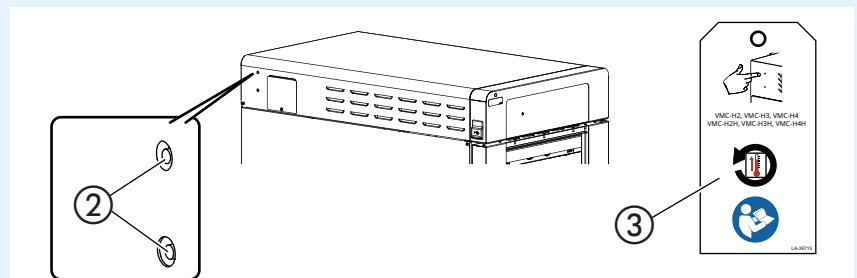
5. **Connect** the plug to the electrical outlet.



VMC-TS-000318

Press reset button(s)

6. **Press and release** the high limit temperature reset button(s) ②.
Remove the tag ③.



VMC-TS-007505

Result

The oven is now installed and ready to be used.

How to Install the Oven (60 Hz Models Without Cords or Plugs)

Before you begin

Make sure you have:

- Appropriate cord and plug. See local codes and regulations.
- Screwdriver (Phillips #2)
- Nut driver (1/4-inch)
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)

Requirements

- The oven must be installed on a level surface.
- The oven must not be installed in any area where it may be affected by steam, grease, dripping water, high temperature, or any other severely adverse conditions.
- The oven is not intended for built-in installation.

Continued on next page

Continued from previous page

Voltages

	V	Ph	Hz	A	Breaker*	kW
VMC-H2/ VMC-H2H	220	1	50/60	25	32	5.4
	240	1	50/60	28	32	6.4
	380	3	50/60	12	16	5.4
	415	3	50/60	13	16	6.4
VMC-H3/ VMC-H3H	220	1	50/60	37	63	8.1
	240	1	50/60	41	63	9.6
	380	3	50/60	12	16	8.1
	415	3	50/60	13	16	9.6
VMC-H4/ VMC-H4H	380	3	50/60	23	32	10.8
	415	3	50/60	25	32	12.7
VMC-H2HW	208	1	60	33	50	6.9
	240	1	60	38	50	9.1
	208	3	60	19	40	6.9
	240	3	60	22	40	9.1
VMC-H3HW	208	3	60	29	50	10.5
	240	3	60	33	50	13.6

*Electrical connections must meet all applicable federal, state, and local codes.

Continued on next page

Continued from previous page

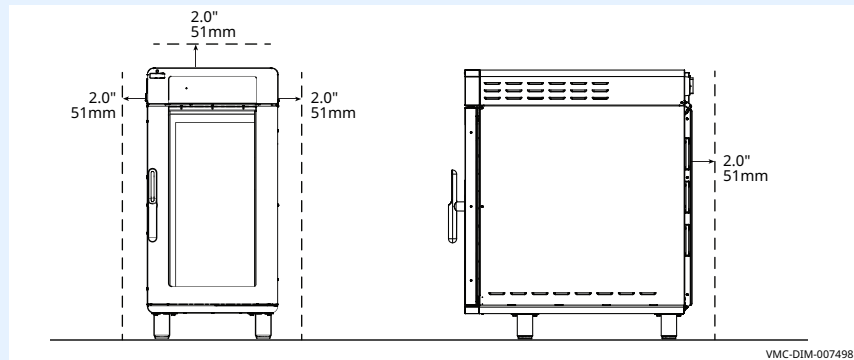
Position the oven

To position the oven, do the following.

Step	Action
1.	Make sure that: - The location where the oven is being installed is rated to support the weight of the oven, - The oven is within five feet of the appropriate electrical outlet, - You follow the oven clearance guidelines.

1. **Make sure** that:

- The location where the oven is being installed is rated to support the weight of the oven,
- The oven is within five feet of the appropriate electrical outlet,
- You follow the oven clearance guidelines.



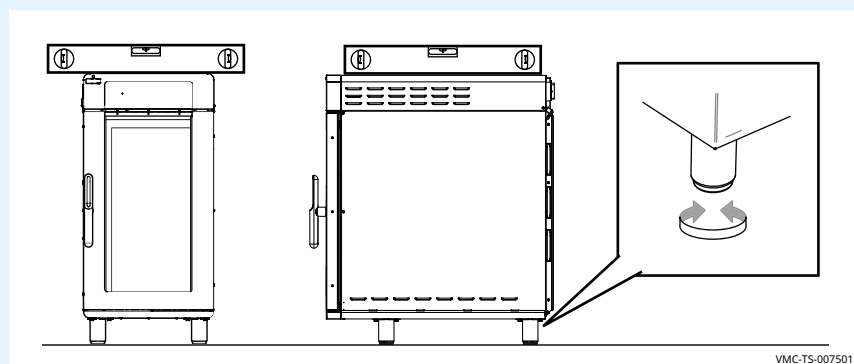
2. **Move** the oven to the installation location and onto the final resting surface.

The oven is now correctly positioned.

Level the oven

To level the oven, do the following.

3. **Check** the level of the oven using a spirit (bubble) level. Check front to back and side to side.



Adjust the legs, if necessary, to achieve levelness.

Continued on next page

Continued from previous page

Connect the wiring

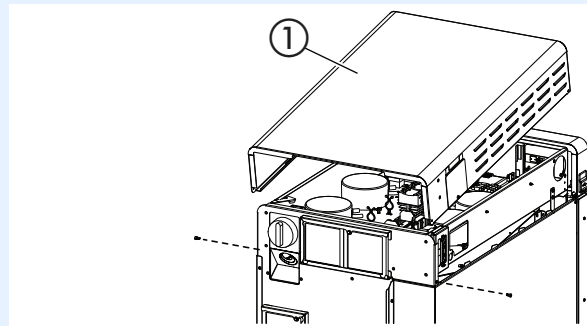
To connect the wiring, do the following.

4. **Remove** the pivot screws. **Remove** the top cover ①.



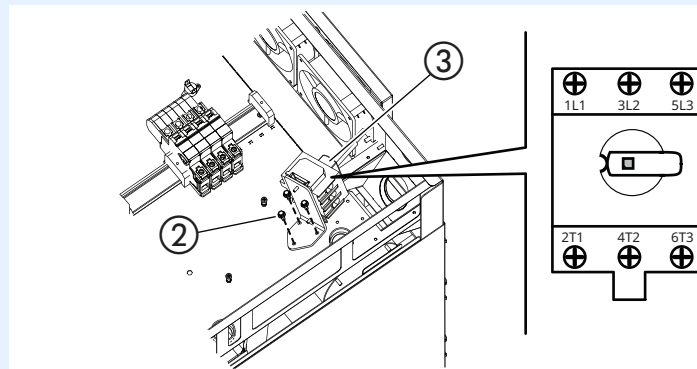
WARNING: Electric shock hazard.

Make sure the supply cord is not connected to a power supply.



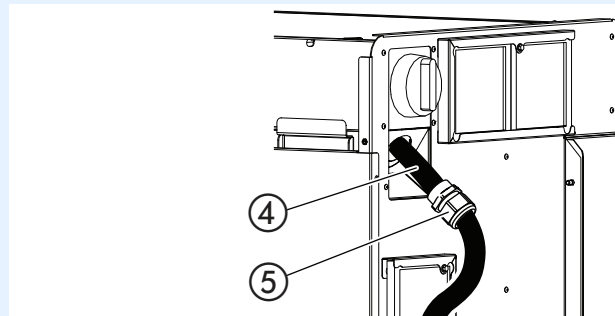
VMC-TS-007943

5. **Remove** the bottom 3 screws ② from the mounting bracket.
Remove the main disconnect switch ③ from the mounting bracket.



VMC-TS-001815

6. **Install** the cord ④ through the cord grip ⑤ and install to oven.
Install the lock nut onto the cord grip.



VMC-TS-007946

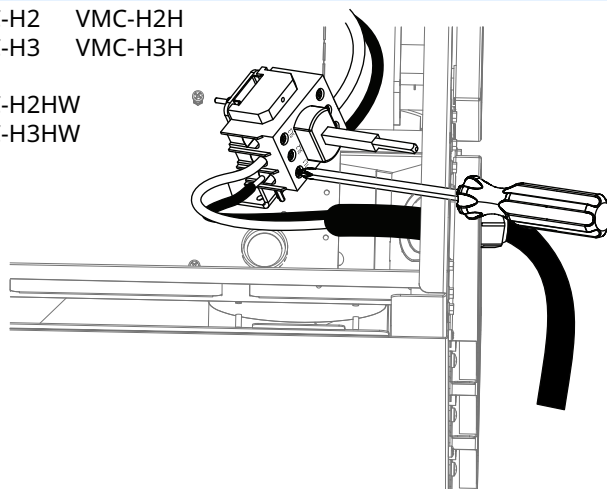
Continued on next page

Continued from previous page

7. **Connect** the supply cord to the appropriate terminals (L1, L2, L3, etc.) in accordance with local codes and regulations.

VMC-H2 VMC-H2H
VMC-H3 VMC-H3H

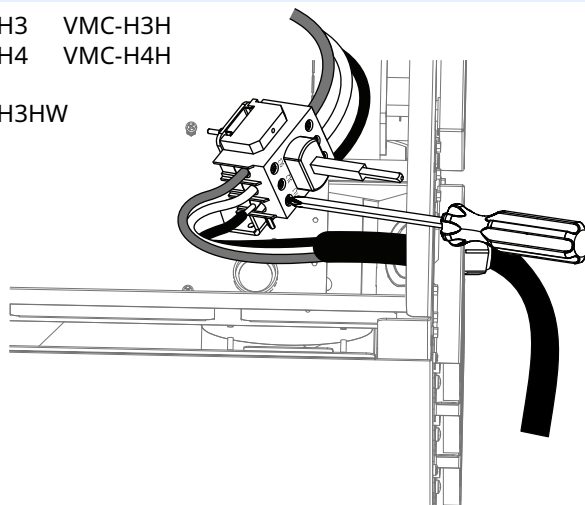
VMC-H2HW
VMC-H3HW



VMC-TS-001821

VMC-H3 VMC-H3H
VMC-H4 VMC-H4H

VMC-H3HW

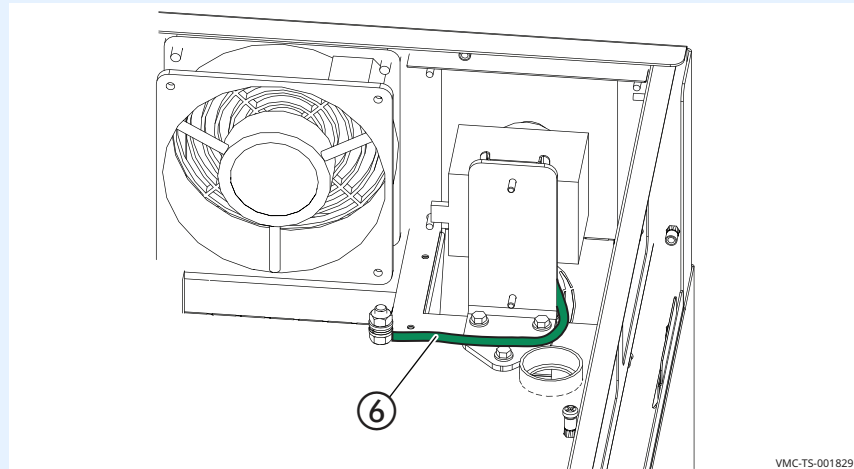


VMC-TS-001825

Continued on next page

Continued from previous page

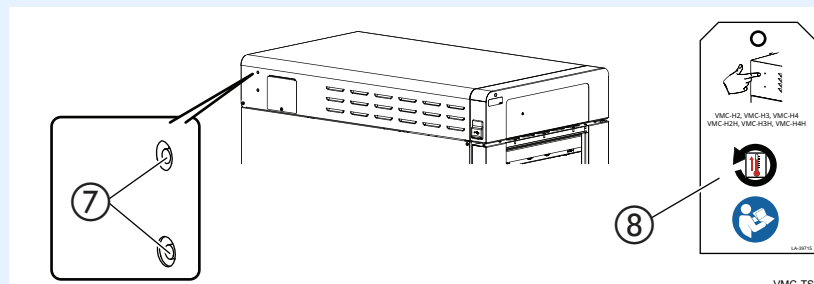
8. **Install** the ground wire ⑥.
Adjust the cord length.
Tighten the cord grip sealing nut onto the supply cord.



VMC-TS-001829

9. **Re-install** the main disconnect switch.
10. **Re-install** the mounting bracket.
11. **Re-install** the top cover.
12. **Press and release** the high limit temperature reset button(s) ⑦.
Remove the tag ⑧.

Press reset button(s)



VMC-TS-007949

Result

The oven is now installed.

How to Install the Oven

(50/60 Hz Models Without Cords or Plugs)



WARNING: Electric shock hazard.

Make sure the supply cord and plug have an earth connection (ground).

Before you begin

Make sure you have:

- Appropriate cord and plug, minimum oil resistant HO7RN-F. See local codes and regulations.
- Screwdriver (Phillips #2)
- Nut driver (1/4-inch)
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)

Requirements

- The oven must be installed on a level surface.
- The oven must not be installed in any area where it may be affected by steam, grease, dripping water, high temperature, or any other severely adverse conditions.
- If required by local codes, use Type F RCD.
- The oven is not intended for built-in installation.

Continued on next page

Continued from previous page

Voltages

	V	Ph	Hz	A	Breaker*	kW	Wire Size (mm)
VMC-H2H 220-240V	220	1	50	25	32	5.4	4
	240	1	50	28	32	6.4	4
380-415V	380	3	50	12	16	5.4	1.5
	415	3	50	13	16	6.4	1.5
VMC-H3H 220-240V	220	1	50	37	63	8.1	10
	240	1	50	41	63	9.6	10
380-415V	380	3	50	12	16	8.1	1.5
	415	3	50	13	16	9.6	1.5
VMC-H4H 380-415V	380	3	50	23	32	10.8	4
	415	3	50	25	32	12.7	4
VMC-H2HW 200-240V	200	1	50/60	32	50	6.5	8
	240	1	50/60	38	50	9.1	8
200-240V	200	3	50/60	18	40	6.5	10
	240	3	50/60	22	40	9.1	10
220-240V	220	1	50/60	35	63	7.7	10
	240	1	50/60	38	63	9.1	10
380-415V	380	3	50/60	20	32	7.7	4
	415	3	50/60	22	32	9.1	4
VMC-H3HW 200-240V	200	3	50/60	28	50	9.7	8
	240	3	50/60	33	50	13.6	8
380-415V	380	3	50/60	30	63	11.5	6
	415	3	50/60	33	63	13.6	6

*Electrical connections must meet all applicable federal, state, and local codes.

Continued on next page

Continued from previous page

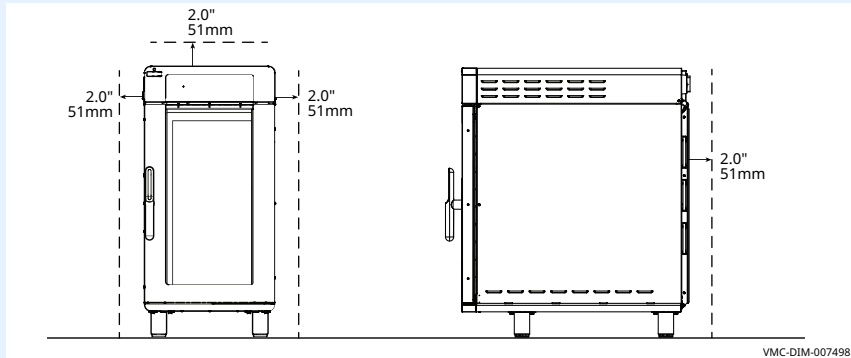
Wire sizes

60335-1 IEC:2010

Rated current of appliance A	Nominal cross-sectional area mm ²
>0.2 – ≤3	0.5
>3 – ≤0	0.75
>6 – ≤10	1.0
>10 – ≤16	1.5
>16 – ≤25	2.5
>25 – ≤32	4
>32 – ≤40	6
>40 – ≤63	10

Position the oven

To position the oven, do the following.

Step	Action
1.	Make sure that: ■ The location where the oven is being installed is rated to support the weight of the oven, ■ The oven is within five feet of the appropriate electrical outlet, ■ You follow the oven clearance guidelines. 
2.	Move the oven to the installation location and onto the final resting surface.

The oven is now correctly positioned.

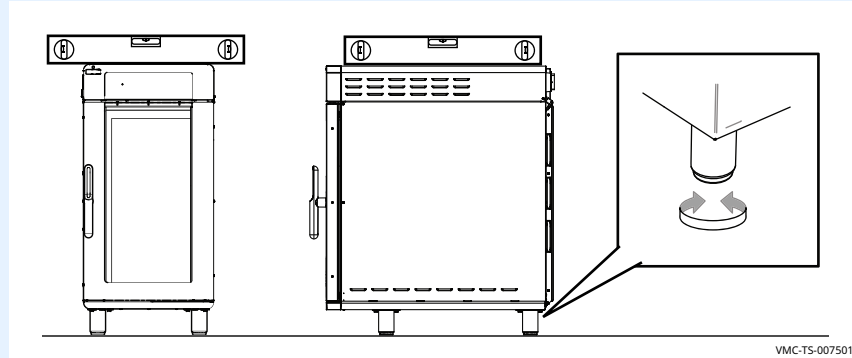
Continued on next page

Continued from previous page

Level the oven

To level the oven, do the following.

3. **Check** the level of the oven using a spirit (bubble) level. Check front to back and side to side.



Adjust the legs, if necessary, to achieve levelness.

The oven is now level.

Connect the wiring

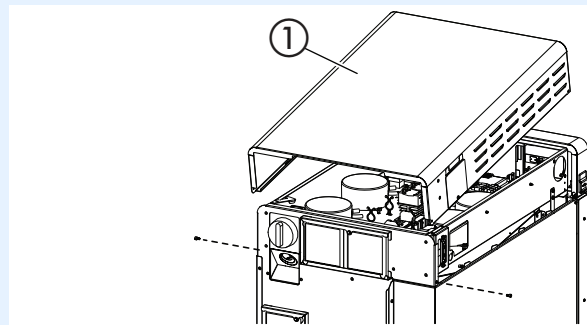
To connect the wiring, do the following.

4. **Remove** the top cover ①.



WARNING: Electric shock hazard.

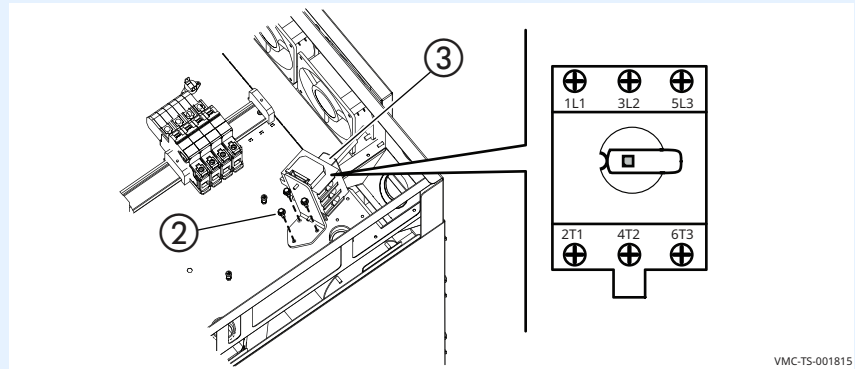
Make sure the supply cord is not connected to a power supply.



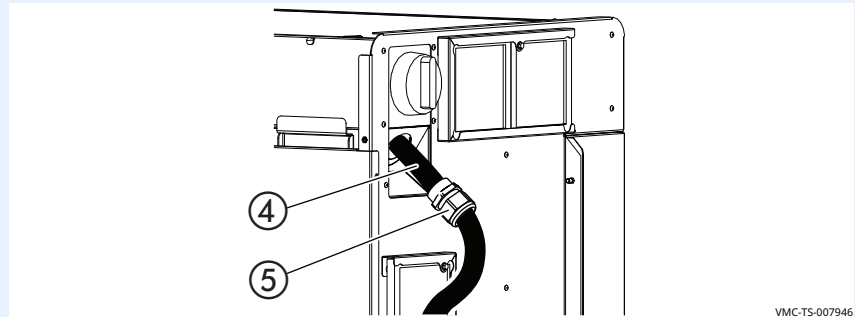
Continued on next page

Continued from previous page

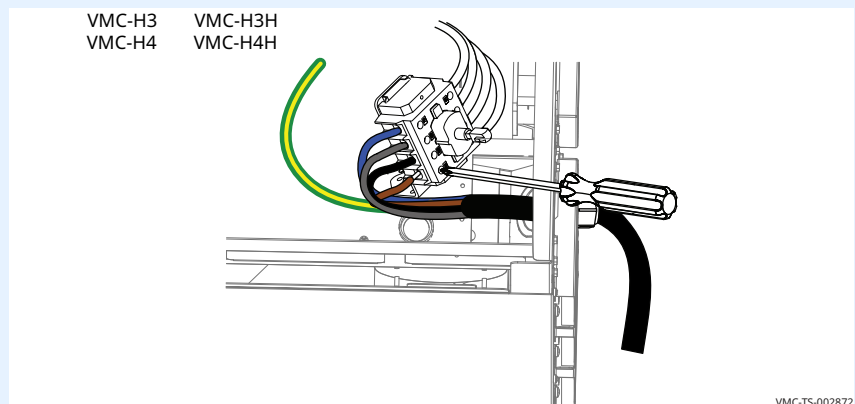
5. **Remove** the bottom 3 screws ② from the mounting bracket.
Remove the main disconnect switch ③ from the mounting bracket.



6. **Install** the cord ④ through the cord grip ⑤.
Install the cord and cord grip into the oven.
Install the lock nut onto the cord grip.



7. **Connect** the supply cord to the appropriate terminals (L1, L2, L3, etc.) in accordance with local codes and regulations.



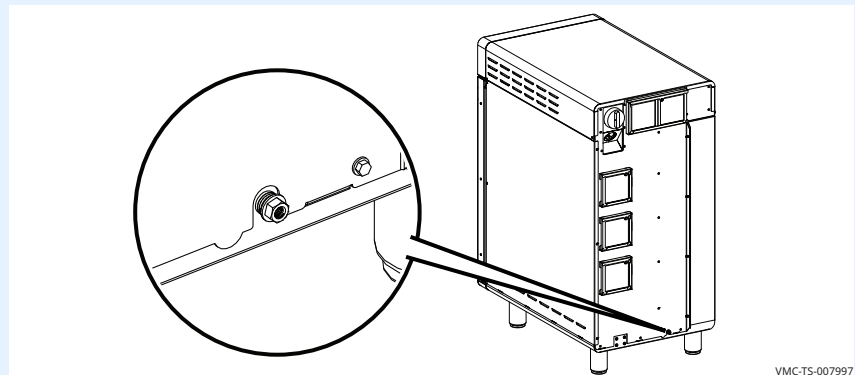
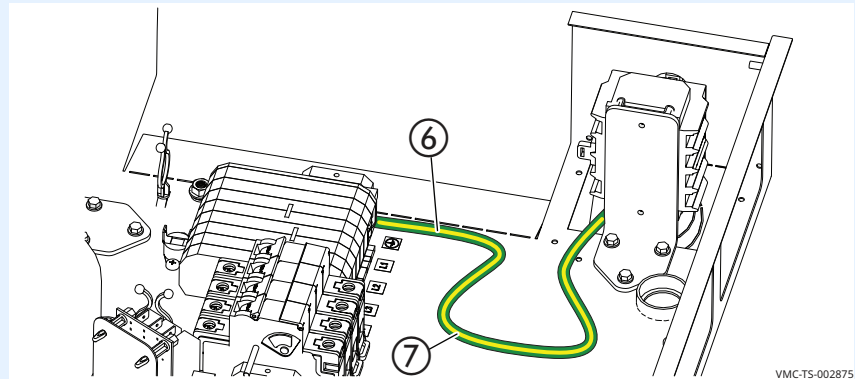
Continued on next page

Continued from previous page

8. **Install** the ground wire ⑥.

Leave an extra loop ⑦ so that current-carrying conductors become taut before the ground wire if the cord is accidentally pulled. Follow applicable regulations.

Tighten the cord grip sealing nut onto the supply cord.



NOTE: The equipotential-bonding terminal is located at the bottom rear of the oven.

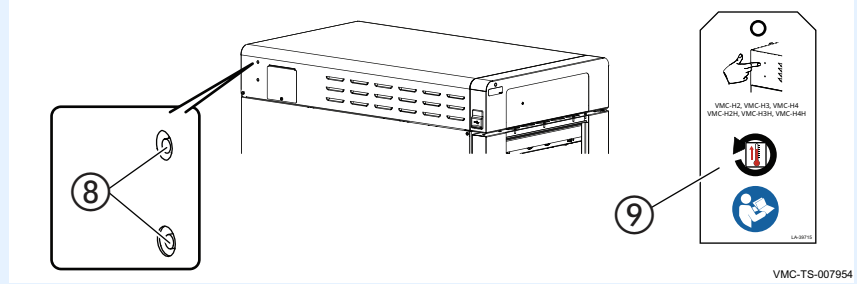
9. **Re-install** the main disconnect switch.
10. **Re-install** the mounting bracket.
11. **Re-install** the top cover.

Continued on next page

Continued from previous page

Press reset button(s)

12. **Press and release** the high limit temperature reset button(s) ⑧.
Remove the tag ⑨.



Result

The oven is now installed.

How to Install the Oven on a Stand (VMC-H2/H2H, VMC-H3/H3H, VMC-H4/H4H)

Before you begin

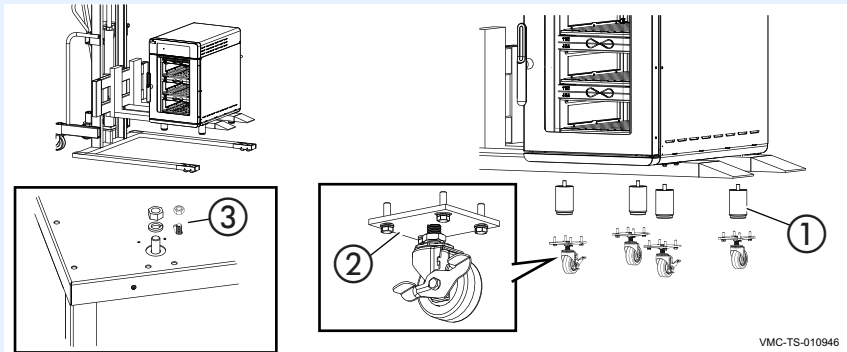
Make sure you have:

- The appropriate stand for your oven
- Regulation UL 197, 91.8
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)

Procedure

To install the ovens on a stand, do the following.

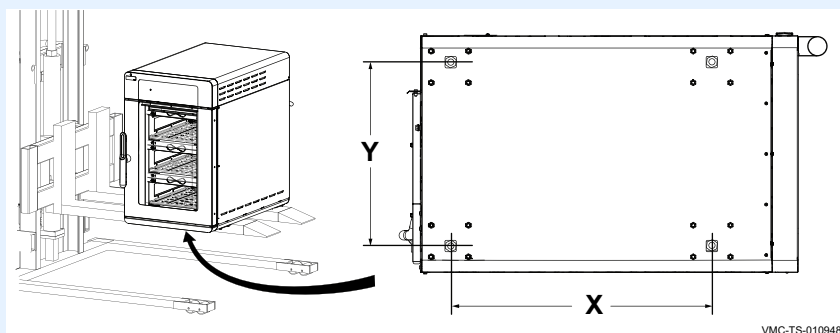
Step	Action
1.	Lift the oven using an appropriate lifting device. Remove the feet ①, or if the unit has casters ②, remove them including the mounting plates. Note the location of the fasteners ③ and remove them from the stand. Save the fasteners for re-use. VMC-TS-010946



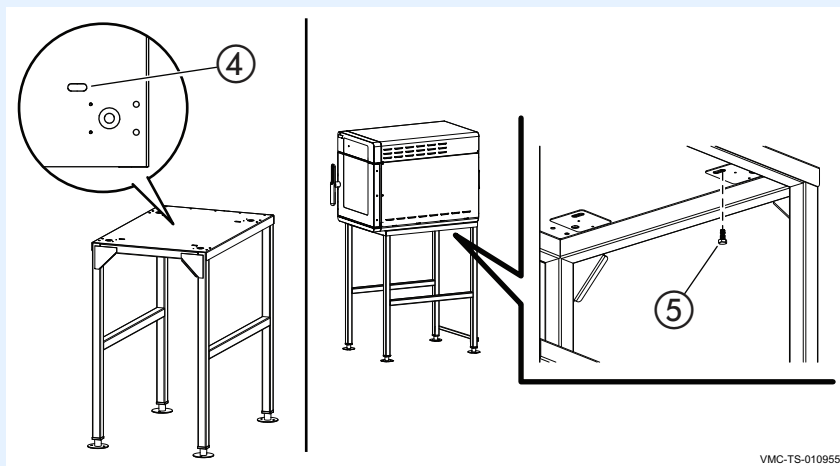
Continued on next page

Continued from previous page

2. While the oven is still on the lifting device, **measure** the distance between the mounting holes of the legs/casters (**X** and **Y**).



3. **Place** the oven on the stand. Use the hole pattern **④** on the stand that corresponds to the hole pattern of the oven measured in step 2. **Connect** the oven to the stand using the hardware **⑤** removed in step 1.



Result

The oven is now installed to the stand.

How to Install the Oven on a Stand (VMC-H2HW, VMC-H3HW)

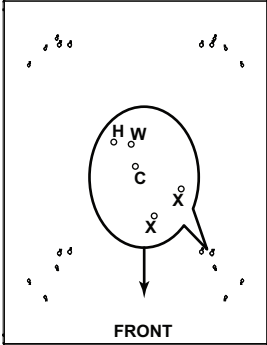
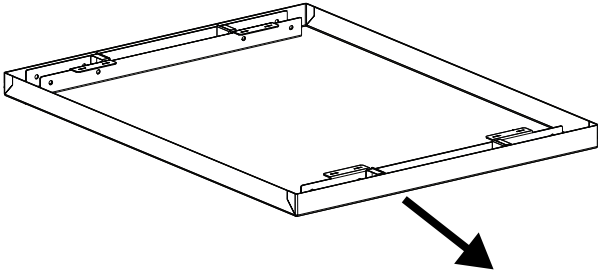
Before you begin

Make sure you have:

- The appropriate stand for your oven
- Regulation UL 197, 91.8
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)

Procedure

To install the ovens on a stand, do the following.

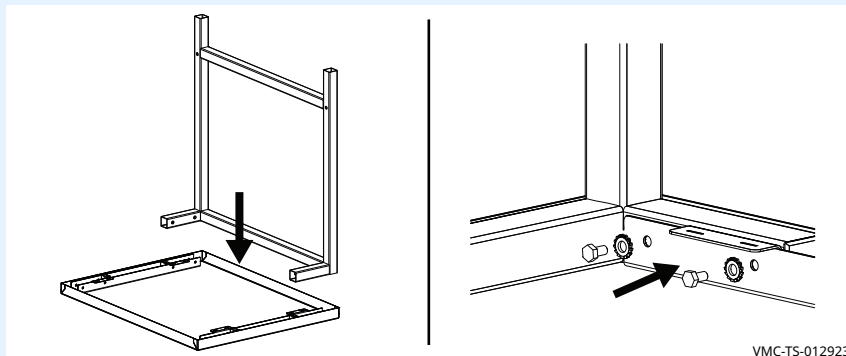
Step	Action
1.	Locate the front of the top panel.  VMC-TS-012917
2.	Put the top upside down on a flat surface.  VMC-TS-012920

Continued on next page

Continued from previous page

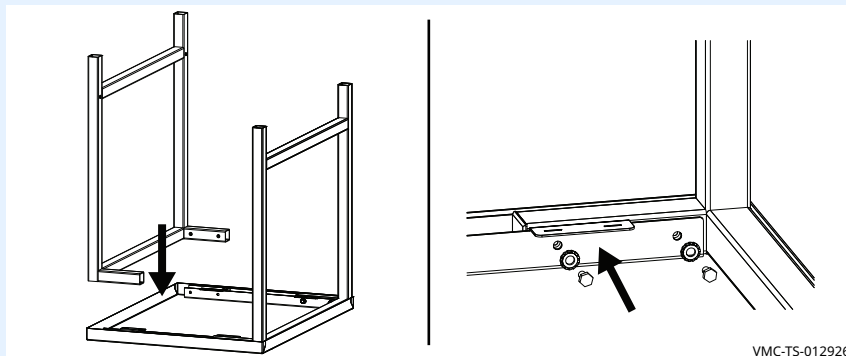
3. **Install** the leg assembly into the top panel.

Attach the leg assembly to the top panel with bolts and lock washers.

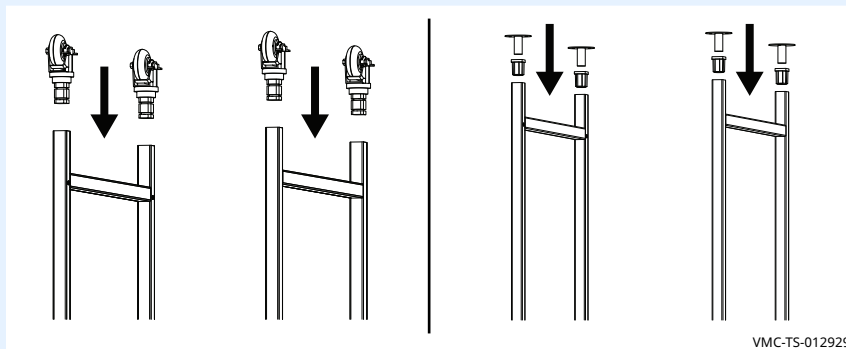


4. **Install** the second leg assembly into the top panel.

Attach the leg assembly to the top panel with bolts and lock washers.



5. **Install** the casters or the feet assemblies into the legs.

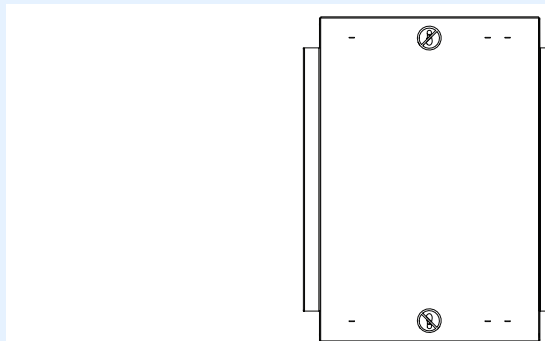


Continued on next page

Continued from previous page

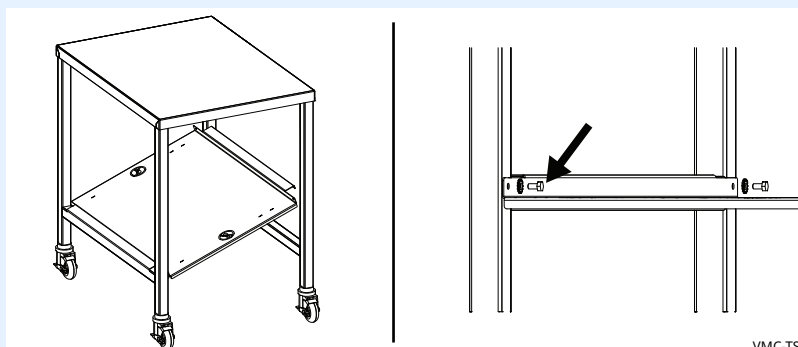
Installing the shelf (optional)

6. **Determine** which way the slots are to be oriented.



VMC-TS-012932

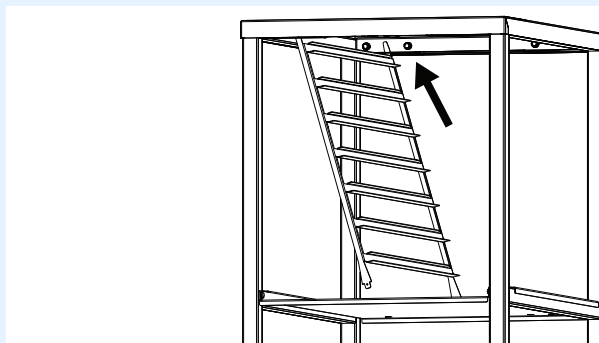
7. **Install** the shelf onto the leg assemblies.
Attach the shelf to the leg assemblies with bolts and lock washers.



VMC-TS-012935

Installing the racks (optional)

8. **Install** the rack into the slots on the underside of the top.



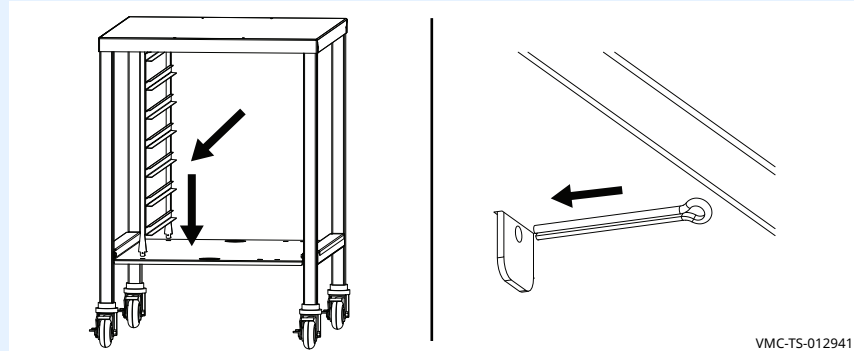
VMC-TS-012938

Continued on next page

Continued from previous page

9. **Rotate** the rack and lower it into the slots on the shelf.
Attach the rack to the shelf with cotter pins.

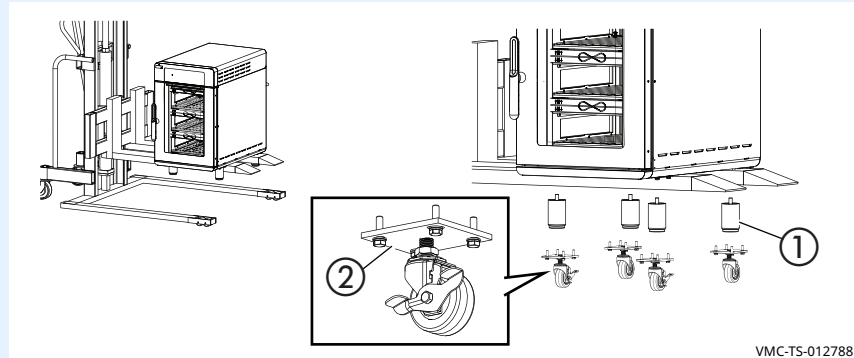
NOTE: Expand the cotter pin after inserting it through the hole.



10. **Repeat** the process for the other rack.

Installing the oven on a stand

11. **Lift** the oven using an appropriate lifting device. **Remove** the feet ①, or if the unit has casters ②, remove them including the mounting plates.

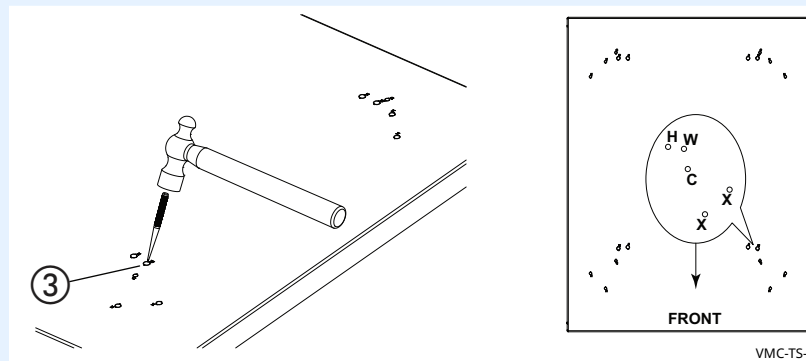


Continued on next page

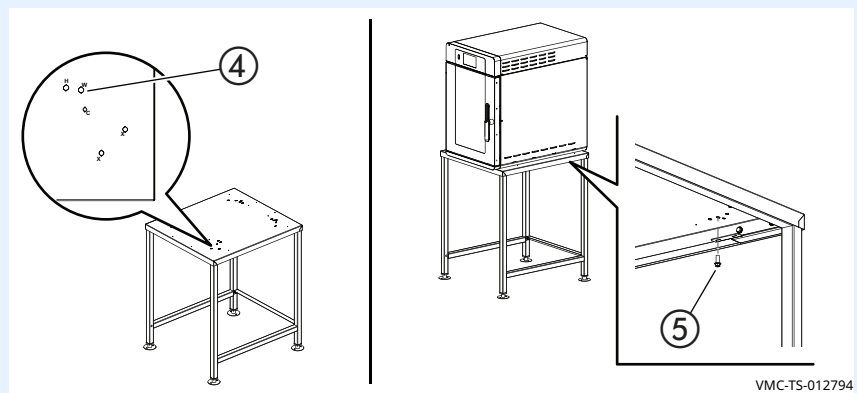
Continued from previous page

12. **Remove** the knock-outs ③ that correspond to your oven. The following letters represent the oven models.

- C—Converge
- H—Vector H Series
- W—Vector Wide
- X—Combitherm CTX



13. **Place** the oven on the stand. Use the hole pattern ④ on the stand that corresponds to the hole pattern of the oven. **Connect** the oven to the stand using the hardware ⑤.



Result

The oven is now installed to the stand.

How to Install the Oven on Casters (if required)

Before you begin

Make sure you have:

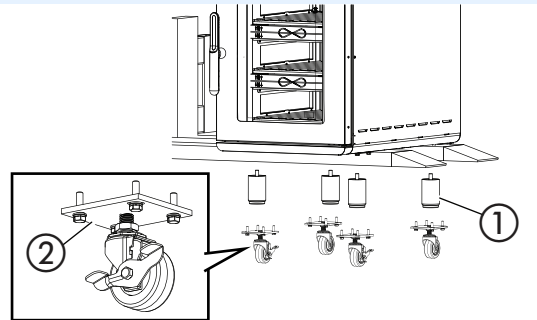
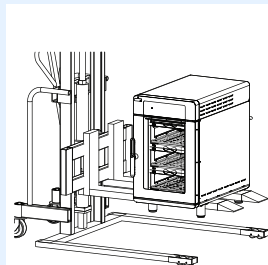
- The appropriate stand for your oven
- Regulation UL 197, 91.8
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
 - VMC-H2/H2H: 213 lb (97 kg)
 - VMC-H3/H3H: 278 lb (126 kg)
 - VMC-H4/H4H: 348 lb (158 kg)
 - VMC-H2HW: 243 lb (110 kg)
 - VMC-H3HW: 312 lb (142 kg)

Install casters on lower oven (if required)

Some stand-oven combinations require installing casters on the oven meant to be under the stand.

To install the casters on the lower oven, do the following.

Step	Action
1.	Lift the oven using an appropriate lifting device. Remove the feet ①. Attach each caster ② with fasteners as shown. VMC-TS-010961



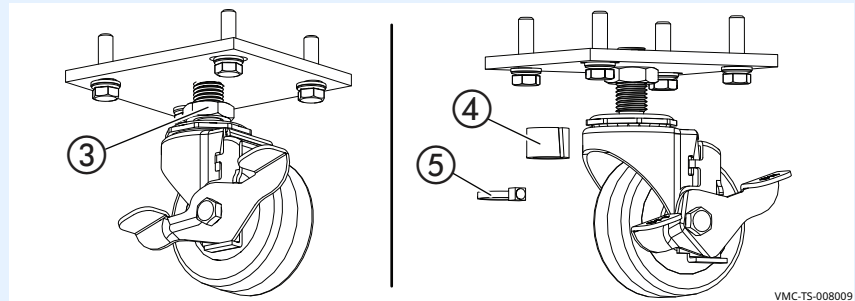
Continued on next page

Continued from previous page

2. **Level** the unit as necessary. To do so, screw the wheel up or down until the unit is level. Tighten the jam nut ③.

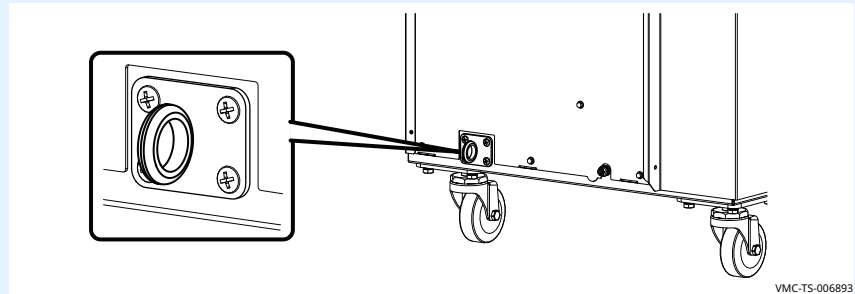
Slide a piece of the tubing ④ over the exposed screws if more than 1/4-inch of thread is exposed.

Attach wire tie ⑤ around the tubing to hold it in place.



Install the tether

3. **Install** the tether to the lower oven. Install the tether so that no stress is transmitted to the electrical cord when the oven moves.



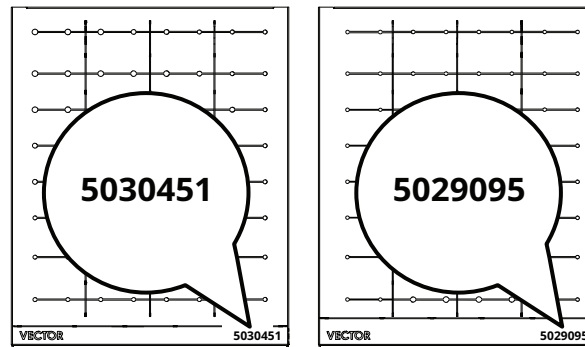
Result

The casters are now installed.

How to Install the Jet Plates (VMC-H2HW, VMC-H3HW)

Background

Each jet plate assembly consists of one inner panel and one outer panel. There are two unique jet plate assemblies used on the Vector Wide oven. The difference is in the outer panel used. One type (5029095) is used on the lower section of each chamber. The other type (5030451) is used on the upper section of each chamber. The inner panels used are the same for both types of assemblies.

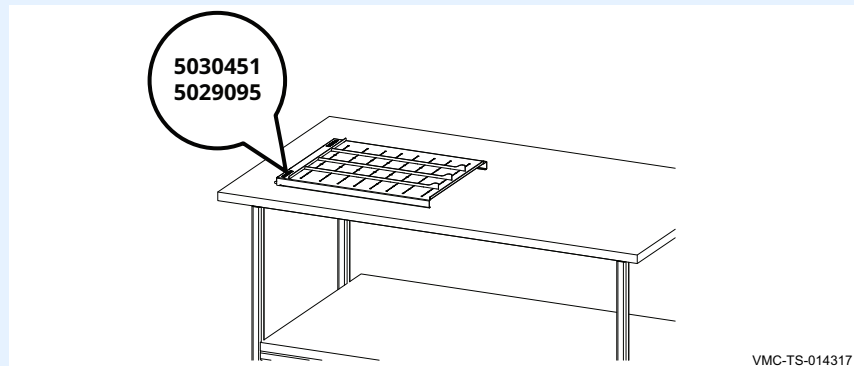


VMC-TS-014314

Procedure

To install the jet plates, do the following.

Step	Action
1.	Each outer panel has the part number etched into the right corner. Locate the part number on all outer panels. Place an outer panel on a table with the part number facing up.

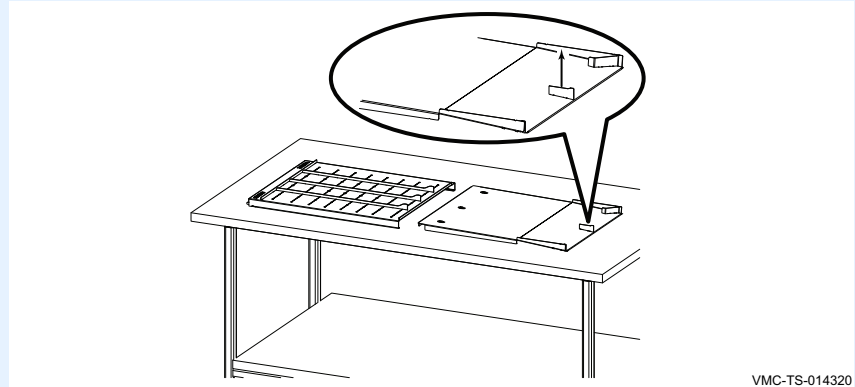


VMC-TS-014317

Continued on next page

Continued from previous page

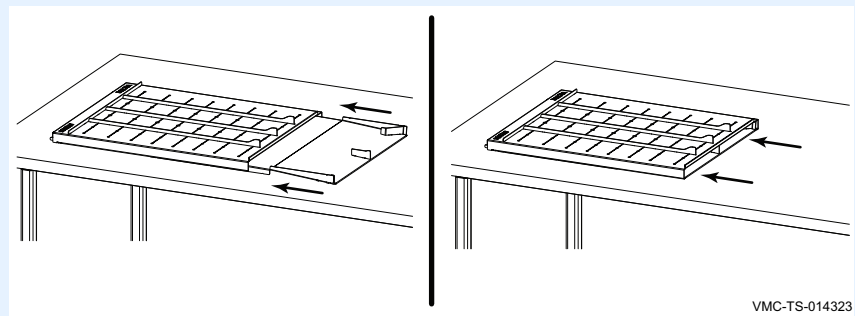
2. **Place** an inner panel on the table with the air deflector up.



VMC-TS-014320

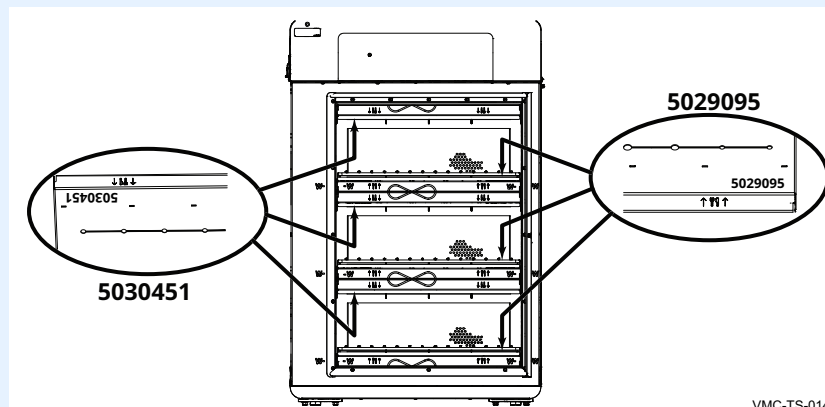
3. **Insert** the inner panel into the outer panel. **Push** the inner panel into the outer panel until it is fully inserted.

Assemble all jet plates in a similar fashion.



VMC-TS-014323

4. **Install** jet plates 5029095 in the lower section of each chamber with the part number facing up. **Install** jet plates 5030451 in the upper section of each chamber with the part number facing down.

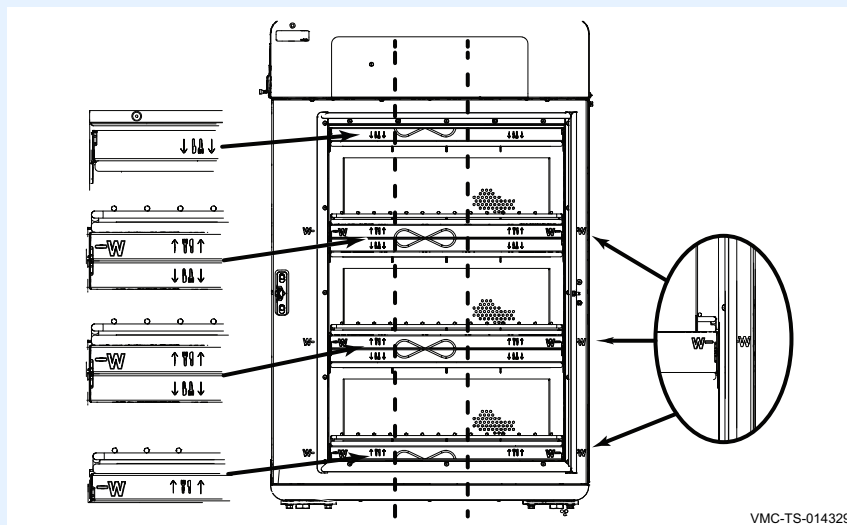


VMC-TS-014326

Continued on next page

Continued from previous page

5. **Follow** the steps below and inspect the installation of the jet plates.
 - Make sure the ∞ symbols are aligned.
 - Make sure the fork and knife arrows point to the product in each chamber.
 - On later production jet plates which include a "W" etched into them, make sure the "W" etched aligns with the "W" etched in the door frame.



VMC-TS-014329

Result

The jet plates are now installed.

How to View and Set up Network Connections

Before you begin

- The facility must have Wi-Fi.
- The oven will only recognize networks that require a password to connect.
- Do not connect to a guest network.

Procedure

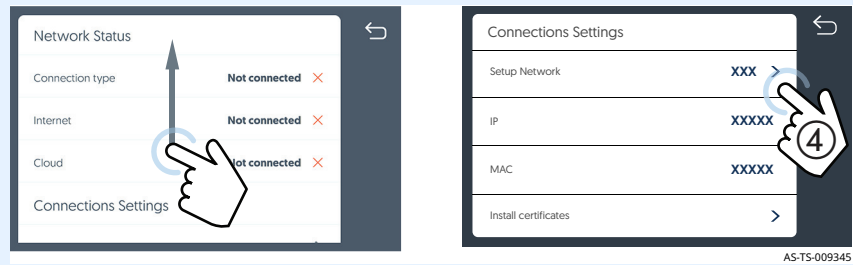
To set up Wi-Fi, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays. VMC-TS-006259
2.	Touch the settings icon ②. The general settings screen displays. VMC-TS-006262
3.	Touch the Wi-Fi icon ③. The Network Status screen displays. AS-TS-009332

Continued on next page

Continued from previous page

4. **Scroll** to “Connection settings”. **Touch** the Setup Network icon ④.

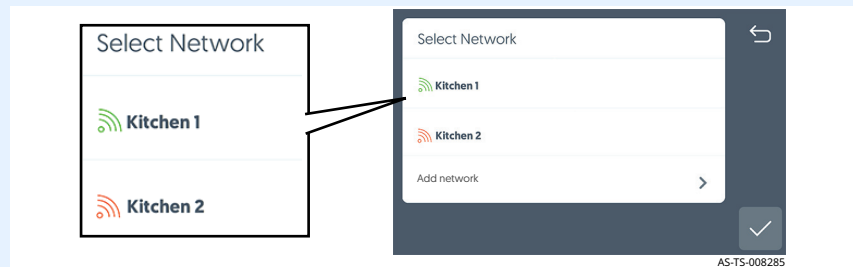


The available networks will show on the screen. The color of the network icon indicates the strength of the signal for each network.

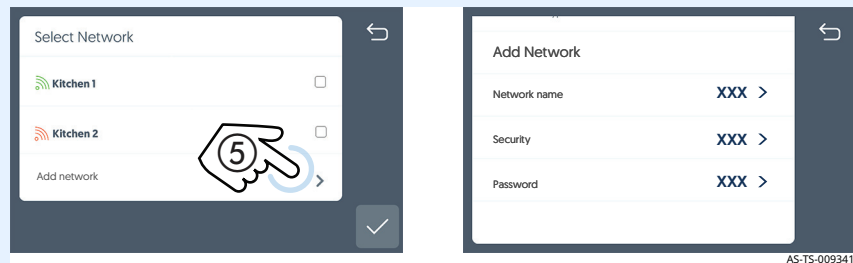
Green = strong

Red = weak

If the network to be used is not displayed, continue with step 5.



5. If the network is not displayed, **touch** the “Add network” icon ⑤.



Enter the SSID using the keypad. Then, **touch** the arrow key.

Enter the security type. Then, **touch** the check mark.

Enter the password using the keypad. Then, **touch** the arrow key.

Touch the check mark when finished.

Result

The procedure is now complete.

How to Set up an Ethernet Connection

Before you begin

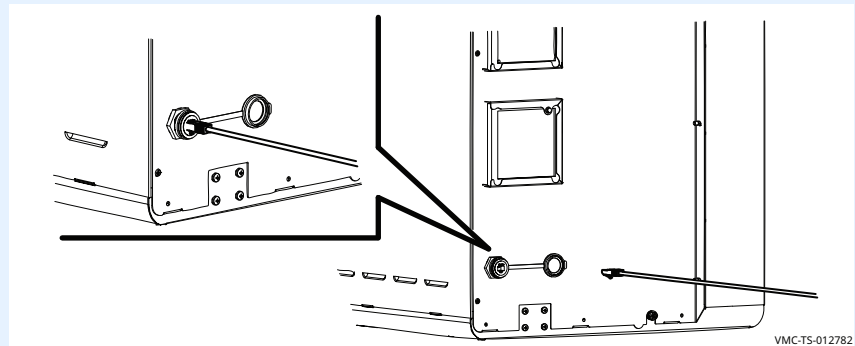
- The facility must have an Ethernet port.
- You will need an Ethernet cable.

Procedure

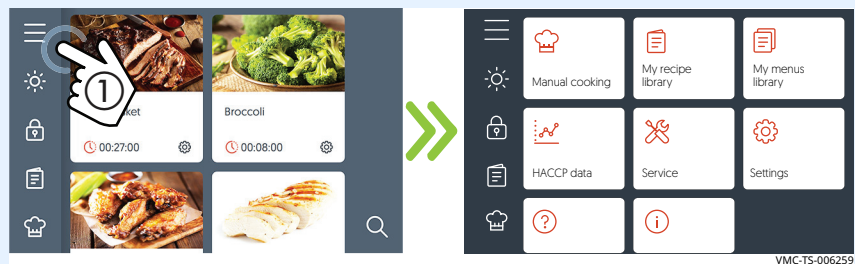
To set up an Ethernet connection, do the following.

Step	Action
------	--------

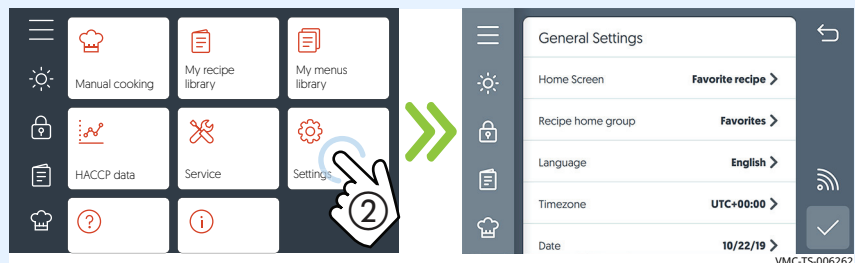
- | | |
|----|---|
| 1. | Plug the Ethernet cord into the Ethernet port on the oven and the wall outlet. |
|----|---|



- | | |
|----|---|
| 2. | Touch the menu icon ①. The menu screen displays. |
|----|---|



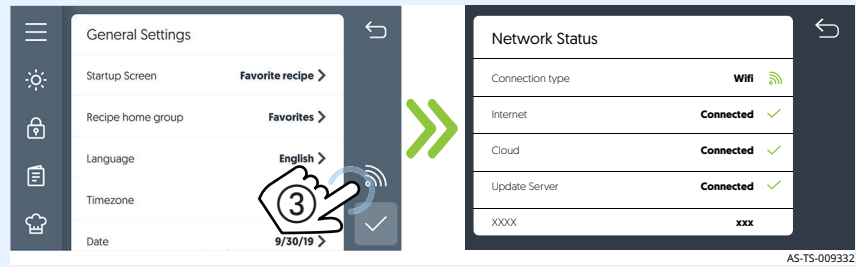
- | | |
|----|---|
| 3. | Touch the settings icon ②. The general settings screen displays. |
|----|---|



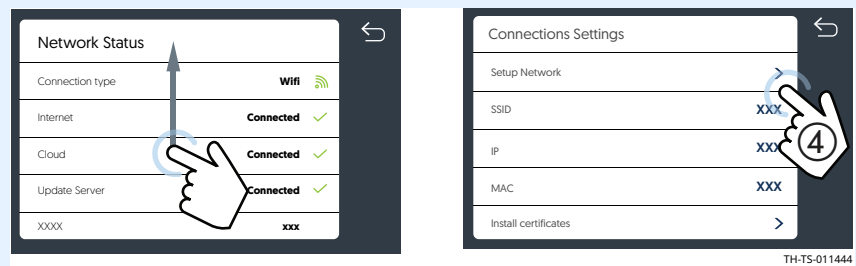
Continued on next page

Continued from previous page

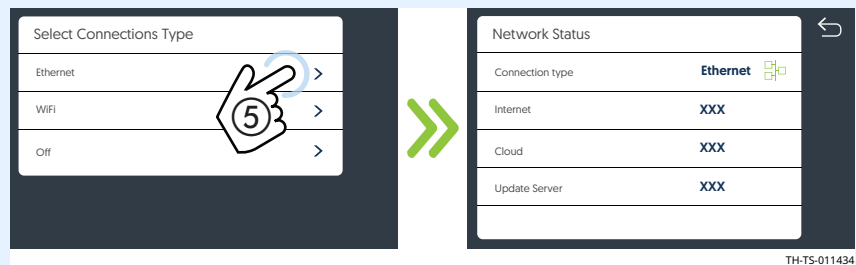
4. **Touch** the Wi-Fi icon ③. The Network Status screen displays.



5. **Scroll** to "Connection Settings". **Touch** the Setup Network icon ④. The Select Connection Type screen displays.



6. **Touch** the "Ethernet" icon ⑤. Follow any prompts.



Result

The Ethernet connection is now set up.

How to Turn On and Turn Off the Oven

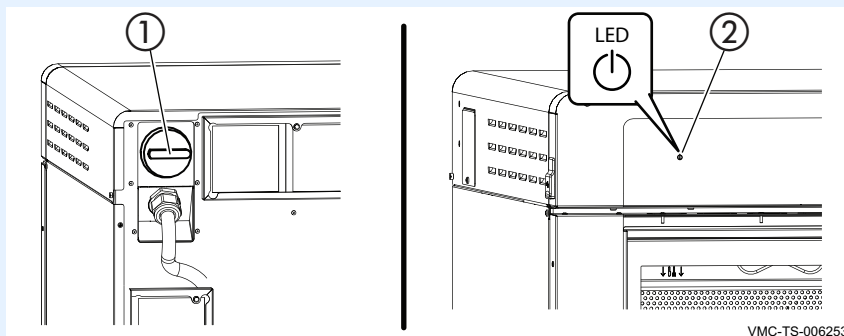
Before you begin

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 main disconnect switch ① to the ON position. Touch the ON/OFF button ②. NOTE: The main disconnect switch is meant to be used during service operations. For every day operation, it may be left in the ON position. The diagram shows two parts of the oven. On the left, a side view of the main disconnect switch (1) is shown. On the right, a front view of the control panel shows the ON/OFF button (2) with an LED indicator. VMC-TS-006253
2.	Touch and hold the ON/OFF button ② until the “Shut down options” screen displays. Touch “Shut down” ③. The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off. The diagram shows the control panel with the ON/OFF button (2) and the Shut down option (3) highlighted. The Shut down option is part of a menu that also includes Standby and Restart options. VMC-UI-010613

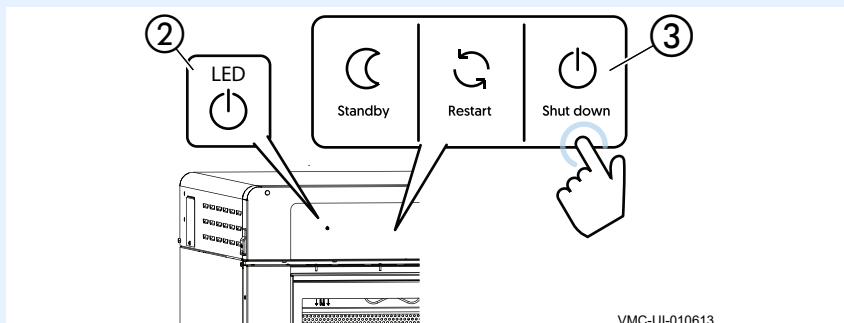


The oven is now on.

Turning off the oven

To turn off the oven, do the following.

- Touch** and hold the ON/OFF button ② until the “Shut down options” screen displays. **Touch** “Shut down” ③. The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off.



The oven is now off.

How to Preheat the Oven

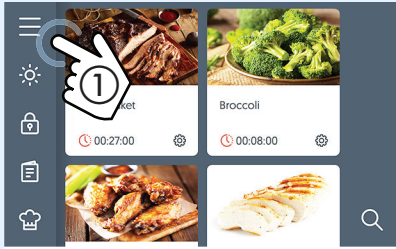
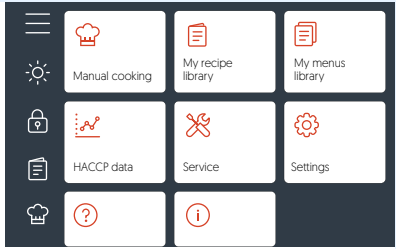
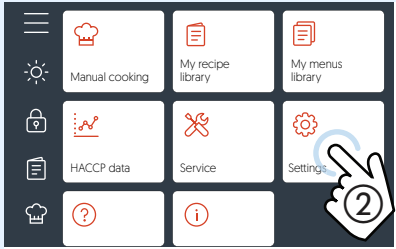
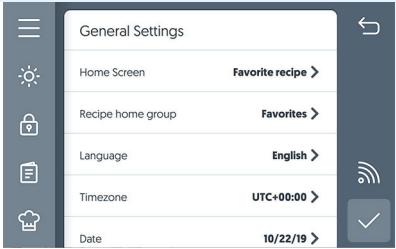
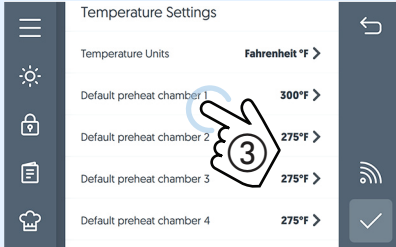
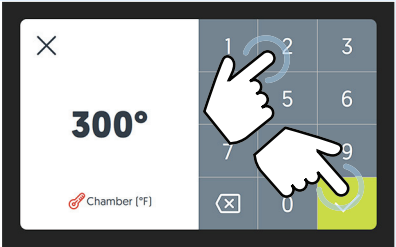
Before you begin

Make sure:

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

Procedure

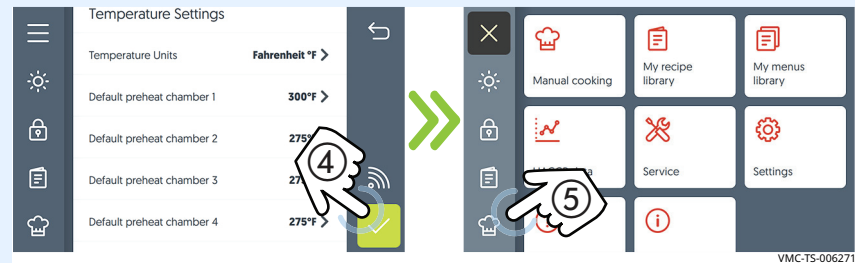
To preheat the oven, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.   VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.   VMC-TS-006262
3.	Scroll to the Temperature Settings. Touch the preheat chamber setting ③. The existing temperature displays. Enter the preheat temperature using the number pad. Touch the check mark.   VMC-TS-006265

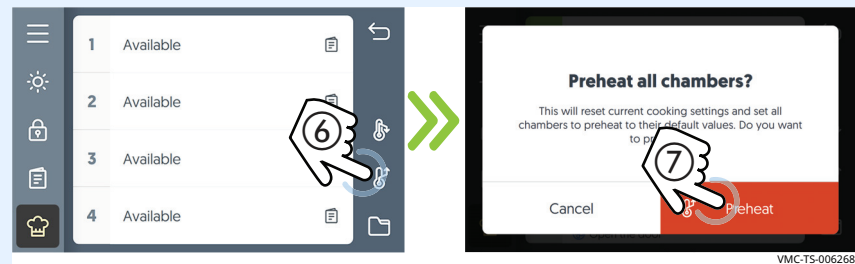
Continued on next page

Continued from previous page

4. **Touch** the check mark ④ to save the preheat temperature settings.
Touch the manual cook icon ⑤ to return to the manual cook screen.



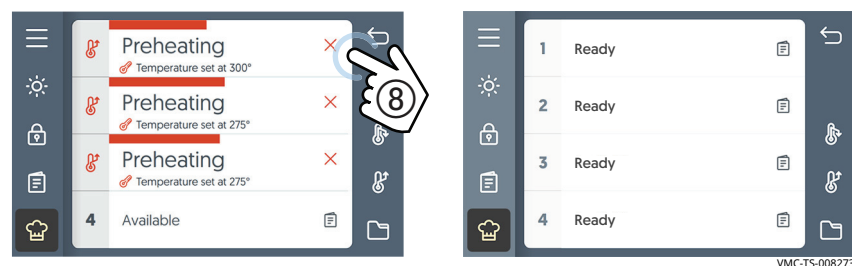
5. **Touch** the preheat icon ⑥. The preheat all chambers confirmation screen displays.
Touch "Preheat" ⑦. All chambers start to preheat to their preset temperatures.



Screen loading bars

Red loading bars indicate each chamber's progress towards reaching its set temperature.

Touch the cancel icon ⑧ to cancel the preheating process before the individual chamber reaches its preset preheat temperature. Each chamber must be canceled individually.



Result

The oven is preheating. When the preheat process is complete, the screen displays Ready for each chamber.

How to Cook with Programmed Recipes

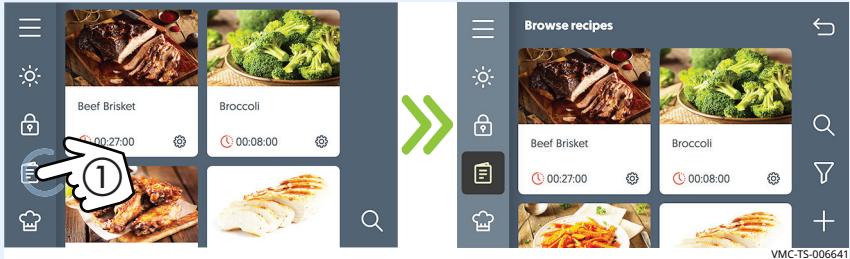
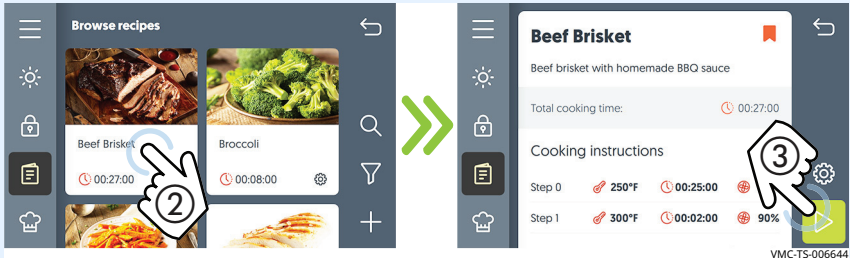
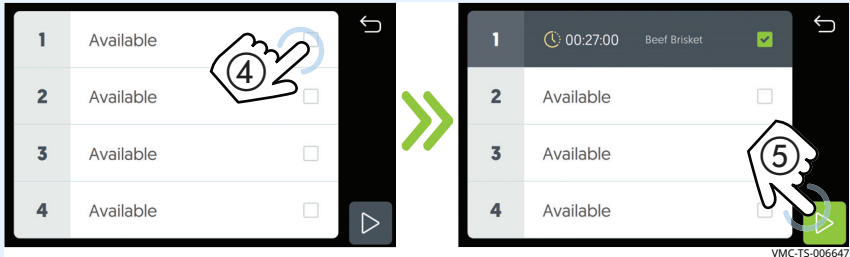
Before you begin

Make sure:

- The oven is preheated.
- Your food is prepared and ready to cook.

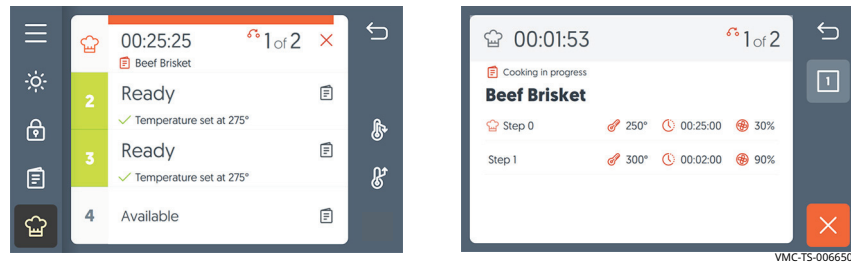
Procedure

To cook using a programmed recipe, do the following.

Step	Action
1.	Touch the recipes icon ①. The browse recipes screen displays. 
2.	Navigate to the recipe. Touch the recipe ②. Touch the start icon ③. 
3.	Select the available chamber(s) ④. Open the door and load the food into the chamber. Close the door. Touch the start icon ⑤. 

During the cooking process

The cooking status screen displays the details on the current cook setting.



During the cooking process:

Action	Result
Touch the hand icon  when action is required...	to continue the cooking process.
Touch the chamber...	to show the recipe details.
Touch and hold the chef's hat next to the cooking parameters... 	to show the current chamber temperature.
Touch "X"...	to cancel the cooking process.

Result

At the end of the cooking process, the oven sounds an alert and both the chamber light and door handle light flash. Remove the cooked food.

NOTE: Be sure to remove the cooked food after pressing "Continue". By pressing "Continue" the oven will revert back to the preheat temperature. If left inside the oven, the food will continue to cook.



How to Cook in Manual Mode

Before you begin

Be sure your food is prepared and ready to cook.

Background

This procedure consists of:

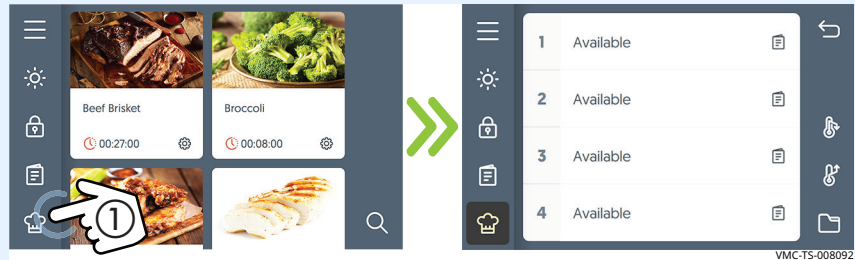
- Setting the preheating stage;
- setting the food loading action;
- and setting the cooking stage parameters (temperature, time, and fan speed).

Procedure

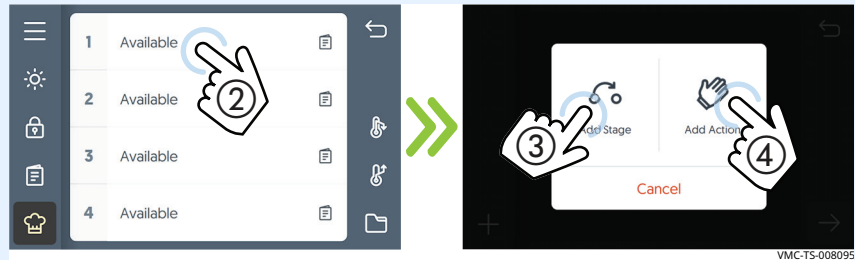
To cook in manual mode, do the following.

Step	Action
------	--------

- | | |
|----|--|
| 1. | Touch the manual cook icon ①. The available chambers are displayed. |
|----|--|



- | | |
|----|---|
| 2. | Touch any available chamber ②.
Touch “Add Stage” ③ to add the preheat stage. |
|----|---|



NOTE:
Touching “Add Stage” ③ adds a cooking stage to the recipe. A stage is a set of cooking parameters: cooking temperature, cooking time, and fan speed.

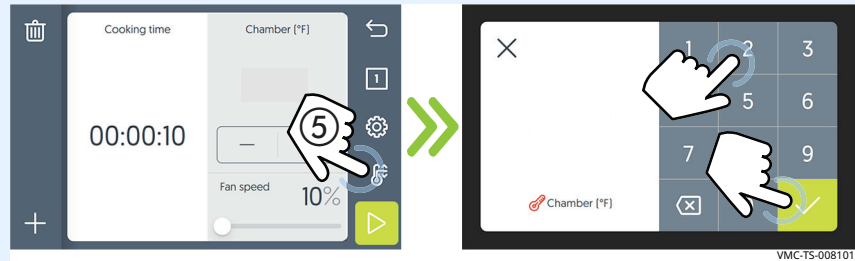
Touching “Add Action” ④ adds an action step to the recipe. An action adds manual tasks to be completed during the recipe such as loading the food or adding an ingredient.

Continued on next page

Continued from previous page

3. **Touch** the temperature regulation icon ⑤. The oven may need to warm up or cool down to reach your cooking temperature.

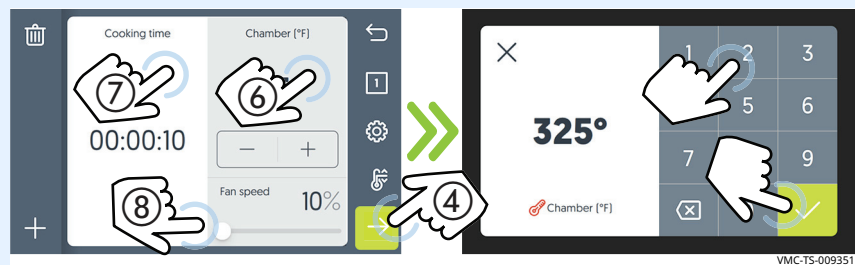
Enter a preheat temperature using the key pad. **Touch** the check mark.



4. Now set the cooking parameters. **Touch** the cooking temperature ⑥. **Enter** the cooking temperature using the key pad.

Touch the cooking time ⑦. Enter the cooking time using the key pad.

Slide the slider ⑧ to set the fan speed.



5. **Touch** the start icon ⑨. The preheat process starts.



At the end of the preheat stage, the oven sounds an alert, and both the chamber light and the door handle light flash.

Continued on next page

Continued from previous page

6. **Load** the food into the appropriate chamber. **Touch** the action hand ⑩. The cooking stage timer starts to count down.



At the end of the cooking stage, the oven sounds an alert, and the chamber light and door handle light flash.

7. **Open** the door and remove the hot food.

NOTE: Be sure to remove the cooked food after pressing "Continue". By pressing "Continue" the oven will revert back to the preheat temperature. If left inside the oven, the food will continue to cook.

Result

The food is now cooked.

How to Lock and Unlock the Screen

Before you begin

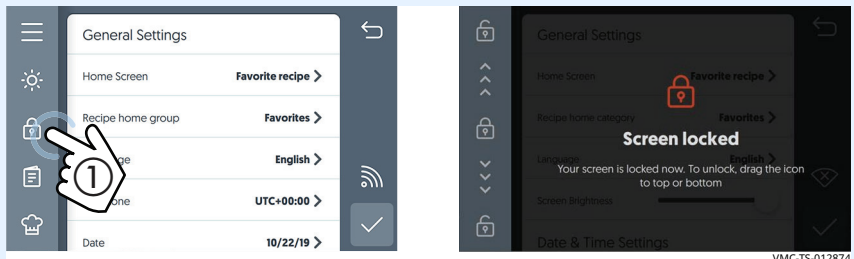
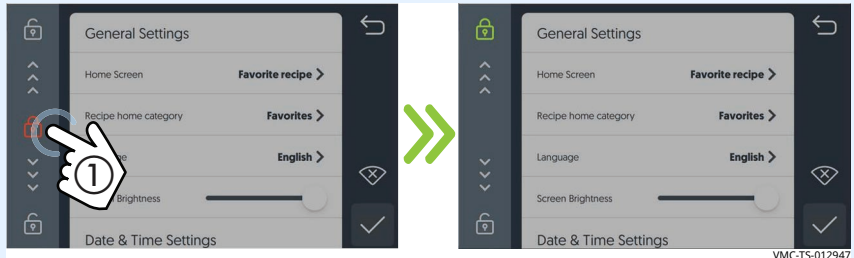
The oven is turned on.

Background

The screen can be locked to prevent changes being made during the cooking process.

Procedure

To lock and unlock the screen, do the following.

Step	Action
1.	Touch the lock icon ①. The screen is now locked. 
2.	To unlock the screen, touch and hold the lock icon and drag it to the top or bottom of the screen. 

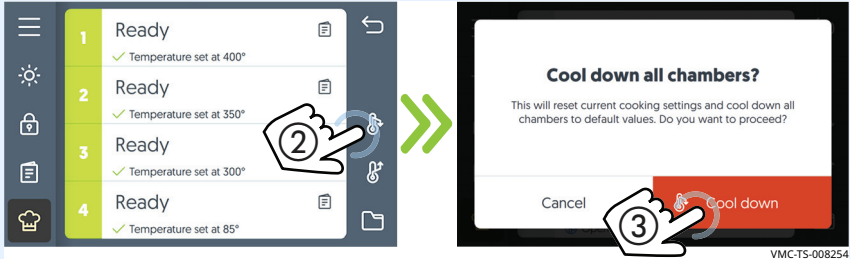
Result

The screen is now locked or unlocked.

How to Cool Down the Oven

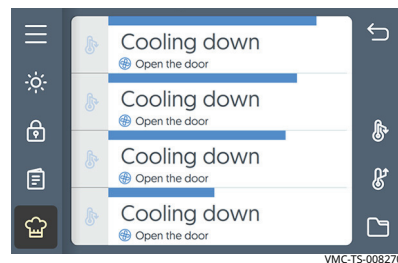
Procedure

To cool down the oven, do the following.

Step	Action
1.	Touch the manual cook icon ①.  VMC-TS-008263
2.	Touch the cool down icon ②. The cool down all chambers screen displays. Touch "Cool down" ③. Open the door. NOTE: The oven activates the blowers for the cool down process. The oven deactivates the blowers when the cool down process is complete.  VMC-TS-008254

Cooling down progress bars

Above each chamber on the screen, blue progress bars indicate each chamber's progress towards reaching its cool down temperature.



Result

The oven is now cooled down.

How to Create a Recipe

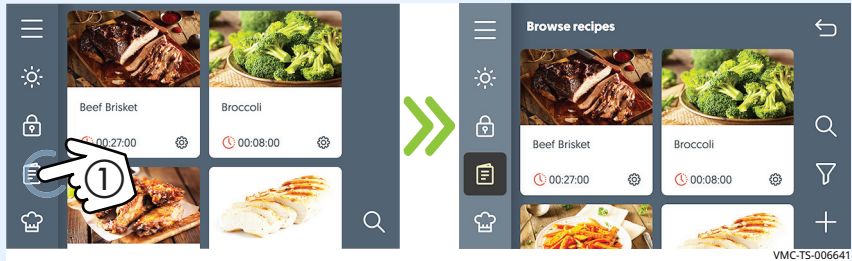
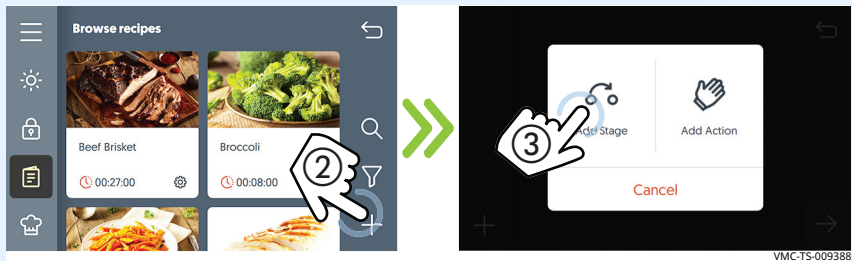
Background

Creating a recipe consists of:

- Setting the cooking stage(s) parameters (temperature, time, and fan speed);
- setting an action step if desired such as adding an ingredient;
- naming the recipe;
- adding a description to the recipe;
- adding a photo to the recipe;
- and adding the recipe to a category.

Procedure

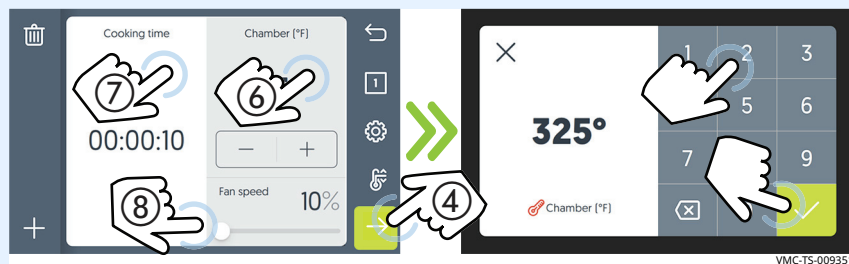
To create a recipe, do the following.

Step	Action
1.	Touch the recipes icon ①. The browse recipes screen displays.  VMC-TS-006641
2.	Touch the plus icon ②. Touch "Add Stage" ③ to add a cooking stage to the recipe.  VMC-TS-009388

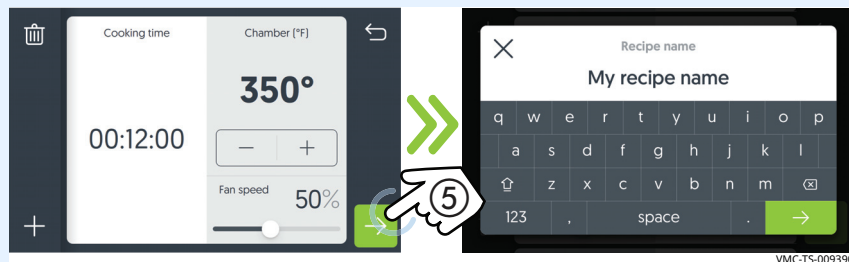
Continued on next page

Continued from previous page

3. Set the cooking parameters. **Touch** the cooking temperature ⑥. Enter the cooking temperature using the key pad. **Touch** the check mark.
Touch the cooking time ⑦. Enter the cooking time using the key pad.
Touch the check mark.
Slide the slider ⑧ to set the fan speed.
Touch the forward arrow icon ④ when finished.



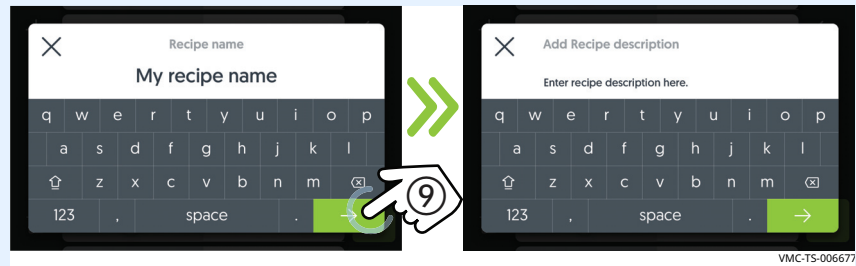
4. **Touch** the plus icon to add an additional stage or action, if needed.
5. **Touch** the forward arrow icon ⑤. The recipe name screen displays.



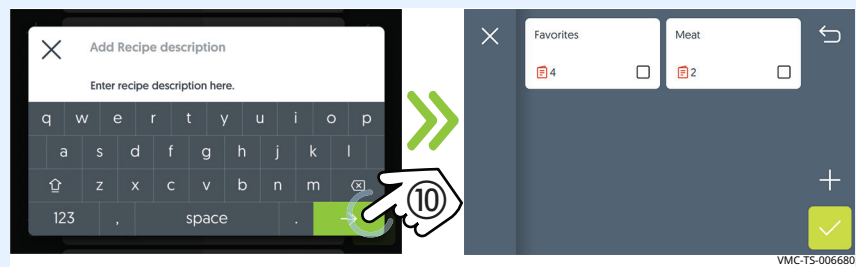
Continued on next page

Continued from previous page

6. **Enter** the recipe name. **Touch** the forward arrow icon ⑨. The recipe description screen displays.

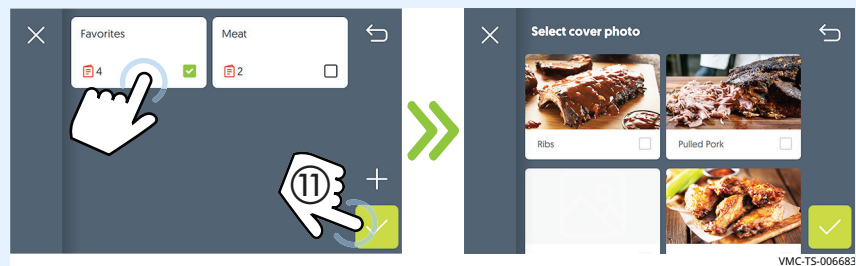


7. **Enter** the recipe description. **Touch** the forward arrow icon ⑩. The recipe category screen displays.



8. **Select** the recipe category. A check mark displays on the selected recipe category.

Touch the check mark ⑪. The select cover photo screen displays.

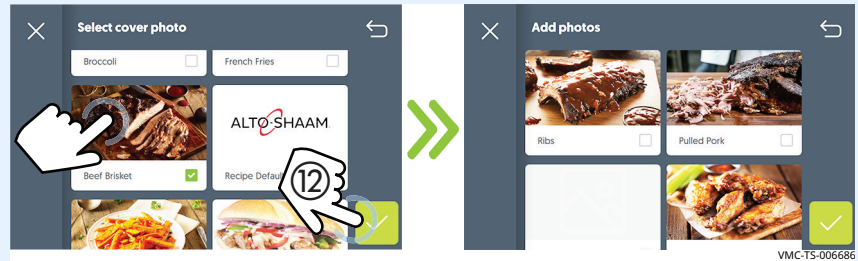


Continued on next page

Continued from previous page

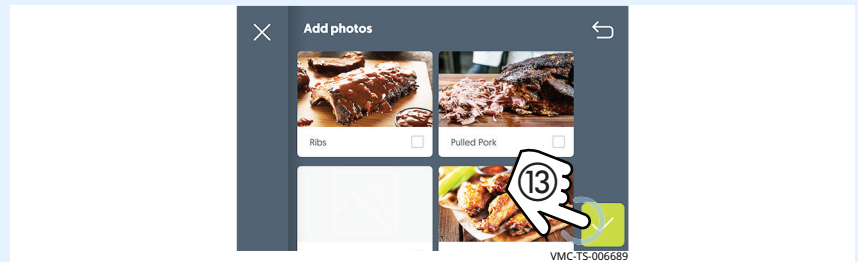
9. **Select** the cover photo for the recipe. A check mark displays on the selected photo.

Touch the check mark ⑫. The add photos screen displays.



10. **Select** additional photos for the recipe, if needed. A check mark displays on any selected photos.

Touch the check mark ⑬ when finished to save the recipe.



Result

A new recipe has been created.

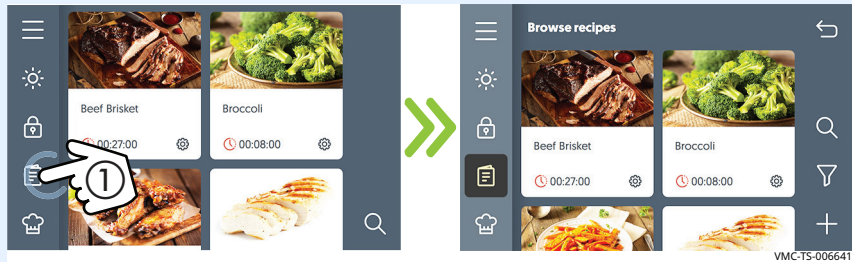
How to Modify, Duplicate, or Delete a Recipe

Procedure

To modify, duplicate, or delete a recipe, do the following.

Step	Action
1.	Touch the recipes icon ①. The browse recipes screen displays.
2.	To modify a recipe, Touch the recipe settings icon ② of the desired recipe.
Touch "Modify recipe". The first stage of the recipe displays. There will be a screen for each stage. Scroll to the stage you want to modify.	
Touch the time or temperature space then modify the value using the key pad. Slide the slider to change the fan speed. Touch the forward arrow icon when finished. Touch the trash icon to delete the stage, if desired.	

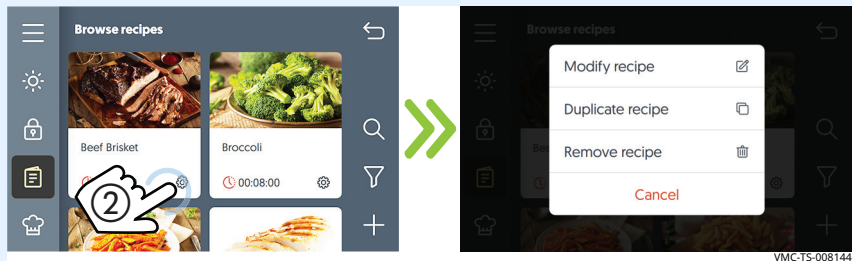
1. **Touch** the recipes icon ①. The browse recipes screen displays.



VMC-TS-006641

Modifying

2. To modify a recipe, **Touch** the recipe settings icon ② of the desired recipe.



VMC-TS-008144

Touch "Modify recipe". The first stage of the recipe displays. There will be a screen for each stage. Scroll to the stage you want to modify.



VMC-TS-009395

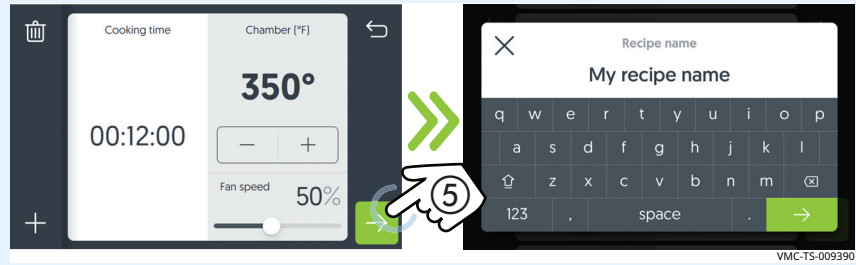
Touch the time or temperature space then modify the value using the key pad. **Slide** the slider to change the fan speed. **Touch** the forward arrow icon when finished.

Touch the trash icon to delete the stage, if desired.

Continued on next page

Continued from previous page

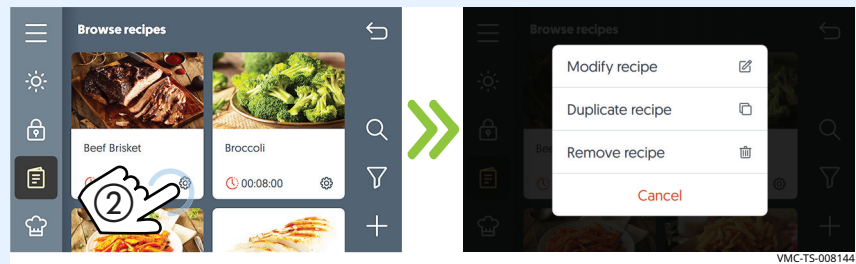
3. **Touch** the forward arrow icon (5). The recipe name screen displays.



Step through the remaining screens using the forward arrow icon. You will be given the opportunity to change the description and any photos you have included in the recipe. When you get back to the **browse recipes** screen, the changes will be saved.

Duplicating

4. To duplicate a recipe, **Touch** the recipe settings icon (2) of the desired recipe.



Touch "Duplicate recipe" to copy it.

5. Step through the remaining screens using the forward arrow icon. When you get to the naming screen, enter a new name using the keypad.



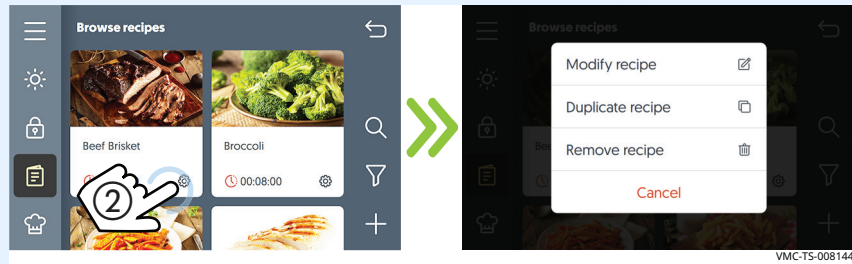
Step through the remaining screens using the forward arrow icon. Change the parameters of the recipe as desired. When you get back to the **browse recipes** screen, the changes will be saved and the recipe will be visible on the display.

Continued on next page

Continued from previous page

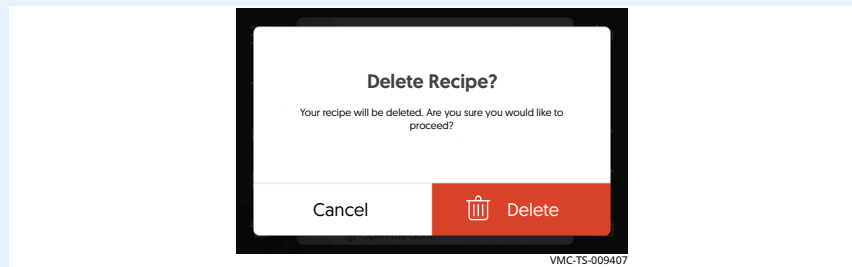
Deleting

6. To delete a recipe, **Touch** the recipe settings icon ② of the desired recipe.



Touch "Remove recipe" to delete it.

Touch "Delete" to confirm that you want to delete the recipe.



Result

The procedure is now complete.

How to Backup or Restore Settings with a USB Drive

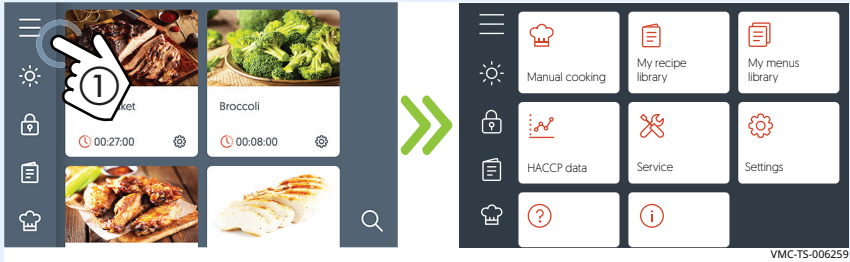
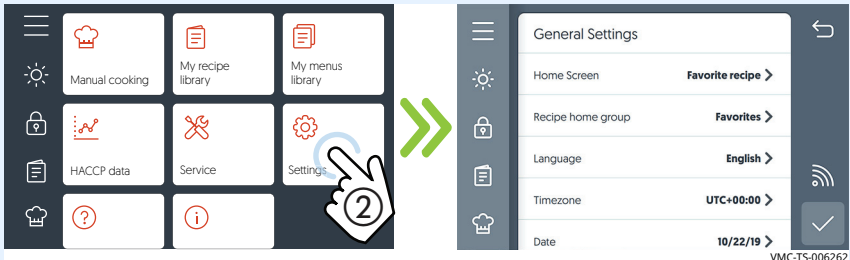
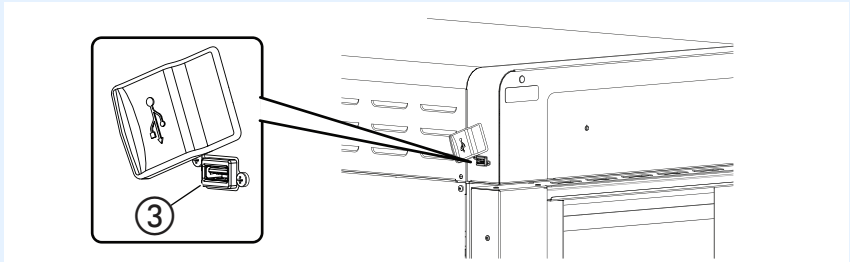
Before you begin

Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive.

Procedure

To backup or restore settings with a USB drive, do the following.

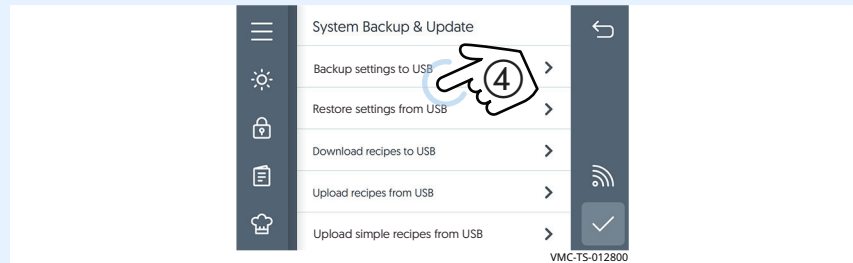
Step	Action
1.	Touch the menu icon ①. The menu screen displays.  VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.  VMC-TS-006262
3.	Plug the USB drive ③ into the port.  VMC-TS-007852

Continued on next page

Continued from previous page

4. **Scroll** to System Backup & Update.

Touch the Backup settings to USB or Restore settings from USB ④.



Loading the recipes

The oven downloads or restores the settings. When the process is complete, **touch** the check mark to return to the settings screen. **Remove** the USB drive.



Result

The settings have now been saved to the USB drive or restored from the USB drive.

How to Load Recipes from a USB Drive

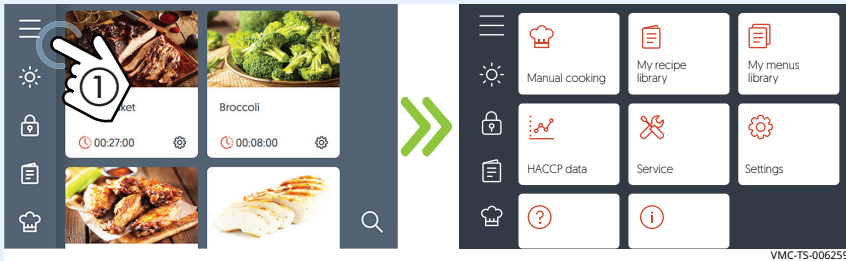
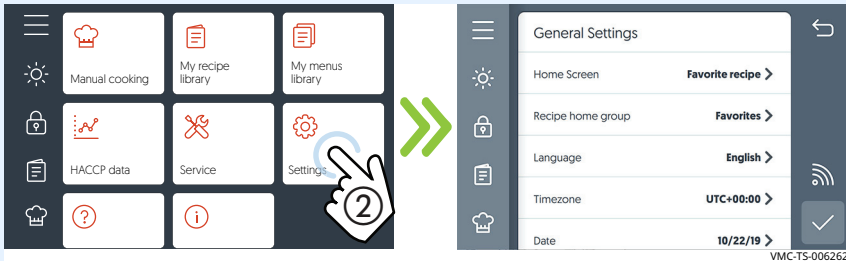
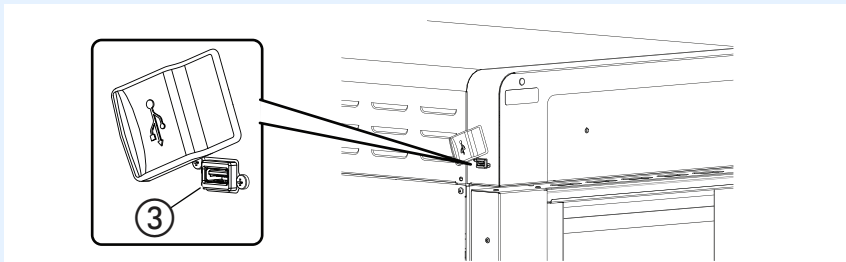
Before you begin

Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive loaded with recipes.

Procedure

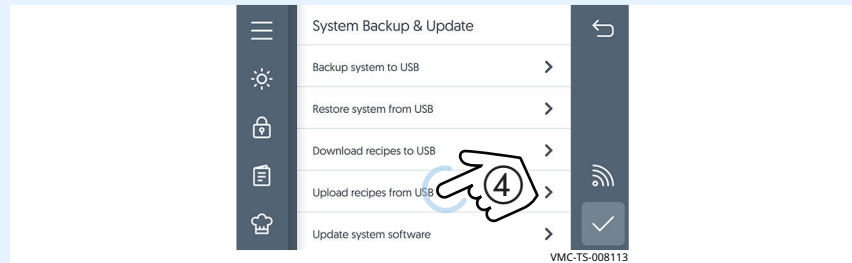
To load recipes from the USB drive to the oven, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.  VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.  VMC-TS-006262
3.	Plug the USB drive ③ into the port.  VMC-TS-007852

Continued on next page

Continued from previous page

4. **Scroll** to System Backup & Update.
Touch the Upload recipes from USB ④ setting.



Loading the recipes

The oven loads the recipe file. When the process is complete, the Recipes uploaded screen displays. **Touch** the check mark to return to the settings screen. **Remove** the USB drive.



Result

The recipes are now loaded.

How to Save Recipes to a USB Drive

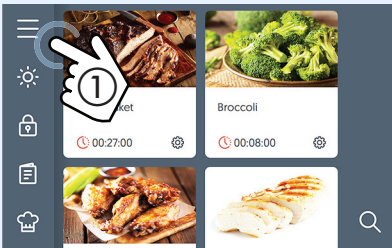
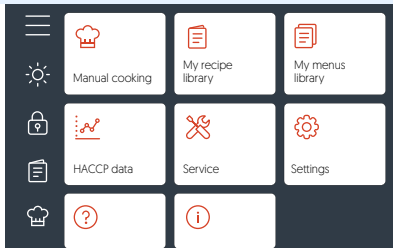
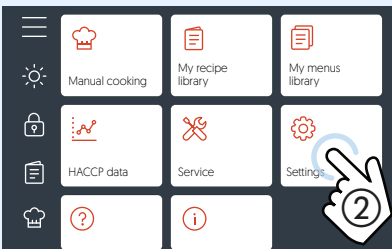
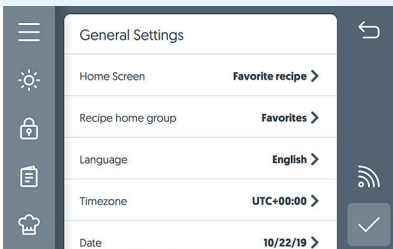
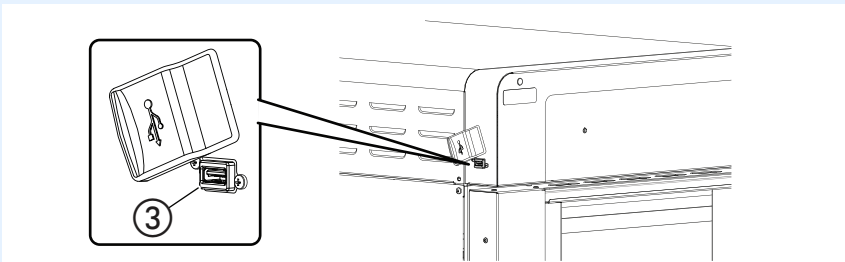
Before you begin

Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive.

Procedure

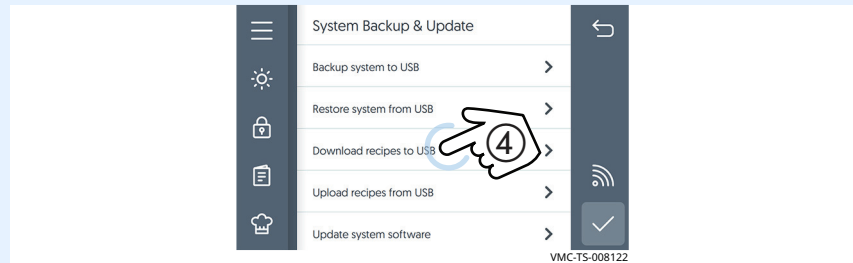
To download recipes from the oven to a USB drive, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.   VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.   VMC-TS-006262
3.	Plug the USB drive ③ into the port.  VMC-TS-007852

Continued on next page

Continued from previous page

4. **Scroll** to System Backup & Update.
Touch the Download recipes to USB ④ setting.



Loading the recipes

The oven downloads the recipes onto the USB drive. When the process is complete, the Recipes uploaded screen displays. **Touch** the check mark to return to the settings screen. **Remove** the USB drive.



Result

The recipes are now saved to the USB drive.

How to Update Software with a USB Drive

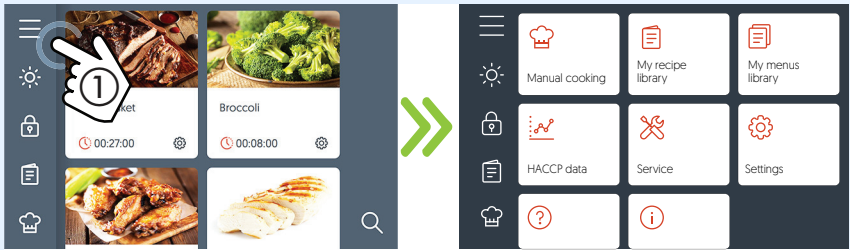
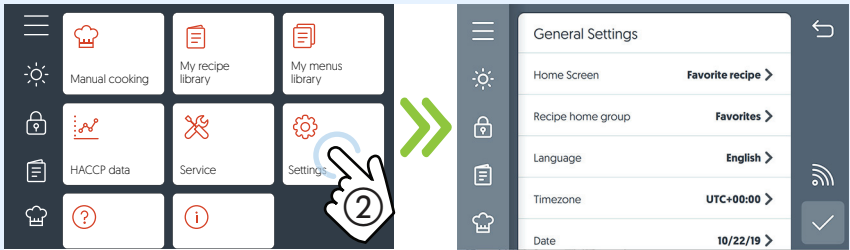
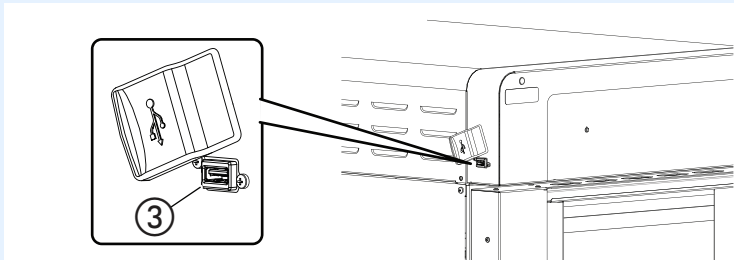
Before you begin

Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive with the updated software. To download the most up to date oven software and register for email notifications when new software versions are released, please visit <https://www.alto-shaam.com/en/customer-support/software-downloads>.
- Do not remove the USB drive during the update process.

Procedure

To update the software, do the following.

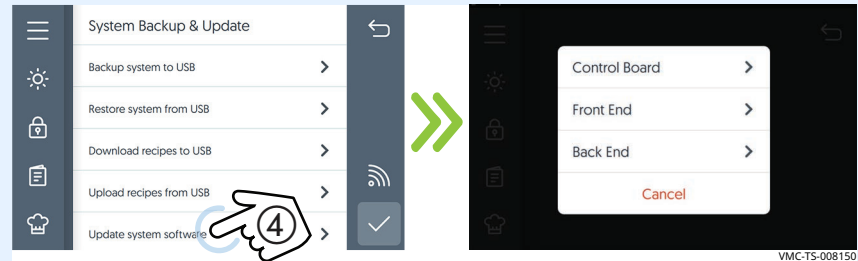
Step	Action
1.	Touch the menu icon ①. The menu screen displays.  VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.  VMC-TS-006262
3.	Plug the USB drive ③ into the port.  VMC-TS-007852

Continued on next page

Continued from previous page

4. **Scroll** to System Backup & Update.

Touch the Update system software ④ setting.



Touch Control Board (CB) to update the control board. The oven loads the selected software. The oven verifies the file and then updates the CB.

NOTICE Do not remove the USB drive during the update process.

Touch Front End to update the user interface software. The oven loads the selected software.

Touch Back End to update the supporting software between the control board (CB) and interface board (IB). The oven loads the selected software.

5. **Touch** the check mark when the update is complete to restart the oven.



6. **Remove** the USB drive.

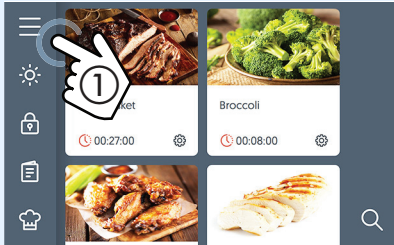
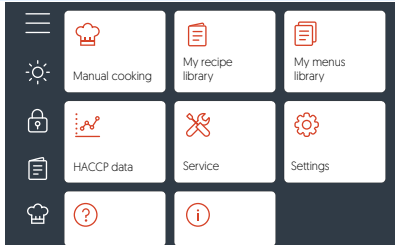
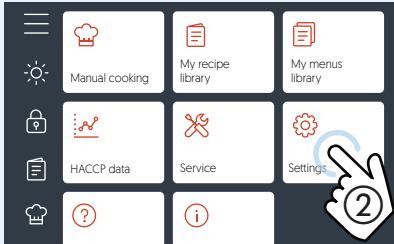
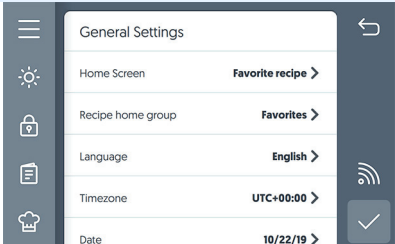
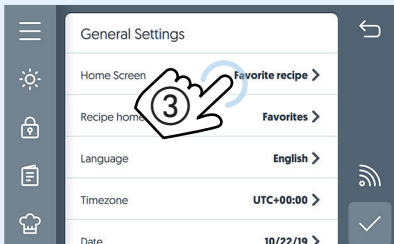
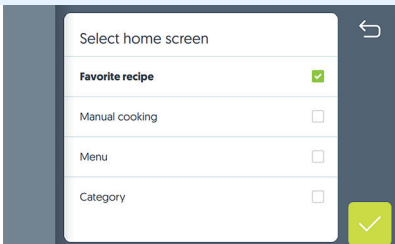
Result

The software has now been updated.

How to Change the Home Screen

Procedure

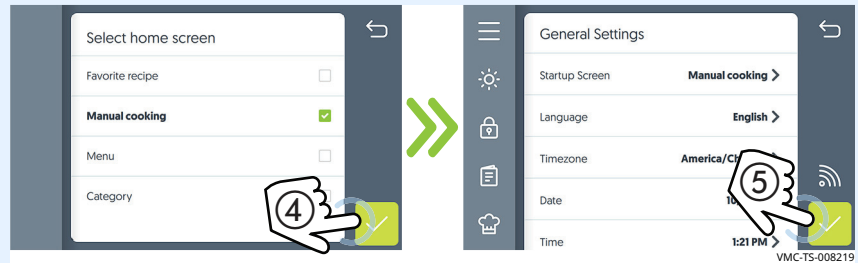
To change the home screen, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.   VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.   VMC-TS-006262
3.	Touch the Home Screen setting ③. The select home screen displays.   VMC-TS-008216

Continued on next page

Continued from previous page

4. **Select** your desired home screen from the list. **Touch** the check mark ④. **Touch** the check mark ⑤ to save the home screen setting.



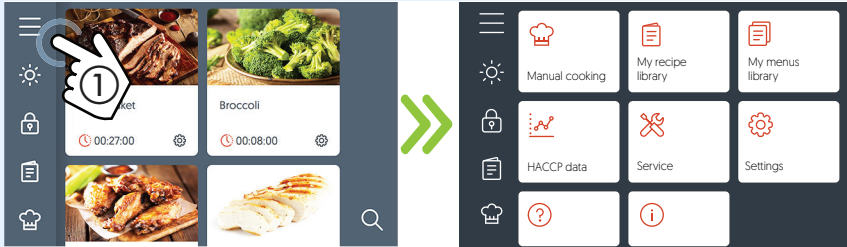
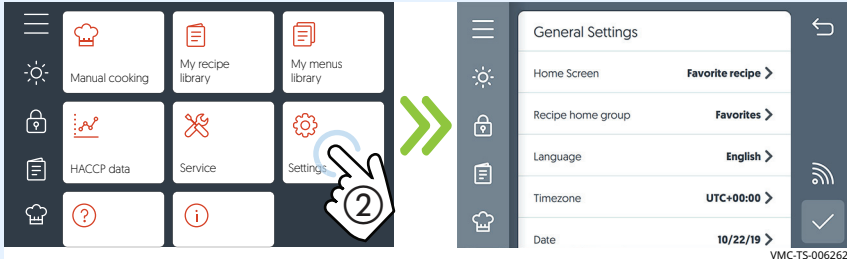
Result

The home screen has now been changed.

How to Change the Temperature Scale

Procedure

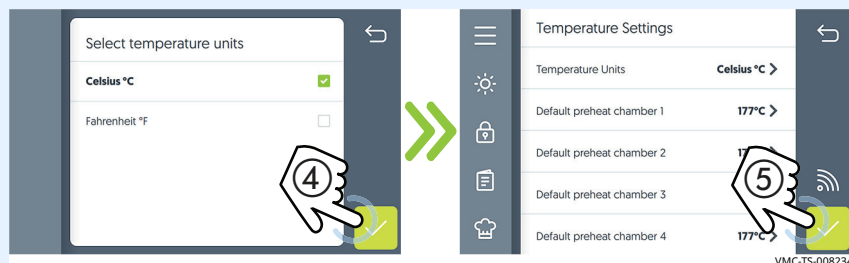
To change the temperature scale from °F to °C and vice versa, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.  VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.  VMC-TS-006262
3.	Scroll to the Temperature Settings. Touch the Temperature Units setting ③. The select temperature units screen displays.  VMC-TS-008230

Continued on next page

Continued from previous page

4. **Select** your desired temperature scale. **Touch** the check mark ④.
Touch the check mark ⑤ to save the temperature scale setting.



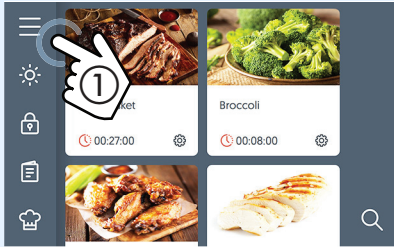
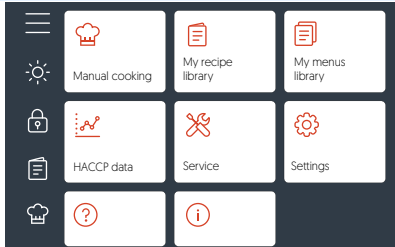
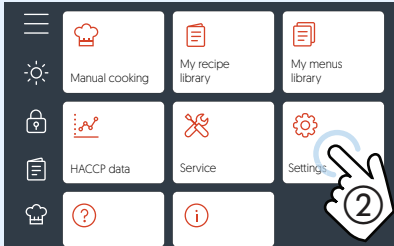
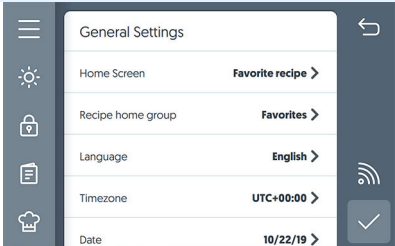
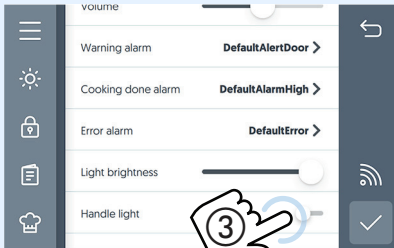
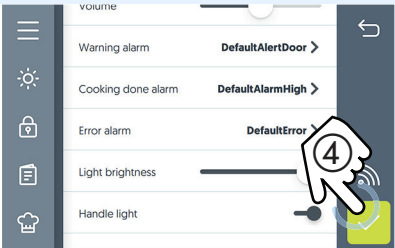
Result

The temperature scale has now been changed.

How to Enable the Handle Light

Procedure

To enable the handle light, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.   VMC-TS-006259
2.	Touch the Settings icon ②. The general settings screen displays.   VMC-TS-006262
3.	Scroll to the Handle light setting. Touch the Handle light button ③. Touch the check mark ④. The handle light is now enabled. Repeat the process to disable the handle light.   VMC-TS-008248

Result

The handle light is now enabled.

How to View Oven Information

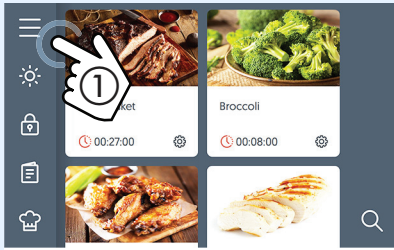
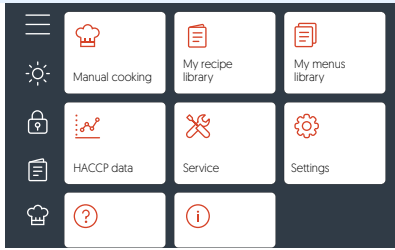
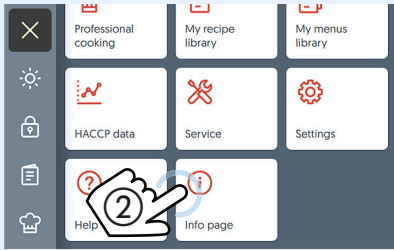
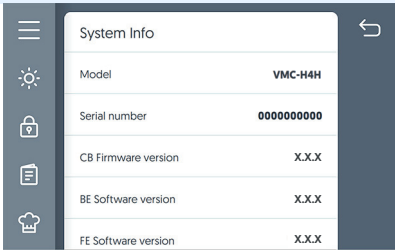
Background

This procedure is to be done through the touchscreen on the Deluxe control, not through the ChefLinc™ oven management system.

The oven information screen shows the system info, serial number, network status, and connection settings.

Procedure

To view oven information, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.   VMC-TS-006259
2.	Touch the Info page icon ②. The oven information screen displays. Scroll to view the oven model, serial number, system software, network status, and cleaning timer.   VMC-TS-008242

Result

The oven's information has been viewed.

How to Download HACCP Data

Before you begin

Make sure:

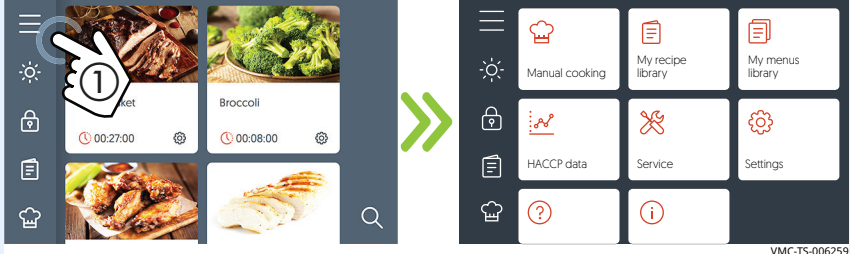
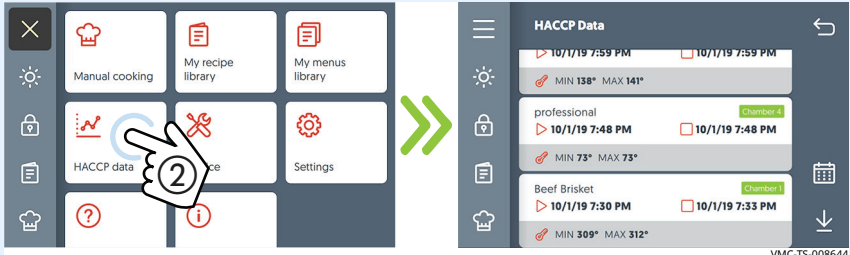
- The oven is on, but not in a cooking mode.
- You will need a USB drive.

Background

HACCP data provides automated record keeping, set-point validation, recipes used, dates and times. The data is stored until the information is downloaded. Once downloaded, the information is removed from the oven's memory. Best practice would be to download the information every 30 days to a USB drive. The file format is plain text file (.csv). The file can be viewed in Microsoft® Excel.

Procedure

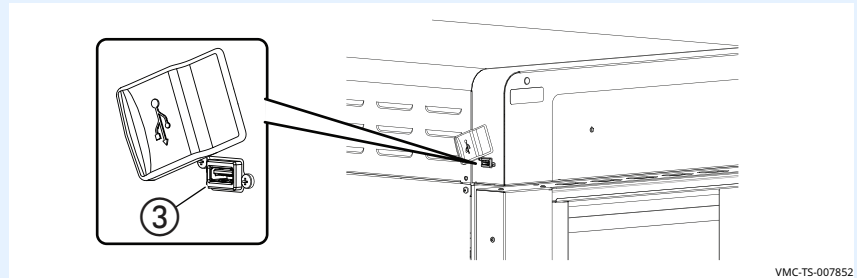
To download HACCP data, do the following.

Step	Action
1.	Touch the menu icon ①. The menu screen displays.  VMC-TS-006259
2.	Touch the HACCP data icon ②. The HACCP data screen displays.  VMC-TS-008644

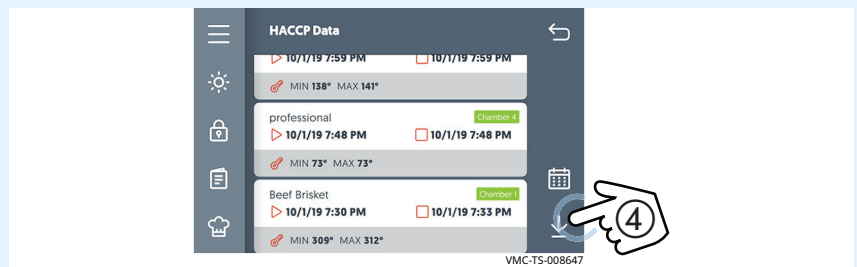
Continued on next page

Continued from previous page

3. **Plug** the USB drive ③ into the port.



4. **Touch** the download icon ④.



Loading the data

The oven downloads the data onto the USB drive. When the process is complete, the download successful screen displays. **Touch** the check mark to return to the menu screen. **Remove** the USB drive.



Result

The HACCP data has now been downloaded.

This page is intentionally left blank.

Maintenance Schedule

Requirements

- See topic *How to Clean the Oven*.
- Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.

Daily

For daily maintenance, do the following.

- **Remove** any spills with disposable paper wipes or a damp cloth.
- **Wipe** the outside of the oven with a damp cloth.
- **Check** the screen for cracking or peeling. Contact Technical Service if needed.

Weekly

For weekly maintenance, do the following.

- **Restart** the oven to reboot the screen.
- **Clean** the entire oven. **Make sure** to use a non-abrasive nylon scrub pad.
- **Inspect** and clean the grease filters (if equipped)
- Do not spray the cleaner directly into the fan openings located in the rear of the oven.

Monthly

For monthly maintenance, do the following.

- **Inspect** and clean the cooling fan filters.

Yearly

For yearly maintenance, do the following.



NOTE: Must be performed by a qualified professional.

- **Remove** the convection element(s) and inspect the return air path for grease buildup. **Remove** any grease buildup.
- **Inspect** the catalyst for any signs of degradation (Vector H Series models only).
- **Inspect** the heater flange area for grease leakage.
- **Inspect** the motor flange area for grease leakage.
- **Inspect** the door gaskets for correct shape and seal.
- **Inspect** the inner and outer door window panes for cracking or chipping.

- **Check and tighten** all wire connections.
- **Check and tighten** all display, interface and control board connections.
- **Check and tighten** the door hinges.

Continued on next page

Continued from previous page

- **Record** the software versions and update if necessary.
 - **Record** the amp draw of all elements on the service screen individually.
 - **Record** the incoming supply line voltage.
-
- **Test** each chamber fan for correct operation.
 - **Test** each chamber heater for correct operation.
 - **Test** the chamber lights.

How to Clean the Oven

Precautions



WARNING: Burn hazard.

Wear eye protection and hand protection while cleaning the oven.

Do not spray cleaner into the oven while the blowers are running.

Allow the oven, racks, and jet plates to cool before cleaning the oven.

NOTICE

Using improper cleaning procedures will damage the catalyst and void the warranty.

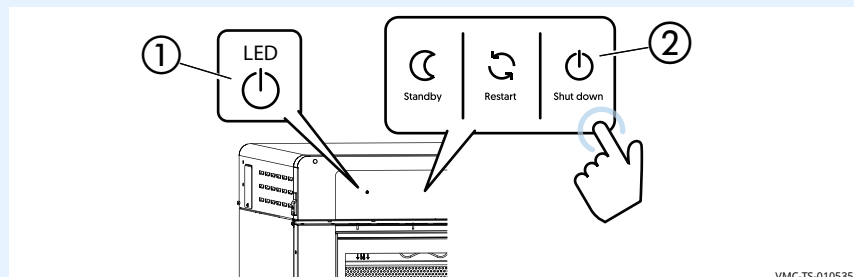
Do not spray the catalyst or any opening inside the oven with water or cleaning solution.

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

Daily cleaning procedure

For the daily cleaning, do the following.

Step	Action
1.	Touch and hold the ON/OFF button ① until the Shut down options screen displays.
	Touch "Shut down" ②.
The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off. When the cool-down process is complete, it is safe to clean the oven.	
2.	Remove any spills with disposable paper wipes or a damp cloth.
3.	Wipe the outside of the oven with a damp cloth.
4.	Wipe the outside of the oven with a stainless steel cleaner.



VMC-TS-010535

Continued on next page

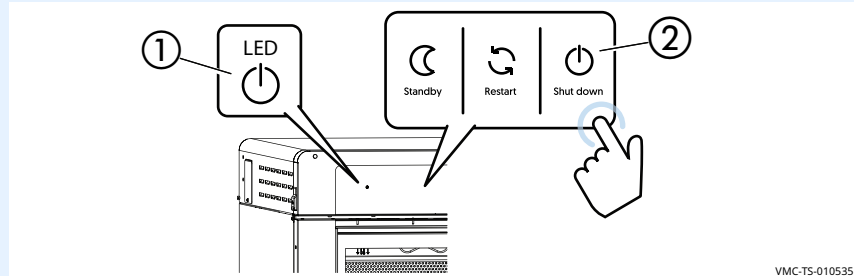
Continued from previous page

Monthly or as needed cleaning procedure

For the monthly cleaning or as needed if the oven is dirty, do the following.

Step	Action
------	--------

- | | |
|----|--|
| 1. | Touch and hold the ON/OFF button ① until the Shut down options screen displays. |
|----|--|



VMC-TS-010535

Touch "Shut down" ②.

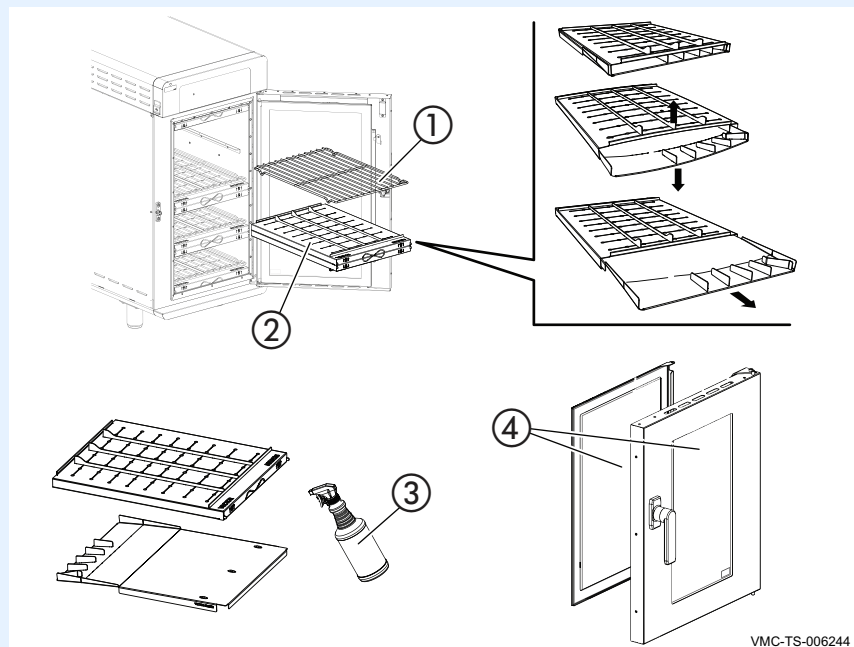
The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off. When the cool-down process is complete, it is safe to clean the oven.

- | | |
|----|---|
| 2. | Remove the cooking racks ① and jet plates ②. |
|----|---|



CAUTION: Personal injury hazard.

Use hand protection when handling the jet plates.

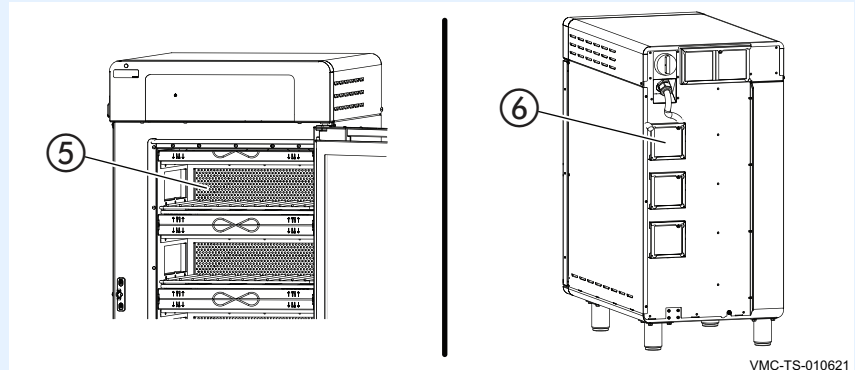


VMC-TS-006244

Continued on next page

Continued from previous page

3. **Separate** the jet plates. Flexing the jet plates outward can aid in separating the jet plates.
4. **Spray** the cooking racks and jet plates with Alto-Shaam non-caustic oven cleaner (3), CE-46828. Follow safety instructions on cleaner bottle. Let the cleaner work for 3–5 minutes. **Scrub** with a non-abrasive scrub pad. **Rinse** with water. **Wipe** with a soft cloth.
5. **Remove** the grease filters (5) if equipped.



6. **Spray** the interior surfaces of the oven with Alto-Shaam non-caustic oven cleaner, CE-46828. Also spray the grease filters. Let the cleaner work for 3–5 minutes. **Scrub** with a non-abrasive scrub pad. **Remove** any residue with a water-soaked towel.
7. **Remove** the cooling fan filters (6). Clean with a mild cleaner and rinse with hot water.



NOTE: Replace the cooling fan filters at least once a year.

8. **Re-install** the grease filters and the cooling fan filters.
9. **Clean** the door glass (4) with Windex® or equivalent glass cleaner.
10. **Re-install** the jet plates and cooking racks. See topic *How to Install the Jet Plates*.



NOTE: Make sure the jet plates are installed correctly. The nozzles on the jet plates should be pointing towards the food.

Continued on next page

Continued from previous page

11. **Spray** the exterior of the oven with stainless steel polish. **Wipe** the exterior of the oven with a non-abrasive scrub pad. Follow safety instructions on the bottle of the stainless steel polish.

NOTICE

Use only non-caustic cleaners.

Do not spray directly into the fan openings on the rear of the oven.

Do not use cleaners that contain sodium hydroxide (lye) or phosphorus.

Result

The oven is now clean.

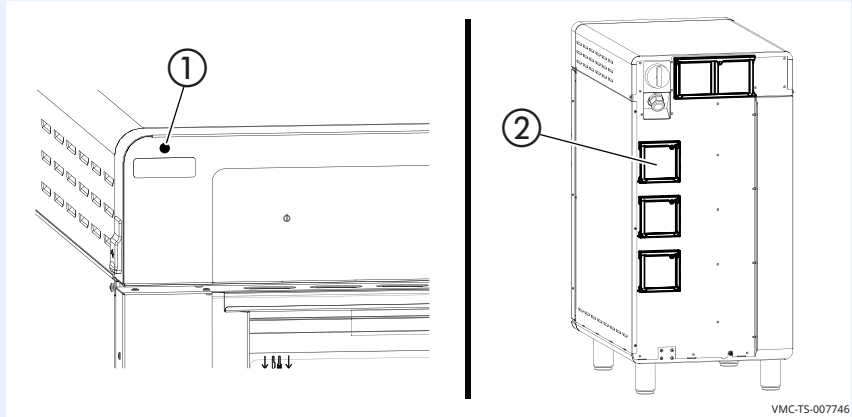
Error Codes

Code	Description	Parameters that trigger the error	Possible Cause(s)
E-3	Motor error	No cavity motor rotation detected for greater than 30 seconds.	1. Connection between Variable Frequency Drive (VFD) and control board 2. Connection between fan motor and VFD 3. Fan motor 4. VFD 5. Control board
E-10	Sensor short	Short circuit detected on sensor wires.	1. Sensor connection 2. Sensor 3. Control board
E-11	Sensor open	Cavity air sensor reading > 650°F (343°C).	1. Sensor connection 2. Sensor 3. Control board
E-30	Unit under temperature	Cavity temperature remains 25°F (14°C) below target for more than 90 minutes.	Troubleshoot heating element
E-31	Electronics over temperature	Control board temperature exceeds 158°F (70°C) and/or interface board temperature exceeds 184°F (84°C).	1. Cooling fan filters blocked or dirty 2. Cooling fan not operating 3. Installation clearance requirements not met
E-87	Gas lockout	Loss of flame three times within 5 minutes.	Lack of fuel pressure.
E-88	Ignition module/valve failure	Two, 4-second tries for light at the ignition module with a 30-second delay between.	1. Valve status is not open after call for heat.
E-90	Gas combustion blower speed failure	Blower RPM is outside +/- 10% of expected RPMs at start of call for heat, or post-ramping when the end speed is reached.	1. Power supply cable is not connected to blower motor. 2. Speed control cable is not connected to blower motor. 3. Blower motor is blocked, rotation is impeded, or motor is faulty. 4. Faulty PWM daughter board.
E-94	Interface Board - Control Board communication error	No signal transfer for more than 5 seconds between the interface board and the control board.	1. Connection of modbus cable 2. Modbus cable 3. Control board 4. Interface board
E-108	Bi-metal thermostat open	Open circuit detected across bi-metal switch.	1. Cooling fan filters blocked or dirty 2. Cooling fan not operating 3. Connection between bi-metal switch and control board 4. Installation clearance requirements not met 5. Bi-metal switch
E-109	High limit error Note: Contact an authorized Alto-Shaam service partner.	Open circuit detected across high limit switch.	1. Jet plate(s) improperly installed 2. Cavity fan not operating 3. Optional grease filters blocked with debris 4. Heat relay(s) stuck closed 5. Connection between high limit switch and control board 6. High limit switch

What to do if the Fan Indicator Light Illuminates

Procedure

If the fan indicator light ① illuminates, do the following.

Step	Action
1.	Turn off the oven and allow it to cool. Remove the filters ②. 
2.	Clean the filters with mild soap and water.
3.	Re-install the filters.
4.	Resume operation of the oven.
NOTE: If the fan indicator light remains on, the appliance is malfunctioning. Disconnect the appliance from the power supply and have it serviced by a qualified technician.	

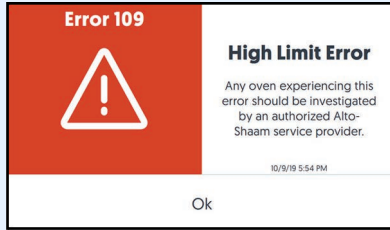
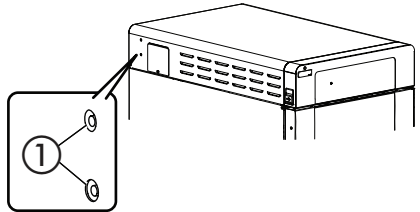
Result

The procedure is now complete.

What to do if the High Limit Screen Displays

Procedure

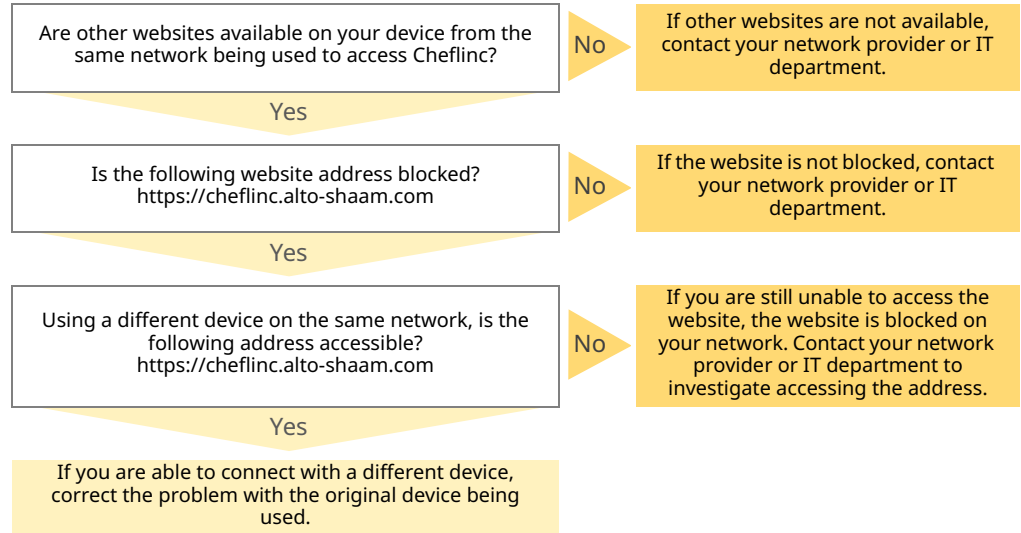
If the high limit screen displays, do the following.

Step	Action
1.	Press and release the high limit temperature reset button(s) ①.   VMC-TS-007607
2.	Resume operation of the oven.  NOTE: If the high limit screen continues to display, the appliance is malfunctioning. Turn off the appliance and have the oven serviced by a qualified technician.

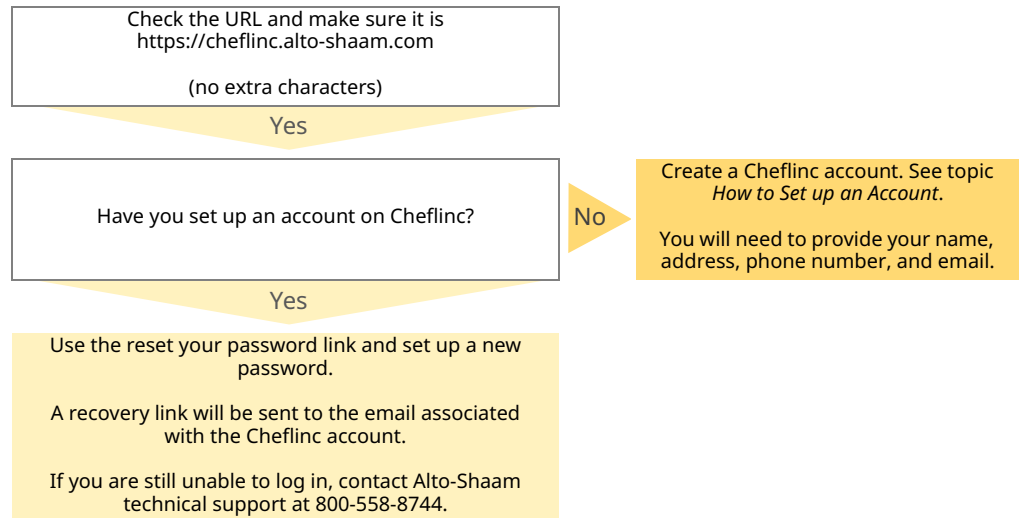
Result

The procedure is now complete.

Cheflinc.alto-shaam.com is Not Available on Your Device

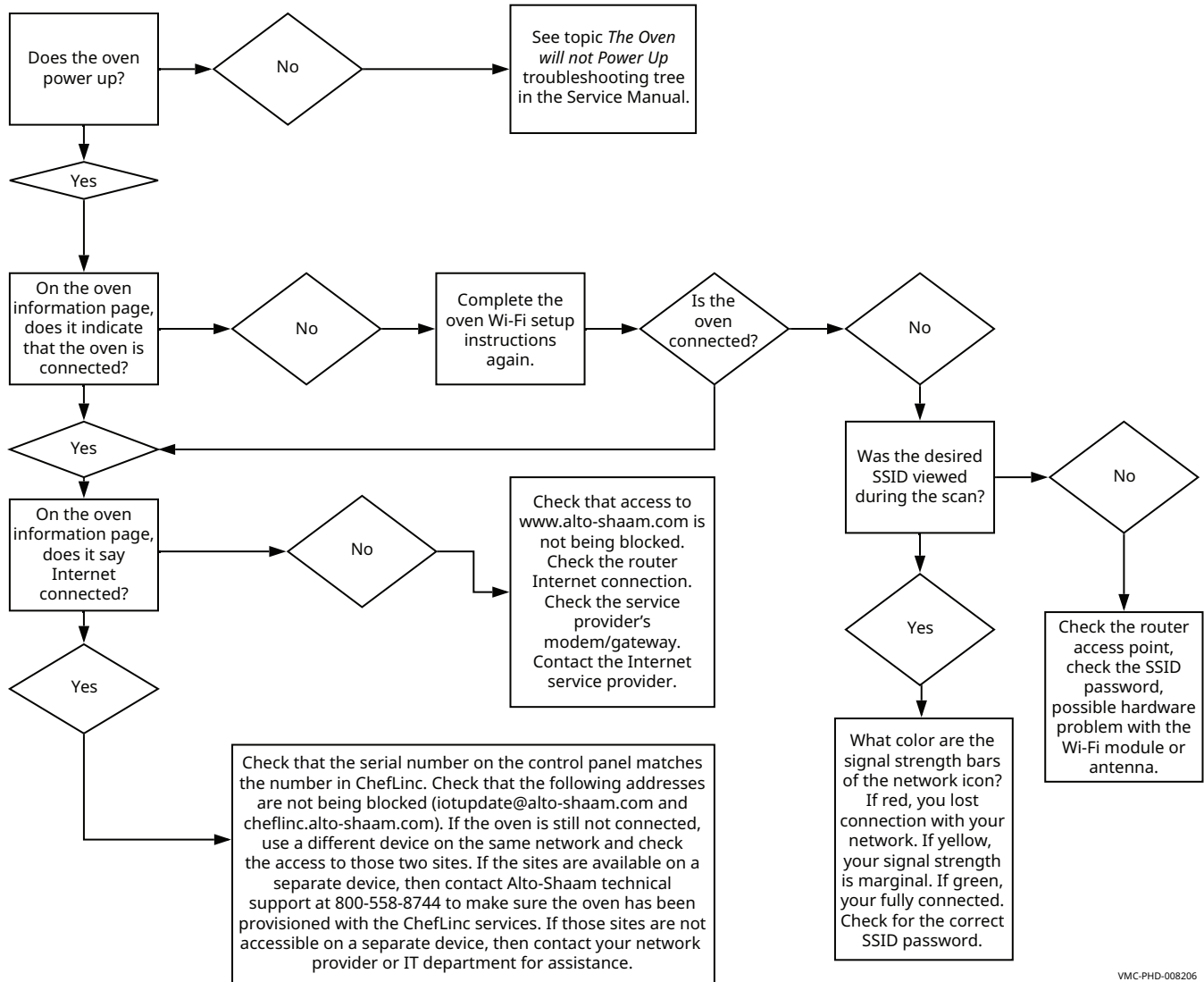


Cannot Connect to cheflinc.alto-shaam.com



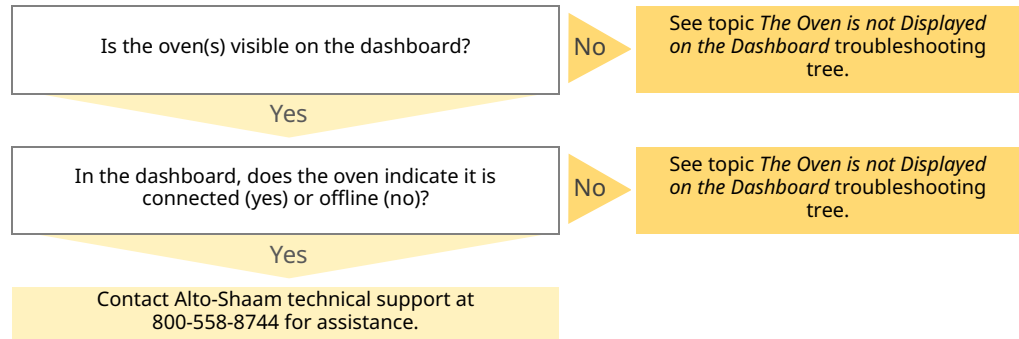
The Oven is not Displayed on the Dashboard

Prerequisite: The operator is on a device connected to the Internet and is able to login to cheflinc.alto-shaam.com.



VMC-PHD-008206

Unable to Assign Recipes from the Dashboard to Ovens in the Field



This page is intentionally left blank.

Notifications

FCC ID: N6C-SDPAC

IC ID: 4908A-SDPAC

NOTICE

Federal Communication Interference Statement (United States only)

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTIFICATIONS

Canadian Department of Communications Industry Canada Notice (Canada only)

This Class B digital apparatus complies with Canadian ICES-003.

FCC Rules, Part 15 / Industry Canada

This device complies with Part 15 of FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from a person's body.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

For product available in the USA/Canada market, only channels 1–11 can be operated. Selection of other channels is not possible. If this device is to be operated in the 5.15~5.25GHz frequency range, it is restricted to indoor environments only.

Antenna: Proprietary

Antenna gain information: Embedded Antenna: 3.25dBi (2.4 GHz), 5.0dBi (5 GHz)

Frequency Tolerance: +/-20ppm

WARNING

The FCC / The Industry Canada regulations provide that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

General Specifications

Chipset:	QCA9377-3, (Qualcomm Atheros)
Host Interface:	Wifi: SDIO v3.0; BT: High Speed UART
Operating Voltage:	3.30 VDC +/- 5%
Operating Temperature:	-20 to +70 degrees C
Dimensions:	18.0 x 13.0 x 2.2 mm (L x W x D)
Connector Type:	52-pin proprietary
Radio Specifications:	802.11b/g/n: 2.412–2.484 GHz; 802.11a/n: 5.18–5.825 GHz BT: 2.402–2.480 GHz
Link Rates (1 stream):	IEEE 802.11b: 1–11 Mbps IEEE 802.11g: 6–54 Mbps IEEE 802.11a: 6–54 Mbps IEEE 802.11n HT20: 6.5–65.0 Mbps IEEE 802.11n HT40: 13.5–135.0 Mbps IEEE 802.11ac VHT20: 6.5–78.0 Mbps IEEE 802.11ac VHT40: 13.5–180.0 Mbps IEEE 802.11ac VHT80: 29.3–390.0 Mbps
Modulation Modes:	OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK), DSSS (CCK, DQPSK, DBPSK), GFSK (1Mbps), $\pi/4$ DQPSK (2Mbps), 8DQPSK (3Mbps)
Hardware Encryption:	WEP, WPA/WPA2 (TKIP/AES-CCMP), WAPI
Quality of Service (QoS):	WMM, WMM-PS, 802.11e
Japanese Security Standard	This oven cannot be connected directly to the telecommunications circuits (or public wireless LANs) of any telecommunication carriers (example: mobile communications carriers, fixed communications carriers, or Internet providers). In the case of connecting the oven to the Internet, make sure to connect it via a router.

Conditions for Ovens Installed in New York City

- Operating instructions in the manual must be read and understood by all persons using the appliance. The person responsible for training of the operators is responsible for the safekeeping of the manual.
- Prior to installation, plans specifying the exact product name/model number and dimensions/specifications shall be filed with and approved by New York City Department of Buildings (DOB). A copy of DOB docketed (Stamped, numbered and dated) plans shall be transmitted to the Fire Department for review and approval, as applicable.
- Installation, maintenance, and cleaning procedures shall comply with all applicable New York City Fire Code, New York City Electric Code, New York City Construction Codes (including the Building Code and the Mechanical Code), and rules.
- The cooking equipment shall be used for light duty cooking and food warming only, and shall be provided with catalyst to limit the emission of grease-laden air.
- The cooking equipment shall be installed in an area approved by the New York City Department of Buildings.
- Underwriters Laboratories, Inc.'s listing requirements and manufacturer's installation, operation and maintenance requirements shall be complied with.
- The cooking equipment (including filters and catalyst) shall be inspected, cleaned and replaced if necessary, by a qualified person holding a Fire Department Certificate of Fitness. The catalyst shall be maintained in proper working order. A record of such inspection and cleaning shall be kept on the premises for inspection.
- All installations are subject to inspection by representatives of the Bureau of Fire Prevention which may result in additional requirements being imposed.
- The Fire Department's condition of approval shall be provided to all New York City buyers, users and installers.
- Certificate of Approval number shall be plainly and permanently stamped or otherwise fixed upon each product by the manufacturer or the local representative of the manufacturer.
- The equipment's technology does not violate any patent, trade name, trade secret or other intellectual right.
- The Certificate of Approval does not constitute an endorsement or recommendation of the product by the Fire Department, but is a certification that the product is acceptable as of the date of issuance.
- The Fire Department may withdraw this approval at any time in the event there is a reasonable doubt that the product does not operate or perform as required by code, the conditions of the resolution or as represented in the application.
- Any end user who fails to comply with the conditions as outlined in this approval will be subject to enforcement action.

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

Continued from previous page

- 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.*

DECLARATION OF CONFORMITY

Manufacturer:

Alto-Shaam, Inc.
W164 N9221 Water Street
Menomonee Falls, WI 53202-0450
U.S.A.

**EQUIPMENT TYPE:**

Household and Similar Electric Appliances

EQUIPMENT DESCRIPTION:

Commercial Electric Convection Ovens

MODEL NUMBER:

VMC-H2, VMC-H3, VMC-H4, VMC-H2H,
VMC-H2HW VMC-H3H, VMC-H3HW,
VMC-H4H, VMC-F3E, VMC-F4E with or without a
V after the dash.
CMC-H2H, CMC-H3H with or without option VH

APPLIED DIRECTIVES:

Low Voltage Directive 2014/35/EU
MD (Machinery Directive) 2006/42/EC
EMC – 2014/30/EC
RED – 2014/53/EU

APPLIED STANDARDS:

EN 60335-1:2012+AC:2014 + A11:2014
EN 60335-2-42:2003 + A1:2008 + A11:2012
AS/NZS 60335.1:2011 + A1:2012 +
A2:2014 + A3:2015. AS/NZS 60335.1:2020
EN 55014-1: CISPR 14, EN 55014-2: CISPR 14
EN 62479, EN 300 328, EN 301 489, EN 300 893



*We the undersigned, hereby declare that the equipment specified above conforms to the above
Directives and Standards*

Manufacturer Name:

ALTO-SHAAM INC.**NAME:** Christa Pieper**TITLE:** Certification Manager**SIGNATURE:****DATE:** March 4th 2022

DECLARATION OF CONFORMITY

Manufacturer:
Alto-Shaam, Inc.
W164 N9221 Water Street
Menomonee Falls, WI 53202-0450



EQUIPMENT TYPE: Household and Similar Electric Appliances

EQUIPMENT DESCRIPTION: Commercial Convection Ovens

MODEL NUMBER: VMC-H2, VMC-H2H, VMC-H2HW, VMC-H3, VMC-H3H, VMC-H3HW, VMC-H4, VMC-H4H, VMC-F3E, VMC-F4E, CMC-H2H, CMC-H3H with or without option VH

APPLIED UK REGULATIONS:

- Supply of Machinery (Safety) Regulations 2008
- Electromagnetic Compatibility Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
- Radio Equipment Regulations 2017

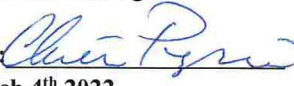
APPLIED STANDARDS:

EN 60335-1:2012+AC:2014 + A11:2014
EN 60335-2-42:2003 + A1:2008 + A11:2012
EN 55014-1:2018, EN 55014-2:2016



We the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards

Manufacturer Name:
ALTO-SHAAM INC.
NAME: Christa Pieper
TITLE: Certification Manager

SIGNATURE: 
DATE: March 4th 2022





ALTO-SHAAM.

Menomonee Falls, WI U.S.A.

Phone 800-558-8744 | +1-26 2-251-3800 | alto-shaam.com

ASIA

Shanghai, China
Phone +86-21-6173-0336

AUSTRALIA

Brisbane, Queensland
Phone 800-558-8744

CANADA

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

FRANCE

Aix en Provence, France
Phone +33(0)4-88-78-21-73

GMBH

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

ITALY

Padua, Italy
Phone +39 3476073504

INDIA

Pune, India
Phone +91 9657516999

MEXICO

Phone +52 1 477-717-3108

MIDDLE EAST & AFRICA

Dubai, UAE
Phone +971-4-321-9712

CENTRAL & SOUTH AMERICA

Miami, FL USA
Phone +1 954-655-5727

RUSSIA

Moscow, Russia
Phone +7 903 7932331

Maintenance Schedule

Requirements

- See topic *How to Clean the Oven*.
- Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.

Daily

For daily maintenance, do the following.

- **Remove** any spills with disposable paper wipes or a damp cloth.
- **Wipe** the outside of the oven with a damp cloth.
- **Check** the screen for cracking or peeling. Contact Technical Service if needed.

Weekly

For weekly maintenance, do the following.

- **Restart** the oven to reboot the screen.
- **Clean** the entire oven. **Make sure** to use a non-abrasive nylon scrub pad.
- **Inspect** and clean the grease filters (if equipped)
- Do not spray the cleaner directly into the fan openings located in the rear of the oven.

Monthly

For monthly maintenance, do the following.

- **Inspect** and clean the cooling fan filters.

Yearly

For yearly maintenance, do the following.



NOTE: Must be performed by a qualified professional.

- **Remove** the convection element(s) and inspect the return air path for grease buildup. **Remove** any grease buildup.
- **Inspect** the catalyst for any signs of degradation (Vector H Series models only).
- **Inspect** the heater flange area for grease leakage.
- **Inspect** the motor flange area for grease leakage.
- **Inspect** the door gaskets for correct shape and seal.
- **Inspect** the inner and outer door window panes for cracking or chipping.
- **Check and tighten** all wire connections.
- **Check and tighten** all display, interface and control board connections.
- **Check and tighten** the door hinges.

Continued on next page

Continued from previous page

- **Record** the software versions and update if necessary.
 - **Record** the amp draw of all elements on the service screen individually.
 - **Record** the incoming supply line voltage.
-
- **Test** each chamber fan for correct operation.
 - **Test** each chamber heater for correct operation.
 - **Test** the chamber lights.

How to Clean the Oven

Precautions



WARNING: Burn hazard.

Wear eye protection and hand protection while cleaning the oven.

Do not spray cleaner into the oven while the blowers are running.

Allow the oven, racks, and jet plates to cool before cleaning the oven.

NOTICE

Using improper cleaning procedures will damage the catalyst and void the warranty.

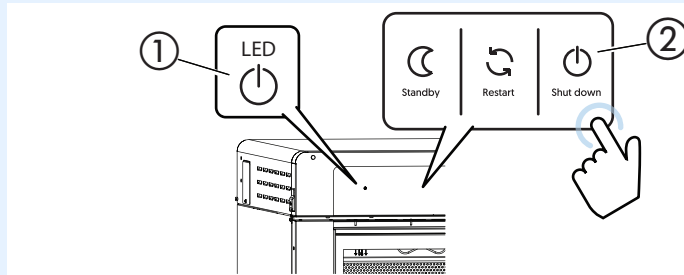
Do not spray the catalyst or any opening inside the oven with water or cleaning solution.

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

Daily cleaning procedure

For the daily cleaning, do the following.

Step	Action
1.	Touch and hold the ON/OFF button ① until the Shut down options screen displays.
	Touch "Shut down" ②. The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off. When the cool-down process is complete, it is safe to clean the oven.
2.	Remove any spills with disposable paper wipes or a damp cloth.
3.	Wipe the outside of the oven with a damp cloth.
4.	Wipe the outside of the oven with a stainless steel cleaner.



VMC-TS-010535

Continued on next page

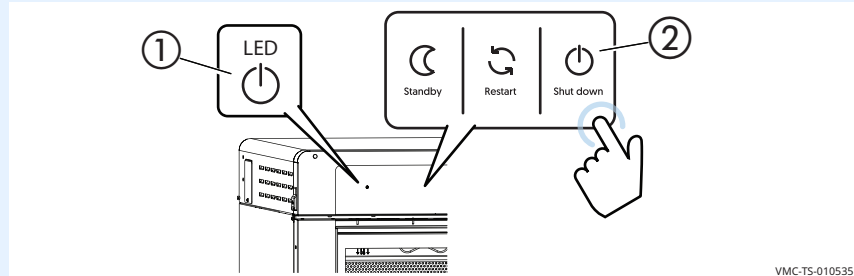
Continued from previous page

Monthly or as needed cleaning procedure

For the monthly cleaning or as needed if the oven is dirty, do the following.

Step	Action
------	--------

- | | |
|----|--|
| 1. | Touch and hold the ON/OFF button ① until the Shut down options screen displays. |
|----|--|



VMC-TS-010535

Touch "Shut down" ②.

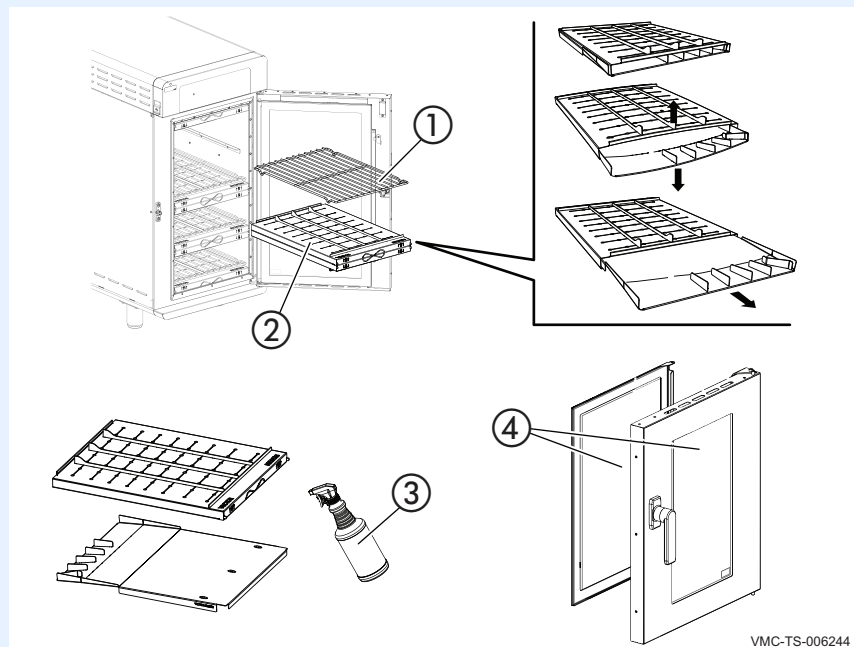
The oven activates the blowers for the cool-down process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off. When the cool-down process is complete, it is safe to clean the oven.

- | | |
|----|---|
| 2. | Remove the cooking racks ① and jet plates ②. |
|----|---|



CAUTION: Personal injury hazard.

Use hand protection when handling the jet plates.

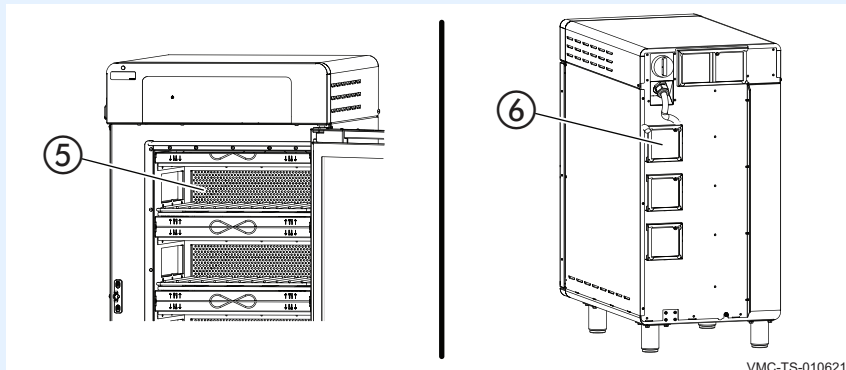


VMC-TS-006244

Continued on next page

Continued from previous page

3. **Separate** the jet plates. Flexing the jet plates outward can aid in separating the jet plates.
4. **Spray** the cooking racks and jet plates with Alto-Shaam non-caustic oven cleaner ③, [CE-46828](#). Follow safety instructions on cleaner bottle. Let the cleaner work for 3–5 minutes. **Scrub** with a non-abrasive scrub pad. **Rinse** with water. **Wipe** with a soft cloth.
5. **Remove** the grease filters ⑤ if equipped.



6. **Spray** the interior surfaces of the oven with Alto-Shaam non-caustic oven cleaner, [CE-46828](#). Also spray the grease filters. Let the cleaner work for 3–5 minutes. **Scrub** with a non-abrasive scrub pad. **Remove** any residue with a water-soaked towel.
7. **Remove** the cooling fan filters ⑥. Clean with a mild cleaner and rinse with hot water.



NOTE: Replace the cooling fan filters at least once a year.

8. **Re-install** the grease filters and the cooling fan filters.
9. **Clean** the door glass ④ with Windex® or equivalent glass cleaner.
10. **Re-install** the jet plates and cooking racks. See topic *How to Install the Jet Plates*.



NOTE: Make sure the jet plates are installed correctly. The nozzles on the jet plates should be pointing towards the food.

Continued on next page

Continued from previous page

11. **Spray** the exterior of the oven with stainless steel polish. **Wipe** the exterior of the oven with a non-abrasive scrub pad. Follow safety instructions on the bottle of the stainless steel polish.

NOTICE

Use only non-caustic cleaners.

Do not spray directly into the fan openings on the rear of the oven.

Do not use cleaners that contain sodium hydroxide (lye) or phosphorus.

Result

The oven is now clean.

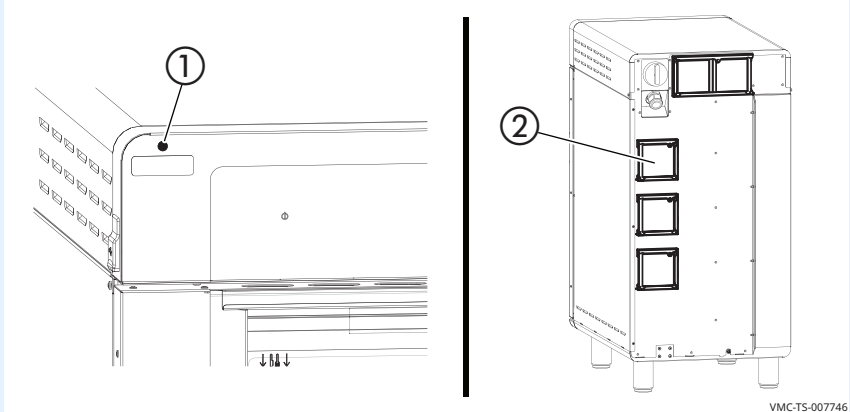
Error Codes

Code	Description	Parameters that trigger the error	Possible Cause(s)
E-3	Motor error	No cavity motor rotation detected for greater than 30 seconds.	1. Connection between Variable Frequency Drive (VFD) and control board 2. Connection between fan motor and VFD 3. Fan motor 4. VFD 5. Control board
E-10	Sensor short	Short circuit detected on sensor wires.	1. Sensor connection 2. Sensor 3. Control board
E-11	Sensor open	Cavity air sensor reading > 650°F (343°C).	1. Sensor connection 2. Sensor 3. Control board
E-30	Unit under temperature	Cavity temperature remains 25°F (14°C) below target for more than 90 minutes.	Troubleshoot heating element
E-31	Electronics over temperature	Control board temperature exceeds 158°F (70°C) and/or interface board temperature exceeds 184°F (84°C).	1. Cooling fan filters blocked or dirty 2. Cooling fan not operating 3. Installation clearance requirements not met
E-87	Gas lockout	Loss of flame three times within 5 minutes.	Lack of fuel pressure.
E-88	Ignition module/valve failure	Two, 4-second tries for light at the ignition module with a 30-second delay between.	1. Valve status is not open after call for heat.
E-90	Gas combustion blower speed failure	Blower RPM is outside +/- 10% of expected RPMs at start of call for heat, or post-ramping when the end speed is reached.	1. Power supply cable is not connected to blower motor. 2. Speed control cable is not connected to blower motor. 3. Blower motor is blocked, rotation is impeded, or motor is faulty. 4. Faulty PWM daughter board.
E-94	Interface Board - Control Board communication error	No signal transfer for more than 5 seconds between the interface board and the control board.	1. Connection of modbus cable 2. Modbus cable 3. Control board 4. Interface board
E-108	Bi-metal thermostat open	Open circuit detected across bi-metal switch.	1. Cooling fan filters blocked or dirty 2. Cooling fan not operating 3. Connection between bi-metal switch and control board 4. Installation clearance requirements not met 5. Bi-metal switch
E-109	High limit error Note: Contact an authorized Alto-Shaam service partner.	Open circuit detected across high limit switch.	1. Jet plate(s) improperly installed 2. Cavity fan not operating 3. Optional grease filters blocked with debris 4. Heat relay(s) stuck closed 5. Connection between high limit switch and control board 6. High limit switch

What to do if the Fan Indicator Light Illuminates

Procedure

If the fan indicator light ① illuminates, do the following.

Step	Action
1.	Turn off the oven and allow it to cool. Remove the filters ②.  The diagram shows the oven interior on the left and the back panel on the right. Callout ① points to the fan indicator light on the top left of the interior. Callout ② points to the filter slots on the back panel. The text 'VMC-TS-007746' is visible in the bottom right corner of the diagram area.
2.	Clean the filters with mild soap and water.
3.	Re-install the filters.
4.	Resume operation of the oven.
NOTE: If the fan indicator light remains on, the appliance is malfunctioning. Disconnect the appliance from the power supply and have it serviced by a qualified technician.	

Result

The procedure is now complete.

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

Continued from previous page

- 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.*