

## Electric Countertop Convection Ovens



351COHD3A, 351COHT3A, 351COHD4M, 351COHT4M, 351COFT4M, 351COFD4M

REVISED 12/2023

Congratulations on your purchase of Cooking Performance Group commercial cooking equipment! At Cooking Performance Group, we take pride in the design, innovation, and quality of our products. To ensure optimal performance, we have outlined the following instructions and guidelines in this manual carefully for your review. Cooking Performance Group declines any responsibility in the event users do not follow the instructions or guidelines stated here.

## Contents

Product Overview.....	2
Safety Precautions.....	3
Installation.....	5
General Operating Procedures.....	7
Manual Cooking.....	8
Cleaning Care.....	11
Warning & Alarms.....	12
Troubleshooting.....	13
Stacking Instructions.....	14

**⚠ WARNING:**  
IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE, OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY, OR DEATH. READ THE INSTALLATION, OPERATING, AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.



Intertek  
5008969

Conforms to UL STD. 197  
Conforms to CSA C22.2  
Conforms to NSF/ANSI STD. 4

## Safety Precautions

### **CAUTION:**

Equipment is designed to provide safe and productive processing, cooking, and warming of food products as long as the equipment is used in accordance with the instructions in this manual and is properly maintained. Failure to comply with the following operation instructions could lead to potential hazards and/or unsafe practice and could result in injury and damage to product and property. Owners of this equipment bear the responsibility to make certain that this equipment is used properly and safely, and to strictly follow all the instructions contained in this manual and the applicable requirements of applicable local, state, or federal law.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other equipment. Improper installation, adjustment, alteration, service, or maintenance could lead to property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing CPG equipment. This manual must be retained for future reference. A certified and insured food service technician must handle all maintenance and repair.

Owners should not permit anyone to touch this equipment unless they are over 18 years old, are adequately trained and supervised, and have read and understood this manual. Repairs and conversions are to be made solely by an authorized servicer. Owners should also ensure that no customers, visitors, or other unauthorized personnel come in contact with this equipment. Please remember that the vender cannot anticipate every circumstance or environment in which its equipment will be operated. It is the responsibility of the owner and the operator to remain alert to any hazards posed by the function of this equipment. If you are ever uncertain about a particular task or the proper method of operating this equipment, ask your supervisor.

This manual contains a number of precautions to follow to help promote safe use of this equipment. Throughout the manual you will see additional warnings to help alert you to potential hazards.

Warnings affecting your personal safety are indicated by:



Warnings affecting possible damage to the equipment and property are indicated by:

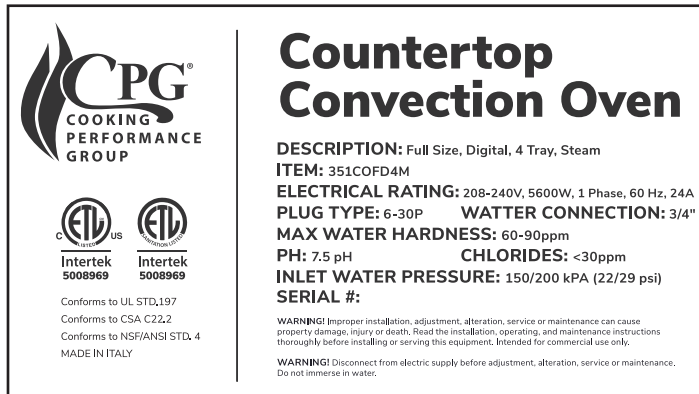


Please remember that this manual or the warning labels do not replace the need to be alert, to properly train and supervise operators, and to use common sense when using this equipment.

## Serial Plate

**NOTE:** The serial plate is located on the back of the unit.

The serial plate provides important technical information that is essential in case of a request for intervention for a maintenance or a repair of the equipment. Do not remove, damage, or modify it.



### IMMEDIATELY INSPECT FOR SHIPPING DAMAGE

All containers should be examined for damage before and during unloading. The freight carrier has assumed responsibility for its safe transit and delivery. If equipment is received damaged, either apparent or concealed, a claim must be made with the delivering carrier.

Apparent damage or loss must be noted on the freight bill at the time of delivery. It must then be signed by the carrier representative (ie: driver). If this is not done, the carrier may refuse the claim. The carrier can supply the necessary forms.

For concealed damage or loss if not apparent until after equipment is uncrated, a request for inspection must be made to the carrier as soon as possible. Please confirm the time frame with the carrier, as this can vary. The carrier should arrange an inspection. Be certain to hold all contents and packaging material.



Installation and service should be performed by a certified and insured food service technician. All CPG ranges should also be installed under a ventilation hood according to local codes. CPG Limited Warranty does NOT cover equipment that fails to follow these guidelines or has been altered, modified, or repaired by anyone other than a certified and insured food service technician. If you have questions concerning the installation, operation, maintenance, or service of your equipment, visit CPG's website at [www.CookingPerformanceGroup.com](http://www.CookingPerformanceGroup.com).

Make sure that the floor where you plan to locate the commercial range can support its weight along with any accessories. Adequate clearance should be provided for proper operation and servicing. Level the commercial range once you've uncrated it in your facility using the adjustable feet.

Proper ventilation is crucial to safe and optimal performance. Ensure that the oven is installed underneath a ventilation hood according to all applicable local and national codes. Keep adequate clearance for air openings into the combustion chamber.



## Installation

 WARNING	IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE, OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY, OR DEATH. READ THE INSTALLATION, OPERATING, AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.	 FOR YOUR SAFETY	DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
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- These units are designed for commercial use and not for household use.
- Installation must conform to all applicable codes. Improper installation will void the manufacturer's warranty.
- Do not obstruct or reduce the air flow rate of the natural ventilation openings on the oven or the vent located at the rear of the oven.
- Discontinue use if power cord or electrical wires are frayed or worn.
- This product conforms to UL-197 standards and is required to be installed under a ventilation hood in accordance with all applicable codes.

**Combustible Clearance Requirements: 20" Sides, 28" Back**

**Non-Combustible Clearance Requirements: 2" Sides, 2" Back**

## Installation Instructions

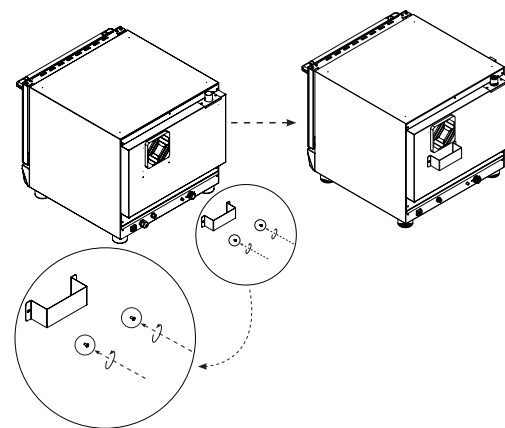
The place of installation must be indoors, well ventilated, and the ambient temperature must be at least 40 degrees Fahrenheit. The unit is required to have at least 2" of clearance on the sides and back from non-combustible surfaces, or at least 20" and 28" of clearance on the sides and back, respectfully, from combustible surfaces. Ensure that all four legs are installed correctly before the operation of this oven. The unit is required to be installed on a non-combustible surface with 4" legs, or a combustible floor with a stand. For full-size models, level unit by adjusting the (4) feet, which have an adjustment of 1<sup>3</sup>/<sub>4</sub>" for accurate leveling.

This product conforms to UL-197 standards and requires it to be under an exhaust hood. A vertical distance of not less than 48" shall be provided between the top of the appliance and filters or any other combustible material. Exhaust installation must conform to applicable local codes.

Do not obstruct or reduce the air flow rate of the natural ventilation openings on the oven or the vent located at the rear of the oven. To ensure proper ventilation and clearance, the provided spacer is required to be installed.

The spacer must be installed by screwing (2) self-threading screws on the back of the unit immediately below the cooling fan.

**NOTE:** For Oven Stacking Instructions, please see page 14.



 **WARNING:** DO NOT OBSTRUCT THE VENT OR COOLING FAN LOCATED AT THE REAR OF THE OVEN.

## Electric Connection

- The power supply must comply with the rated voltage, frequency, and plug specific to the data plate.
- All installation types require a dedicated circuit protected by a fuse or circuit breaker. Do not use an extension cord with plug and cord models.
- All electrical connections must be carried out by a qualified and authorized technician.
- This device should be safely and adequately grounded in accordance with local codes, or in the absence of local codes, with the National Electrical code, ANSI/NFPA 70, Latest Edition to protect the user from electrical shock. It requires a grounded system and a dedicated circuit, protected by a fuse or circuit breaker of proper size and rating. Canadian installation must comply with the Canadian Electrical Code, CSA C22.2, as applicable.
- To prevent any damages to property and/or people, unplug the appliance from the electrical connection prior to carrying out any type of maintenance, installation, and/or cleaning operation.

## Water Connection

**ATTENTION:** Using water that does not meet the requirements listed below may cause severe damage to the heating elements, to the fans, and to the cooking chamber. Additionally, it may cause considerable performance degradation.

A  $\frac{3}{4}$ " water connection is required for installation. The inlet water pressure has a requirement (**min/max**) of 150-200 kPa or 22-29 psi. To reduce calcium/mineral buildup, a water filtration system is recommended.

- **Maximum acceptable water hardness** = 60-90 ppm
- **Minimum water PH** = 7.5 PH
- **Chlorides** = less than 30 ppm
- **Silica** = less than 12 ppm (mg / L)
- **Free chlorine** = less than 0.1 ppm (mg / L)
- **Total dissolved solids (tds)** = 50-125 ppm

## Before First Use

Remove all packing material and protective plastic from the surfaces of the unit. Ovens should be cleaned before operation (see below). Make sure to clean the baffle, wire shelving, and support racks before installing. The 240V full size and half size models feature (7) rack positions and the 120V half size models feature (5) rack position. Make sure the tray support and shelves are correctly positioned inside the cooking chamber and securely installed. Only load the rated number of trays per oven size. Do not overload the chamber, or it will affect cooking performance and results.

It is normal for an unpleasant smell to be noticeable the first time the oven is used. This is caused by burning off residue from the manufacturing process. Set the oven to 450 degrees Fahrenheit until the smell dissipates, for about 30 minutes.

## General Operating Procedures

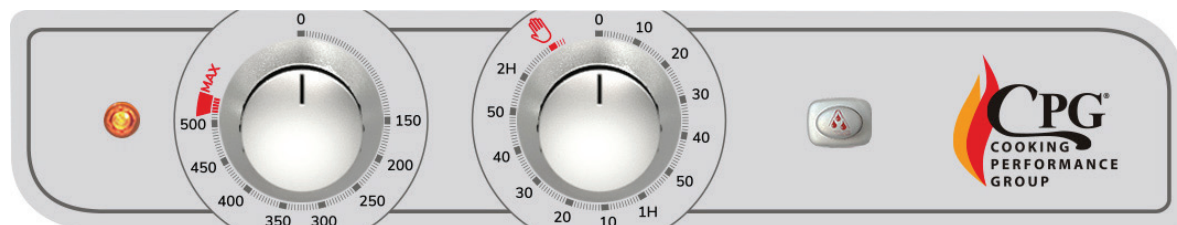
**NOTE:** This convection oven is not a replacement for a combi oven.

**NOTE:** For all models, the bi-directional fans reverse direction of rotation every two minutes.

**NOTE:** All models feature a micro safety switch which shuts off the oven when the door is open.

Exterior surfaces on unit will get hot during use and at the end of the cooking process. Use caution when touching these areas. Do not touch any surfaces labeled CAUTION HOT while the product is in use.

### THERMOSTATIC MODELS



For timed use, **the timer does control the baking operation of the oven.** Start by rotating the 'Temperature' control clockwise to the desired temperature. Then rotate the 120-minute 'Timer' control clockwise to set the desired time. The 'Power On' indicator light should now illuminate. When the timer reaches '0' minutes, the buzzer will sound and the heating will stop. To ensure the oven is 'Off' at the end of service, rotate the 'Temperature' and 'Timer' controls to the '0' position.

For continuous use and without interruption, first rotate the 'Timer' control counterclockwise to the 'OFF' symbol to turn the timer 'Off'. Then, rotate the 'Temperature' control clockwise to the desired temperature. The 'Power On' indicator light should now illuminate. The oven will continue to run until you turn it 'Off' by rotating the 'Temperature' and 'Timer' controls to the '0' position. Steam can be added to the chamber at any point by pressing and holding the steam button.

### DIGITAL MODELS

**TEMPERATURE:**  
When the oven is cycling 'On' and heating, the LED will light up. The actual temperature of the chamber will appear on the display. If you want to display the set temperature, please press this button.

**SELECTING BUTTONS:**  
Plus or minus selecting buttons.

**START/STOP:**  
Use this button to start or stop a manual or programmable cooking cycle.

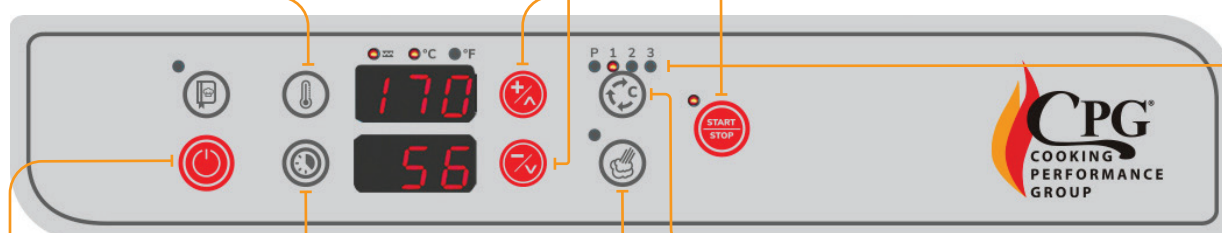
**PHASE**  
These LEDs inform you about which phase is operating at the time.

**ON/OFF:**  
Press once to turn 'On' the oven. Press and hold to turn 'Off' the oven.

**TIMER:**  
The adjustable time range is 999 minutes. Timer will be displayed as a countdown timer.

**STEAM/HUMIDITY:**  
This button allows you to add steam during manual or programmable cooking modes. The adjustable humidity range is: OFF - 20% - 40% - 60% - 80% - 100%. The LED will illuminate when steam is being added to the chamber. **Note:** This unit is not a substitute for a combi oven.

**COOKING CYCLE**  
For programmable mode, this button allows you to cycle through the (3) different cooking phases when creating a program.



The image shows the control panel for digital models. It features a digital display showing '170' and '56'. To the left of the display are buttons for 'ON/OFF', 'TEMPERATURE', and 'TIMER'. To the right of the display are buttons for 'SELECTING', 'START/STOP', 'STEAM/HUMIDITY', and 'COOKING CYCLE'. The CPG logo is on the right side of the panel.

## Manual Cooking

For manual timed use, **the timer does control the baking operation of the oven.** Turn 'On' the oven by pressing the 'On/Off' button. Manual cooking mode is the default and 'MAN' will appear on the display. To set the temperature, press the 'ⓘ' button and then select your desired set temperature using the '+' or '-' buttons. Pressing the 'ⓘ' button again, or waiting 5 seconds, will confirm set temperature. Similarly, to set the 999 minute timer press the '⌚' button and then set timer using the '+' or '-' buttons. Then press the '⌚' button again to confirm set timer. To start the cooking cycle, press the 'Start/Stop' button. The unit will now pre-heat (see below). When the timer reaches 0 minutes, 'END' will flash on the display, and the unit will 'beep' for 40-seconds at the end of the cooking cycle and the oven will stop heating.

For manual continuous use and without interruption, turn 'On' the oven by pressing the 'On/Off' button. Manual cooking mode is the default and 'MAN' will appear on the display. Press the '⌚' button and use the '-' button to go below the minimum timer value and select "- -". To set the temperature, press the 'ⓘ' button and then select your desired set temperature using the '+' or '-' buttons. Pressing the 'ⓘ' button again, or waiting 5 seconds, will confirm set temperature. The timer will be displayed as a countdown. The oven will continue to run until you turn it 'Off' by pressing and holding 'On/Off' button or 'Start/Stop' at any point to stop cooking program.

Note: At any point during the cooking process, you can change the temperature and time. Manual steam can be added to the chamber at any point by pressing and holding the steam button.

Note: The actual temperature of the chamber will appear on the display. If you want to display the set temperature, please press the 'ⓘ' button.

**NOTE:** When using the steam functions, if the oven temperature is BELOW 212°F (100°C ), water may pool in oven, as temperature will be too low to create steam.

## Pre-Heating

All digital models feature an automatic pre-heat setting, where 'PRE' will appear on the display and the oven will heat the chamber to a temperature of 20% higher than the set one. This is necessary to compensate for heat loss that occurs when opening the door to load product. The oven will 'beep' and flash when product is ready to be loaded. The unit will not stop 'beeping' or 'flashing' until you open the door and load product. Once you close the door, your cooking cycle will begin automatically.

## Programmable Cooking

In programmable mode, you can create and set 99 programs with 3 stage cooking. In each stage, you can set temperature, time, and humidity. Please refer to the supporting videos on the program page for added visualization of recipe and program creation.

**NOTE:** For further instruction on programmable cooking, please view the online product page for a 'how-to' video.



To create a new cooking program:



Press the button  
COOKBOOK and  
"P01" will appear  
on the display



Then act on the  
PLUS and MINUS  
buttons



Press the button  
COOKBOOK  
to confirm

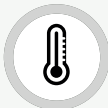
Now the oven is positioned on the first phase (LED lit on N.1) and you can set the time, temperature, and steam in the various stages as follows:



Press the button  
TEMPERATURE



Then act on the  
PLUS and MINUS  
buttons



Press the button  
TEMPERATURE to  
confirm

Set the temperature value:



Press the button  
TIME



Then act on the  
PLUS and MINUS  
buttons



Press the button  
TIME to confirm

Set the timer value:



Press the button  
HUMIDITY



Then act on the  
PLUS and MINUS  
buttons



Press the button  
HUMIDITY to  
confirm, or wait 5  
seconds and the new  
value will be stored

Set the steam/humidity value:



Select the cooking phase button to go to the second phase  
(in the case of a cooking process with several phases) and  
you will see the second LED on

To save a program with 3 steps, after setting them, press and hold the COOKBOOK button until the LED flashes. If you only have 1 or 2 steps, enter '0' for the time in the unused steps and save.

- When the program is stored, you can press START/STOP to activate the cooking process.

If needed, you can skip a phase in your recipe during the cooking cycle by pressing and holding the 'Cooking Cycle' button to continue to the next step. Note: The timer will reset to the next step's set time.

Return to manual cooking mode by turning the oven 'Off' and 'On'.

To delete a program recipe, select the desired recipe and press and hold the temperature "°" and time "⌚" buttons simultaneously. The selected recipe will then be permanently deleted. The program will now flash to indicate it's an empty recipe slot.

## Cleaning Care

- **DO NOT** use abrasive or flammable cleaning fluids.
- **DO NOT** hose down, immerse, or pressure wash any part of the oven.
- **NEVER** use a scrubber pad, steel wool or abrasive material, or cleaners containing chlorine, iodine, ammonia, or bromine chemicals, as these will deteriorate the stainless steel and shorten the life of the unit.
- **NEVER** use steel wool pads to clean oven, as small fibers may be left behind in cooking chamber.
- **ALWAYS** turn off the oven and allow time to cool prior to cleaning and/or maintenance.

## Internal Cleaning

Allow the oven to cool completely. To use the 'cool down' program for digital models, see below:

- Press '⏸' and using the MINUS button, go below the minimum temperature value and select "C00".
- Press 'Start' and the temperature will start to flash in the display, and then you will see the temperature start to decrease.
- To expediate the cooling process, open the door of the oven.

Once the unit is cool, remove stainless steel baffle, wire shelves, and support racks. These parts are dishwasher safe. Clean any buildup of grease from the oven interior using a mild detergent, a hot water solution, and a soft bristle brush. We recommend Noble Chemical Sunbright for daily cleaning, and Noble Chemical Knockout, or Blast, for deep clean or carbon buildup. Dry the oven thoroughly with a soft, dry cloth. Then reinstall steel baffle, wire shelves, and support racks.

## External Cleaning

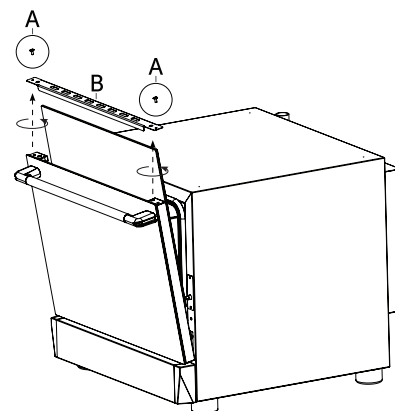
Clean any buildup of grease on the exterior of the oven using a mild detergent, a hot water solution, and a soft bristle brush. We recommend Noble Chemical Sunbright for daily cleaning. We recommend using Noble Chemical Excel to polish external stainless steel surfaces, as well as Noble Chemical Klear View to clean the door glass.

**NOTE:** Remember to replace and/or clean the cooling filter located at the back of the unit. Disconnect from the electrical connection. Then loosen the grid screws and replace the filter. Reinstall and place everything back in its original location.

## Door Cleaning

Strictly adhere to the following procedure in order to avoid electrocution or injury: To clean the inner glass of the door, start a rapid cooling cycle of the oven chamber (for digital models) or wait until the ambient temperature is reached (for mechanical models).

- This procedure should be performed with the door ajar (inclined about 30°).
- Remove the two external screws "A" as shown in the figure, unscrewing counterclockwise.
- Pull out the sheet metal profile "B" carefully.
- Remove the inner glass very gently.
- Place the glass on a suitable surface, such as a soft cloth.
- Clean the surface using a soft cloth just moistened with a neutral product, specific for glass, following the instructions of the manufacturer of the detergent



## Warning and Alarms

All alarms are indicated by a buzzer. The buzzer can be silenced by pressing a key.

- **ERR** = CHAMBER PROBE ALARM  
This is triggered if the chamber probe fails. Everything is deactivated except for the light. The cycle in progress is interrupted. Once the alarm is silenced, press the ON/OFF button for 1 second to reset the alarm (the control panel is set to OFF).
- **"ALL"** = MOTOR ALARM  
This is triggered if the motor overheats. Everything is deactivated except for the light. The cycle in progress is interrupted. Once the alarm is silenced, press the ON/OFF button for 1 second to reset the alarm (the control panel is set to OFF).
- **"H-t"** = CONTROL BOARD TEMPERATURE ALARM  
This is triggered if the control board overheats. The cycle in progress is interrupted. Once the alarm is silenced, press the ON/OFF button for 1 second to reset the alarm (the control panel is set to OFF).

## Operator and Factory Parameters Table

Parameter	Description	Default Value	Limits	Unit	Level
P01	Temperature unit: 0=C, 1=F	0	0-1	Flag	Operator
P03	Min. cooking temperature setpoint	30	30-200	C/F	Factory
P06	Preheating superheating (% value of the set above the cooking setpoint)	20	0-100	%	Operator
P15	Light mode: 0= timed on button pressure, 1= always ON during cooking, 2= always ON	2	0-2	Flag	Operator
P16	Light activation time	45	0-120	Seconds	Operator
P17	Enable preheating	1	0-1	Flag	Operator
P40	Default setpoint for cooling	50	30-70	C/F	Operator
P52	Time of inactivity to switch to standby mode (function disabled with 0)	10	0-60	Minutes	Factory

Access the parameter menu with the oven set to "OFF", indicated by the top display of the appliance. Press down the **[P]** key until the upper display shows "PAS" and the lower display shows "0", flashing. Press the **+** key to set the value shown on the lower display to "30". Confirm by pressing START/STOP. The upper display will show the name of the parameter, whereas the lower one will show the value of that parameter. Scroll through the list of editable parameters using the **+** and **-** buttons. Once the parameter to be edited has been found, press the START/STOP button: the value shown on the lower display will start to flash, and then press **+** and **-** buttons to change the value. Once the desired value has been set, according to the table below, press START/STOP to confirm the change. When the desired parameters have been changed, press the **[P]** key to set the appliance back to "OFF".



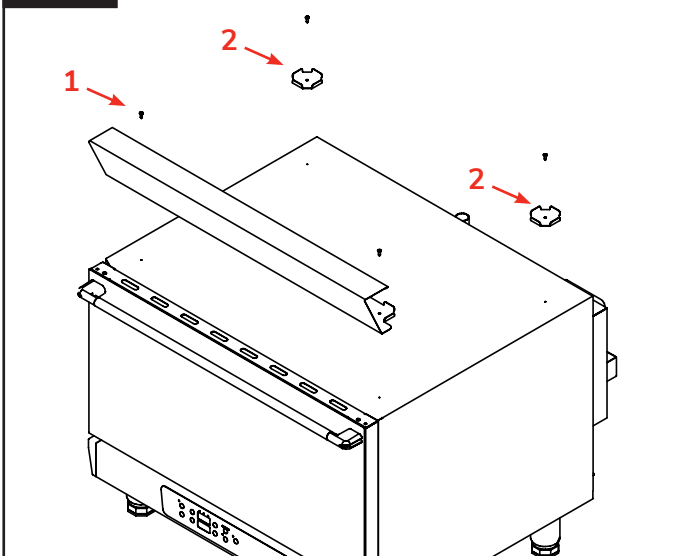
## Troubleshooting

PROBLEM	CAUSE	RESOLUTION
In START mode the oven does not turn on	Door open	Make sure the door is closed.
	The micro-switch does not signal that the door is closed	Contact a specialist technician for repairs, (Customer Service).
Oven light off	Loose lamp	Insert the lamp correctly into the lamp holder.
	Blown lamp	Replace the lamp, (refer to ordinary maintenance).
The oven does not cook uniformly	The fans no longer execute inversion	Contact a specialist technician for repairs (Customer Service).
	One of the fans has stopped	
	One of the heating elements is broken.	
The oven is completely off	No power supply	Restore the power supply.
	Incorrect connection to the mains power supply	Check connection to the main power supply.
	Safety thermostat triggered	Contact a specialist technician for repairs, (Customer Service).
The water is input into the steam pipes	Water inlet closed	Open water inlet.
	Incorrect connection to the main water supply	Check connection to the mains water supply.
	Water inlet filters obstructed by dirt.	Clean the filters.
Water leaks out from the washer when the doors is closed	Dirty washer	Clean the washer with a damp cloth.
	Damaged washer	Contact a specialist technician for repairs, (Customer Service).
	Door closing mechanism problem	
The fan stops during operation	Motor safety thermostat triggered	Switch the oven off and wait for the motor's thermal protection to restore automatically. If the problem persists, contact a specialist technician for repairs, (Customer Service).
	Motor condenser breakage	Contact a specialist technician for repairs, (Customer Service).

**NOTICE:** The above examples are provided for your reference. Provided a failure occurs, stop using the oven and consult an authorized service agency. All maintenance should be done after the power supply is shut off.

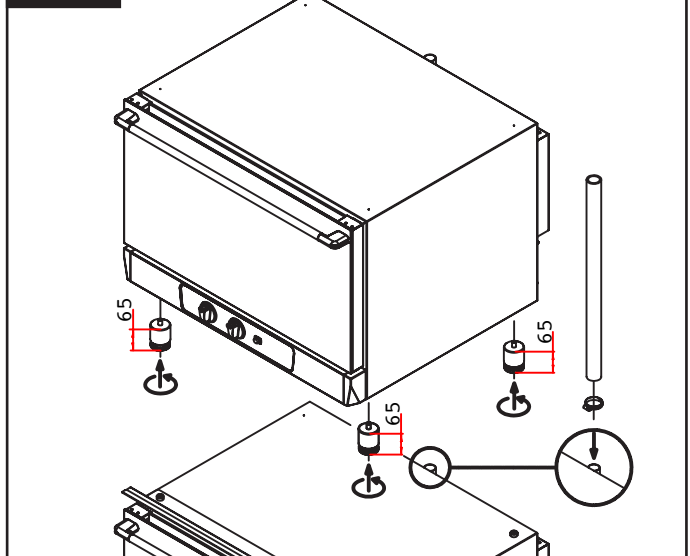
## Stacking Kit Instructions

Fig. 1



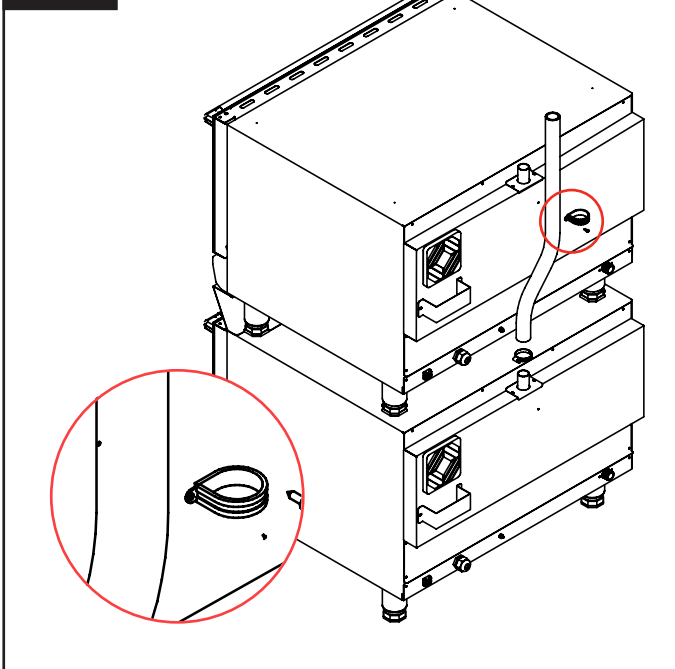
1. Screw the front profile with provided screws.
2. Screw the rear plates with provided screws.

Fig. 2



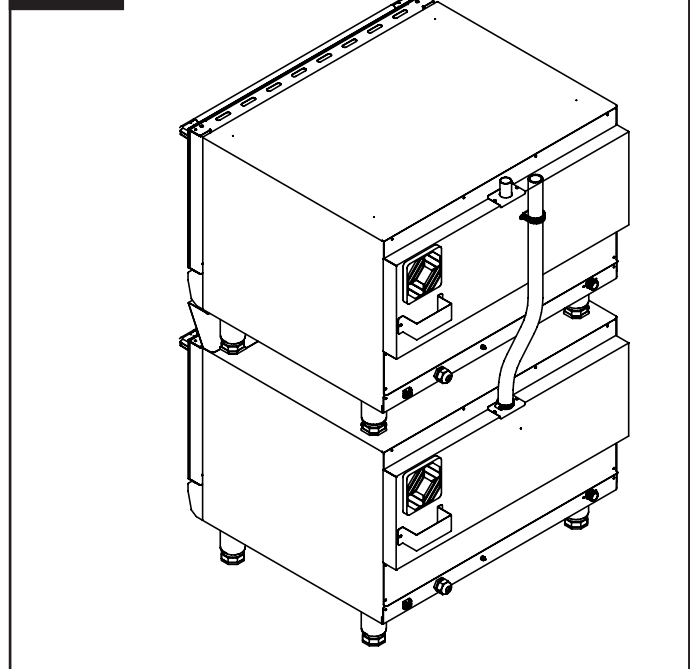
3. Place the oven on top.

Fig. 3



4. Place the bracket on the back of the oven on top.

Fig. 4



5. Connect the pipe and use the bracket provided.