

# Gas Powered Convection Ovens



351FGC100(L/N), 351FGC200(L/N)K

**REVISED 04/2024** 



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 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 351FGC100 features a sturdy steel construction with 4 adjustable legs. It is equipped with one built-in convection fan per oven cavity. The automatic ignition system activates in the event of a flameout, and a shutdown device stops the system from trying to ignite the burner(s) after 3 unsuccessful attempts to ensure safety. The electronic automatic thermostat ensures accurate temperatures for precise cooking. The 351FGC200 features two oven cavities, helping you meet higher production demands.





Conforms to ANSI STD Z83.11-2016 Conforms to CSA STD 1.8-2016"



## **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.

### **Gas Pressure**

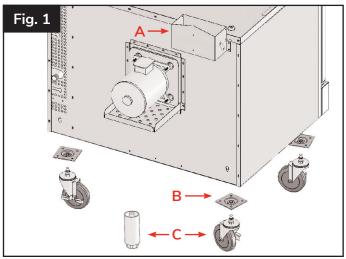
 The appliance and its individual shutoff valve (to be supplied by user) must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 PSI (3 .45 kPa).



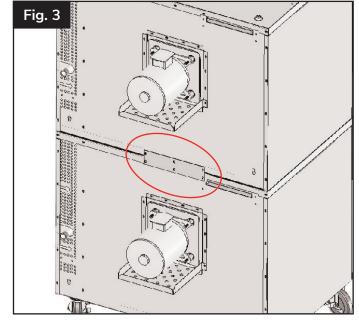
## **Stacking Ovens Instructions**

NOTE: Requires two like ovens and stacking kit (#35165002027).

NOTE: The stacking should be performed by an authorized service agent or installer. It takes two people to lift the ovens.



- Fig. 2
- 1. Dismantle the original flue assembly. (Fig. 1 A)
- 2. Install the caster plate. (Fig. 1 B)
- 3. Install the casters or legs. (Fig. 1 C)
- 4. Align the top notches of the lower oven with the notches on the bottom of the upper oven. (Fig. 2)



- Fig. 4
- Attach the top and bottom unit with connecting plates and screws. (Fig. 3)
- 5. Attach the top and bottom unit with connecting 6. Attach the stacked flue with screws (Fig. 4)
  - 7. Stacking is complete.



## **Specifications**

	351FGC100N	351FGC100L	
Gas Type	Natural Gas	Liquid Propane	
Manifold Pressure	4" WC	10" WC	
Overall Dimensions (Single Oven)	38"W x 42"D x 57"H		
Overall Dimensions (Stacked Ovens)	38"W x 42"D x 68"H		
Oven Chamber Dimensions	29"W × 25"D × 20"H		
BTU per Oven	54,000 BTU		
Total Power per Oven	15.8 kW		
Voltage per Oven	120V		
Amps	5.9		
Temperature Range	150-500°F		
Fan Speed (High)	0.5 HP		
Fan Speed (Low	0.14 HP		
Weight (Single Oven)	403.45 lb.		
Clearance	6" Sides, 2" Rear		

NOTE: 351FGC200 ovens consist of two like 351FGC100 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







## 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. 12 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.

  NOTE: If stacking ovens, see above for stacking instructions. If installing casters on a single deck model, see instructions on page 7.
- 3. The gas/electrical connections must be close to the equipment and easy to reach. You must use a new gas hose to connect to this unit.
- 4. Place the unit under an exhaust hood, ensuring compliance 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:

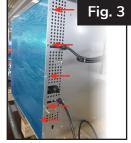
The manufacturer requires the installation to be performed according to national and local codes and must be performed by a licensed installer.

- 7. Turn on the electric and gas valves:
  - a. Manually remove the wing nut located above the control panel (Fig. 1) and carefully open the control panel. (Fig. 2)
  - b. Remove the screws on the back of the oven, then open the right side panel. (Fig. 3)
  - c. Check to ensure that the electric and manual intake valves are open. (Fig. 4)
  - d. Reinstall the right panel, then reattach the control panel with the wing nut.

NOTE: For complete shutdown follow these instructions, but instead close the electric and manual intake valves.









#### 8. Checking the functions:

Start the appliance; check the gas pipes for leaks; check the burner flame. See Gas Connection section on page 7 for more details.



## Startup

#### **Caster Installation Instructions**

Follow the instructions below to install casters on single deck ovens.

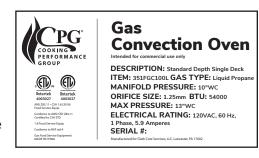
- 1. Remove the foot from the leg.
- 2. If the caster is connected to a mounting plate, use a hex wrench to remove the caster from the mounting plate. If already disconnected, skip this step.
- 3. Screw the caster into the leg.
- 4. Repeat steps 1 3 for the remaining legs.

#### 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 temperature, as the electrical components could be damaged. A 6" minimum clearance is required from such equipment.

#### **Gas Connection**

- 1. The serial plate is located on the side panel. It indicates the type of gas the unit is equipped to use. All equipment is set for use with the specified gas type at the factory.
- 2. The equipment is design-certified for operation on either natural or propane gas; it should only be connected to the type of gas for which it is equipped as stated on the serial plate.



- 3. A 3/4" NPT inlet is located at the rear for the gas connection. The external regulator provided with the unit must be installed. An adequate gas supply is imperative. Undersized or low pressure lines will restrict the volume of gas required for satisfactory performance.
- 4. An adequate gas supply line to the unit should be no smaller than 3/4" diameter.
- 5. Ensure the supply line is clean before connecting the line to the unit.
- 6. All pipe joints and connections must be tested thoroughly for gas leaks. Use only soapy water for testing on all gases. Never use an open flame to check for gas leaks.

#### **Gas Elevation Guide**

	Gas Type	Manifold Pressure		Under 5,000 ft.	Under 8,000 ft.	Under 10,000 ft.
351FGC100N	Natural Gas	4" WC	2.0 mm	1.85 mm (49#)	1.77 mm (50#)	1.61 mm (52#)
351FGC100L	Liquid Propane	10" WC	1.25 mm	1.18 mm (56#)	1.09 mm (57#)	1.016 mm (60#)



#### **Electric Connection**

- 1. Before connecting your appliance, ensure your unit's voltage is compatible with your plug type.
- 2. Electrical Grounding Instructions:

This equipment is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

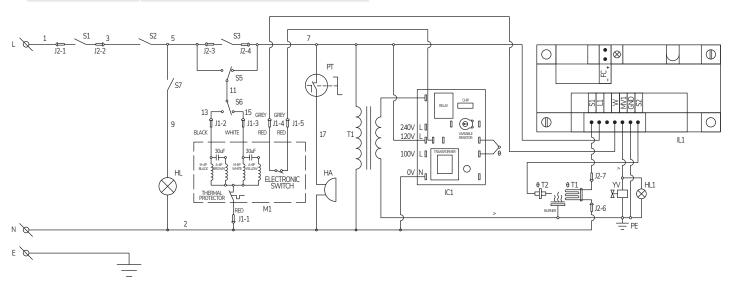


#### **Exhaust System**

- 1. This unit must be installed in accordance with all applicable hood regulations.
- 2. This unit is not designed to be directly connected to an evacuation duct for the discharge of combustible products.
- 3. The room where the equipment is installed must be fitted with air intakes to guarantee the correct operation of the unit and air exchange.
- 4. During installation, make sure the air suction and evacuation ways are free from any obstacles.

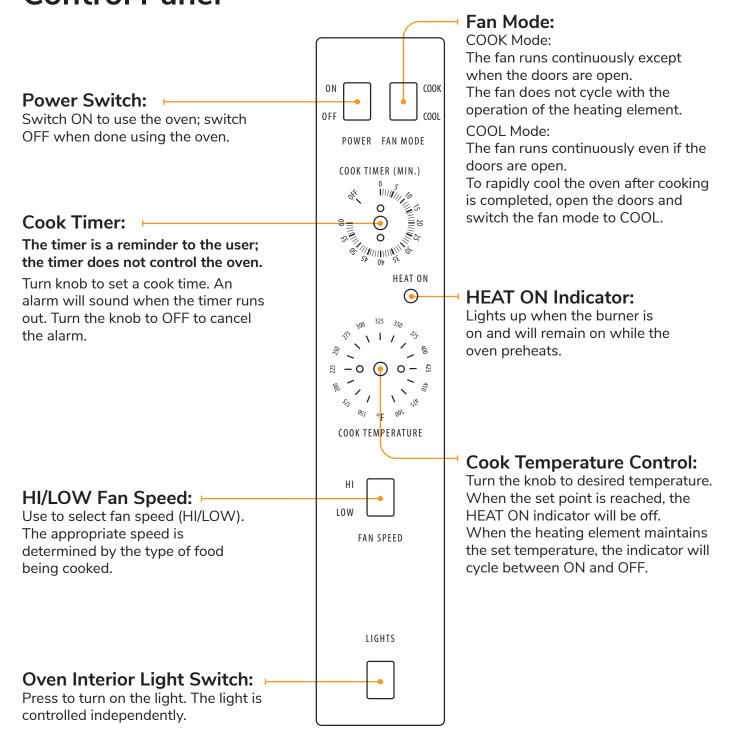
## **Electrical Diagram**

ltem	Description
T1	Gas Igniter
T2	Flame Detector
IC2	Gas Controller
YV	Gas Solenoid Valve





# Operating Instructions Control Panel





# Operating Instructions Lighting, Relighting, and Shutdown Instructions

- 1. To light the oven, flip the power switch at the top left corner of the control panel to the "ON" position. The oven is equipped with a direct hot surface ignition system. There is no pilot to light.
- 2. Turn the oven to the desired temperature. The burners should be automatically ignited with the hot surface ignition system. If the burners fail to ignite within 4 seconds, the oven will automatically shut off the gas. Wait 5 minutes to allow the gas that was released to dissipate, and try to light the burners again. If the burners still fail to ignite after 3 such attempts, the oven will stop trying, even though the power switch is in the "ON" position. To continue to attempt to light the burners, turn the power switch "OFF" and then "ON" again.
- 3. To shut down the oven, flip the power switch to the "OFF" position. For a complete shutdown, also open the control panel and remove the right side panel. Turn the manual electric and gas valve to the "OFF" position. Re-attach the right side panel. (See Installation, step 7 on pg. 6 for further instruction.)

### **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.



# **Operating Instructions**

#### Cooking Instructions (Continued)

- 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.

#### 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. Or 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 user 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 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.

