

## Electric Deep Depth Convection Ovens



351FEC100DDC, 351FEC100DDD, 351FEC200DDCK, 351FEC200DDDK

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.

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## Product Overview

The 351FEC100DD features a sturdy steel construction with 4 adjustable legs. It is equipped with a built-in two speed convection fan for temperature uniformity throughout the cavity. This oven features high efficiency heating elements and an electronic thermostat to ensure accurate temperate for precise cooking. The 351FEC200DD features two oven cavities helping you meet higher production demands.

## Safety Precautions

### CAUTION:

- 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.

### NOTICE:

- Local codes regarding installation vary greatly from one area to another. The National Fire Protection Association, Inc., states in its NFPA96 latest edition that local codes are "Authority Having Jurisdiction" when it comes to requirement for installation of equipment. Therefore, installation should comply with all local codes.
- This product is intended for commercial use only. Not for residential use.

### WARNING:

- 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 foodservice equipment technician must handle all maintenance and repair.

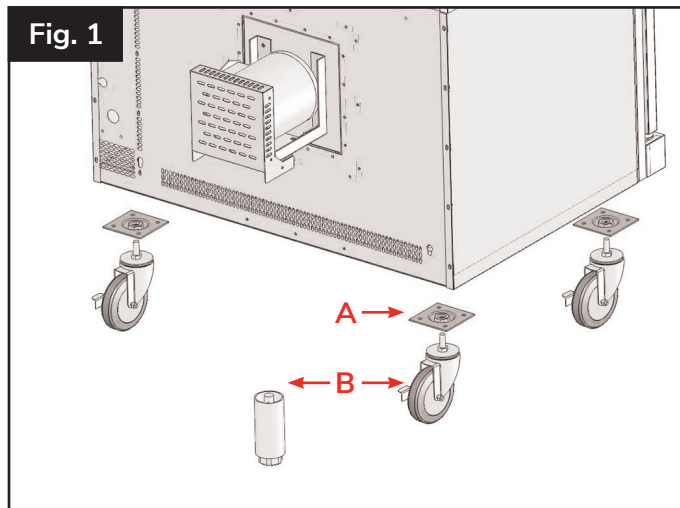


Conforms to UL STD 197  
Conforms to CSA STD C22.2 NO.109  
NSF tested by ETL

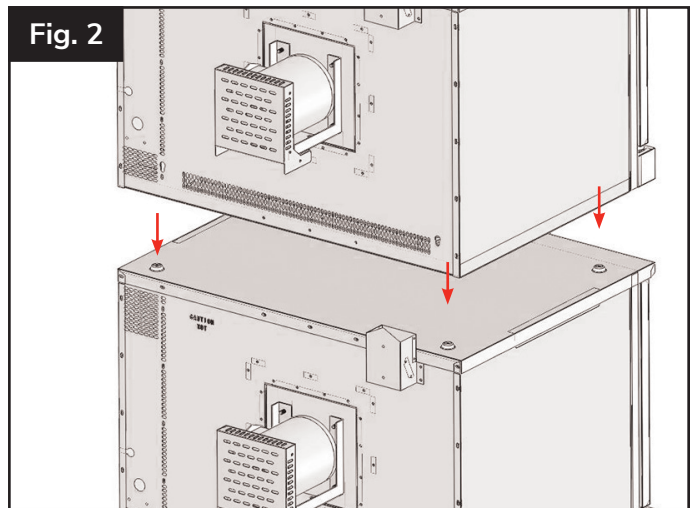
## Stacking Ovens Instructions

**NOTE:** Requires two like ovens and stacking kit (#35117046014).

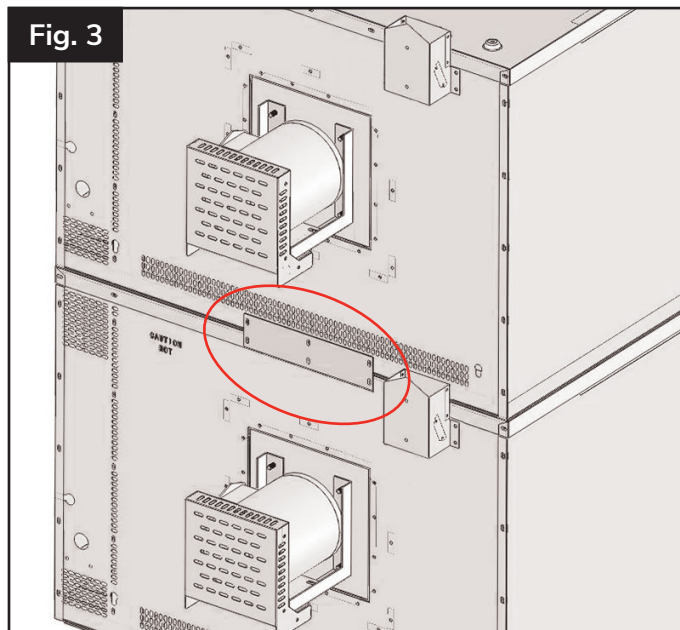
**NOTE:** We require the stacking to be performed by an authorized service agent or installer and takes two people to lift the ovens.



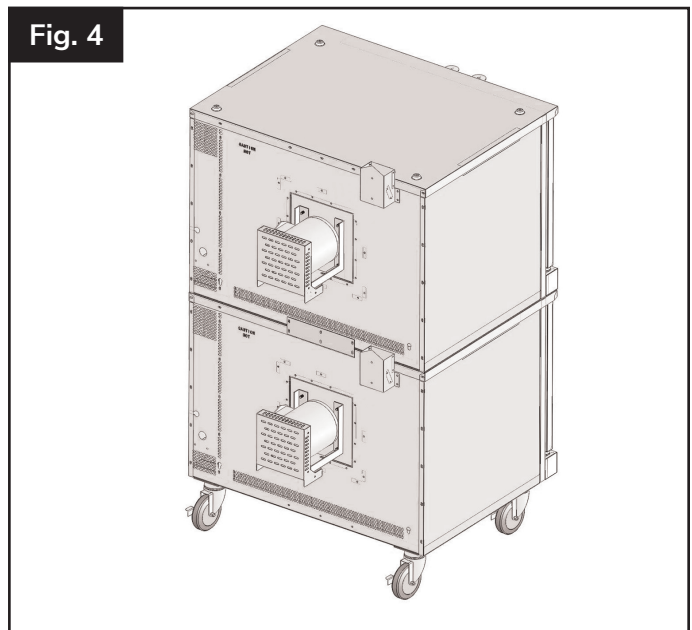
1. Install the caster plate. (Fig. 1 A)
2. Install the casters or legs. (Fig. 1 B)



3. Align the top notches of the lower oven with the notches on the bottom of the upper oven. (Fig. 2)



4. Attach the top and bottom unit with connecting plates and screws. (Fig. 3)



5. Stacking is complete. (Fig. 4)



## Specifications

|                                    | 351FEC100DDC                                                                                                |    | 351FEC100DDD |    |
|------------------------------------|-------------------------------------------------------------------------------------------------------------|----|--------------|----|
| Total Power                        | 11 kW                                                                                                       |    | 10.1-11.9 kW |    |
| Voltage                            | 208V                                                                                                        |    | 220V - 240V  |    |
| Amps                               | 53                                                                                                          | 32 | 50           | 30 |
| Phases                             | 1                                                                                                           | 3  | 1            | 3  |
| Overall Dimensions (Single Oven)   | 38 <sup>1</sup> / <sub>8</sub> "D x 54"H x 45 <sup>13</sup> / <sub>16</sub> "W                              |    |              |    |
| Overall Dimensions (Stacked Ovens) | 38 <sup>1</sup> / <sub>8</sub> "D x 62 <sup>1</sup> / <sub>8</sub> "H x 45 <sup>13</sup> / <sub>16</sub> "W |    |              |    |
| Oven Chamber Dimensions            | 29"D x 20"H x 27 <sup>7</sup> / <sub>8</sub> "W                                                             |    |              |    |
| Temperature Range                  | 150°F - 500°F                                                                                               |    |              |    |
| Fan Speed (Low)                    | 1120 r/min                                                                                                  |    |              |    |
| Fan Speed (High)                   | 1710 r/min                                                                                                  |    |              |    |
| Clearance                          | 6" Sides, 2" Rear                                                                                           |    |              |    |

**NOTE:** 351FEC200DD ovens consist of two like 351FEC100DD ovens - please see the spec table above for the individual oven/cavity specifications.

**NOTE:** Each oven requires its own electrical connection.

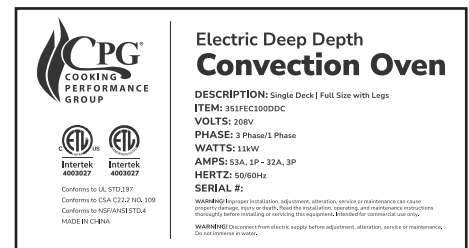
**NOTE:** You cannot convert voltages with these units. If you have the wrong voltage, you will need to purchase a unit with the correct voltage.

**NOTE:** Please note that these units need to be installed on a dedicated and appropriately sized circuit.



## Startup Installation

1. Remove packaging before beginning installation.  
**NOTE:** Some parts are protected with an adhesive film. Remove any glue residue with approved substances, such as Noble Chemical Strike All Purpose Cleaner (#147STRIKE1G); never use abrasive substances. (See Cleaning & Maintenance on pg. 11 for our other recommended cleaning agents and further cleaning instructions.)
2. Mount the feet and adjust the height by loosening or tightening each foot to ensure the unit is level.
3. The electrical connections must be close to the equipment and easy to reach.
4. Place the unit under an exhaust hood to ensure you comply with your local regulations.
5. Install the unit at least 2" from the wall and at least 6" from other heat-producing equipment. Any wall, surface, cabinet, table, etc. in close proximity to the equipment should be made of non-combustible materials with proper thermal insulation.
6. **Law provisions, technical regulations, and directives:**  
The manufacturer requires the installation to be performed according to national and local codes and must be performed by a licensed installer.
7. **Checking the functions:**  
The serial plate, like the example to the right, is located on the right side panel. Please ensure that the voltage stated on the serial plate is compatible before performing the electrical connection.



## Notes for the Installer

- Explain and demonstrate to the user how the equipment works according to the instructions, and ensure that the user manual is accessible.
- Remind the user that any structural alterations or modifications made to the room that houses the equipment will warrant a recheck of the equipment functions.
- Do not install the equipment close to other units that can reach high temperatures, as the electrical components could be damaged. A 6" minimum clearance is required from such equipment.

## Electric Connection

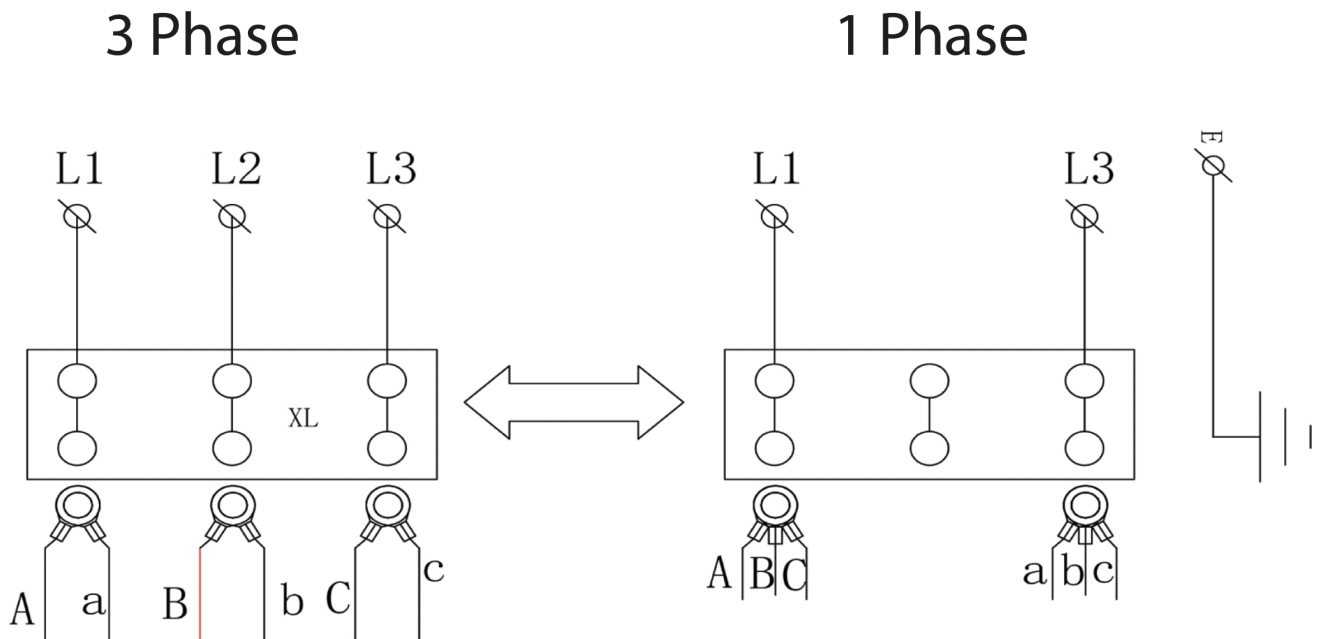
The oven must be electrically grounded in accordance with all local and national codes. (In the USA, the National Electrical Code ANSI/NFPA no. 70 is applicable).

**NOTE:** Please note that these units need to be installed on a dedicated and appropriately sized circuit.

## Phase Conversion Instructions

Please follow the below steps to convert the phase of your oven to match your application.

**NOTE:** Only phase can be converted. The voltage of these ovens cannot be converted. Please ensure that your oven is the proper voltage to be used with your electrical connection.



### Converting 3 Phase to 1 Phase

1. Remove wires 'a', 'B', 'b', and 'C' from their terminal block locations.
2. Secure wires 'A', 'B', and 'C' to the same terminal block location.
3. Secure wires 'a', 'b', and 'c' to the same terminal block location.

### Converting 1 Phase to 3 Phase

1. Remove wires 'a', 'B', 'b', and 'C' from their terminal block locations.
2. Secure wires 'A' and 'a' to the same terminal.
3. Secure wires 'B' and 'b' to the same terminal block location.
4. Secure wires 'C' and 'c' to the same terminal block location.

## Exhaust System

The room where the equipment is installed must be fitted with air intakes to guarantee the correct operation of the unit and air exchange.

- During installation, make sure the air suction and evacuation ways are free from any obstacles.
- This unit must be installed per all applicable hood regulations.
- This unit is not designed to be directly connected to an evacuation duct for the discharge of combustible products.

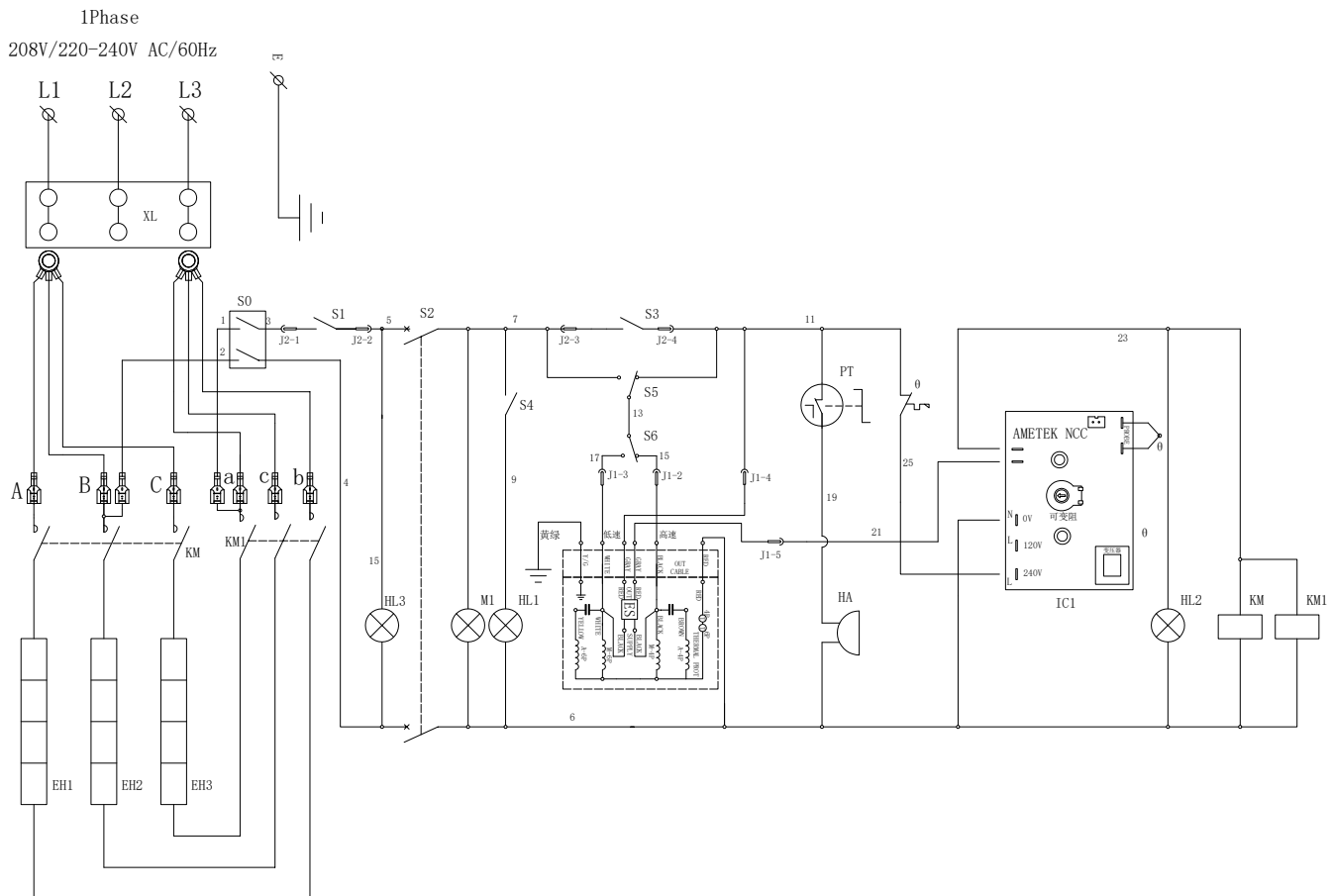
## Electrical Diagrams

### 1 PHASE:

#### FEC100

XL..... Amphenol Connector  
KM, KM1..... AC Contactor  
EH1, EH2, EH3..... Electric Heating Tube  
S0..... Circuit Breaker  
S1..... Electric Box Protection Switch  
S2..... Power Switch  
S3..... Door Switch  
S5..... Cool/Cook Switch  
S6..... High/Low Speed Motor Switch

HL1..... Bore Lamp  
HL2..... Heating Indicator Light  
HL3..... Power Indicator Light  
M..... Motor  
PT..... Timer  
HA..... Buzzer  
IC..... Electronic Temperature Controller  
O..... Temperature Limiter  
M1..... Cooling Fan





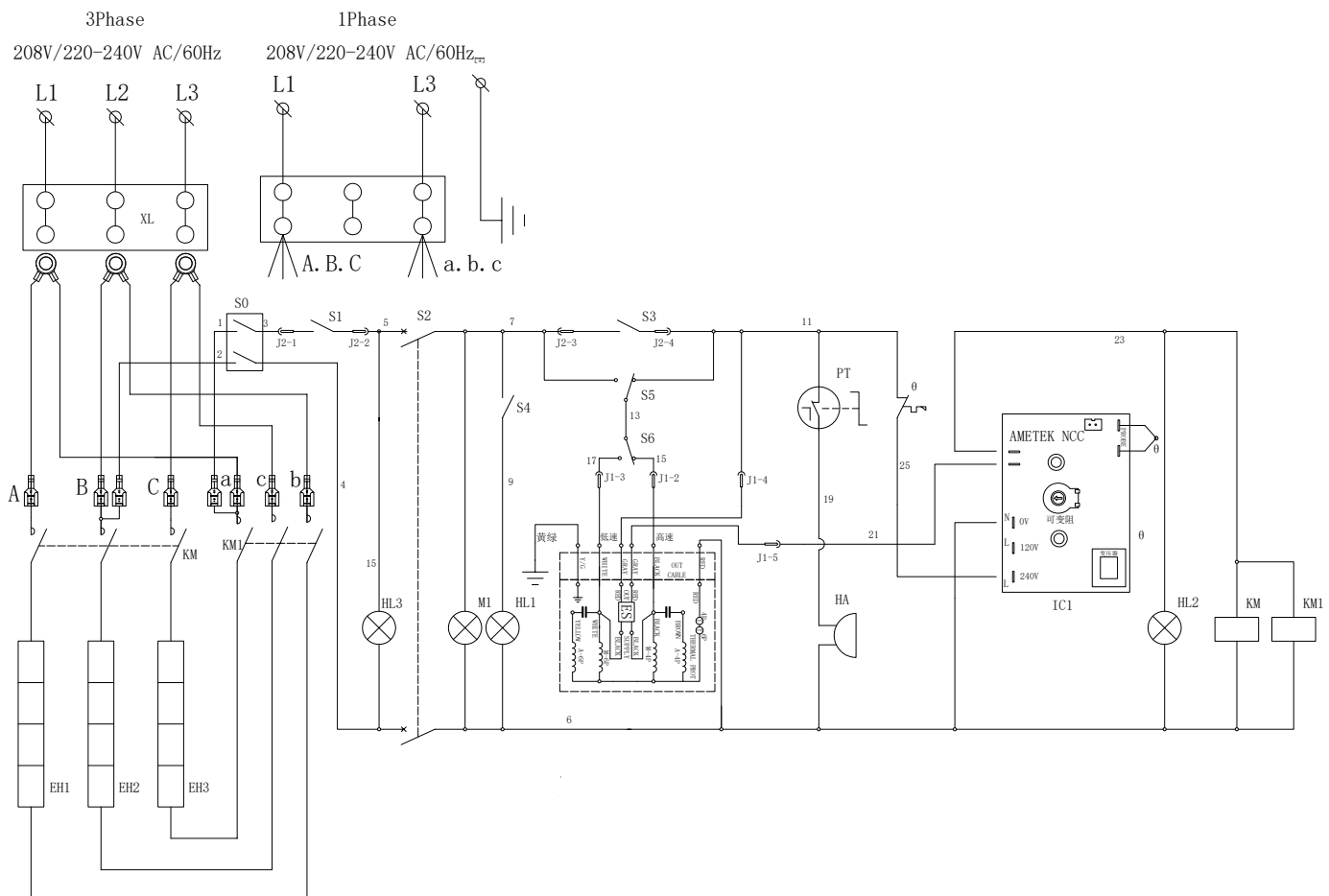
## Electrical Diagrams

### 3 PHASE:

#### FEC100

XL..... Amphenol Connector  
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HL1..... Bore Lamp  
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PT.....Timer  
HA..... Buzzer  
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O..... Temperature Limiter  
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## Operating Instructions Control Panel

### Power Switch:

Switch ON to use the oven; switch OFF when done using the oven.

### Cook Timer:

The timer is a reminder to the user; the timer does not control the oven.

Turn knob to set a cook time. An alarm will sound when the timer runs out. Turn the knob to OFF to cancel the alarm.

### POWER Indicator:

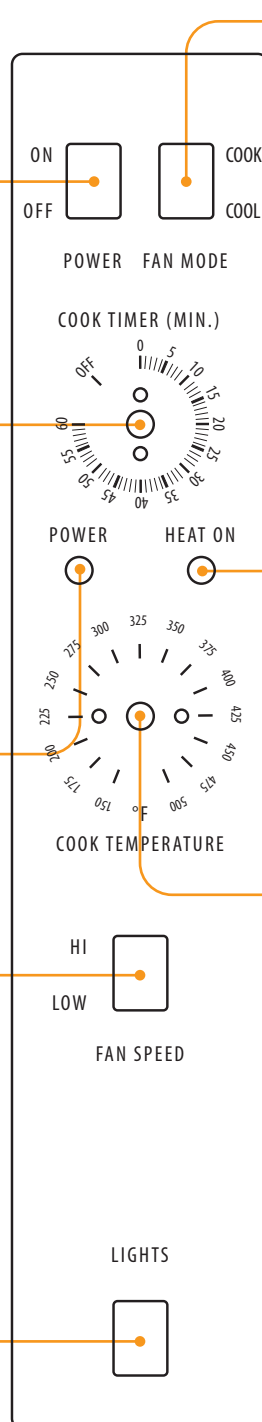
Lights up when the unit is connected and the Power Switch is in the "ON" position.

### HI/LOW Fan Speed:

Use to select fan speed (HI/LOW). The appropriate speed is determined by the type of food being cooked.

### Oven Interior Light Switch:

Press to turn on the light. The light is controlled independently.



### Fan Mode:

**COOK Mode:**

The fan runs continuously except when the doors are open.

The fan does not cycle with the operation of the heating element.

**COOL Mode:**

The fan runs continuously even if the doors are open.

To rapidly cool the oven after cooking is completed, open the doors and switch the fan mode to COOL.

### HEAT ON Indicator:

Lights up when the heating element is on and will remain on while the oven preheats.

### Cook Temperature Control:

Turn the knob to desired temperature. When the set point is reached, the HEAT ON indicator will be off.

When the heating element maintains the set temperature, the indicator will cycle between ON and OFF.

## Operating Instructions

### Cooking Instructions

1. Turn the oven ON using the power switch at the top of the control panel.
2. Select the desired fan speed using the fan speed switch. The appropriate fan speed (HI or LOW) depends on the type of food being cooked.
3. Switch the fan mode to COOK. The fan will run continuously when the oven doors are closed (the fan does not cycle on and off with the heating element). If this switch is set to COOL, the only difference is that the fan will continue to run when the oven doors are open.
4. Set the cooking temperature by turning the cook temperature control until the indicator mark on the knob is pointed to desired cooking temperature. The HEAT ON indicator will light when the heating element is on and will remain on while the oven preheats.
5. Wait until the HEAT ON indicator has gone out. At that time the oven will have reached the set cooking temperature.
6. Open the oven doors, load the product into the oven, and close the doors.
7. You can use the cook timer as a reminder of when to remove product from the oven. Turn the cook timer knob until the indicator mark points to the desired cooking time (up to 55 minutes). The timer knob will rotate counterclockwise as the timer runs down, indicating how much time remains. You can turn the knob while cooking to increase or decrease the remaining time. When the timer runs out, a buzzer will sound for a short time, then turn itself off. (To immediately silence the buzzer, turn the Cook Timer knob to the OFF position.)

**NOTE:** The timer is a reminder to you; the timer does not control the oven.

  - If you open the oven doors, the heating element and fan will shut off until the doors are closed. However, the timer will continue running even if the doors are open.
  - For ovens that are equipped with an oven interior light, to turn on the light, press and hold the switch located at the bottom of the control panel.
8. To rapidly cool the oven cavity when finished cooking: turn thermostat down to lowest level, open the oven door, switch the fan to COOL mode, and fan speed to HI. This will cause the fan to run even with the doors open.
9. When you are done cooking, turn the cook temperature control to the lowest setting (fully counterclockwise) and switch the power switch to OFF.

## Operating Instructions

### High Limit Temperature Reset

**WARNING:** PLEASE UNPLUG AND DISCONNECT UNIT BEFORE REMOVING THE BOLT AND OPENING THE CONTROL PANEL TO AVOID INJURY.

1. Remove the 7mm bolt that secures the control panel. (Fig. 1 & 2)
2. Open the control panel by carefully pulling down, lowering it from the top. (Fig. 3)
3. Reset the temperature limiter.  
The temperature limiter is installed on a small bracket behind the control panel (Fig. 4). Press the reset button manually.  
The unit will operate under the new settings once powered on.
4. Close the control panel and re-install the 7mm bolt to secure.
5. Power the unit on for inspection.



Fig. 1

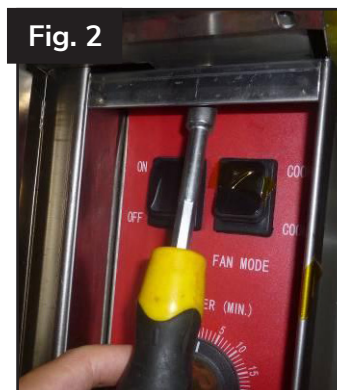


Fig. 2



Fig. 3



Fig. 4

### Warnings

1. Always ensure proper supervision while the equipment is in use.
2. Simple adjustments to knobs, leg height, etc. do not require assistance from specialized personnel. For more technical adjustments, please consult a qualified technician.
3. Use only parts and accessories recommended by Cooking Performance Group.
4. During the initial uses of the equipment, an acrid or burning smell may be detected. This will disappear after two or three uses. To remove the smell faster, set unit to 450-500°F for 30 min. or until smell starts to disappear, then turn unit off and let cool.
5. The equipment will remain hot for a short time after use (residual heat). Avoid all physical contact with the unit during this time to prevent injury.
6. This equipment is strictly for professional use and must be used by qualified personnel.
7. The installation, startup, and maintenance of this equipment must be carried out by a qualified technician.
8. All installation must be carried out according to the law. Cooking Performance Group is not responsible for damages due to an incorrect installation, improper maintenance, or incorrect use.
  - **These are very important regulations; if they are neglected, the equipment may not perform properly or the user may be placed at risk and void manufacturer warranty.**



## Cleaning & Maintenance

1. Before cleaning, turn off the unit and let it cool down.
2. Carefully clean the equipment daily to promote proper operation and long life.
3. Steel surfaces must be cleaned with cleaning agents such as Noble Chemical Sunbright, Noble Chemical Knockout, or Noble Chemical Blast, diluted in very hot water using a soft cloth; do not use abrasive powder detergents or corrosive substances. The use of acids can affect the unit's operation and safety. Do not use brushes, steel cottons, or abrasive disks made with other metals or alloys that may cause rust stains due to contamination. For the same reason, avoid contact with iron objects. Do not use stainless steel brushes, as they can cause damaging scratches.
4. Metal powder, metal shavings, and iron material in general can cause stainless steel to rust. Superficial rust stains may be present on new equipment and they can be removed with a detergent diluted in water and a scouring pad. If dirt is difficult to remove, a sponge may be used. Please note that rust is not covered by the warranty.
5. Use only approved substances to clean the unit, as some chemicals could damage the unit. Rinse properly after cleaning with clean water. Do not spray directly with water jet.
6. We recommend that the user subscribes to a maintenance agreement to have the equipment checked at least once per year by an authorized technician.
7. Before carrying out any maintenance or repair, disconnect and unplug the equipment. Use only original spare parts supplied by Cooking Performance Group.
8. If the equipment is not going to be used for a long period of time, it is advised to clean the equipment and surrounding areas properly.

### Recommended Cleaning Agents



#999SUNBRIGHT  
**Sunbright**  
Lemon Dish Soap



#999KNOCKOUT  
**Knockout**  
Heavy-Duty Oven/Grill  
Degreaser & Carbon Remover



#147BLASTQT  
**Blast**  
Liquid Oven & Grill Cleaner