



# Operation Manual

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Model Number: \_\_\_\_\_  
Serial Number: \_\_\_\_\_  
Date of Installation: \_\_\_\_\_

## **OV210 SERIES RACK OVENS WITH ELECTRONIC OVEN CONTROL**

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# **IMPORTANT FOR YOUR SAFETY**

**THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.**

**POST IN A PROMINENT LOCATION THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.**

## **IMPORTANT**

**IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.**

## **FOR YOUR SAFETY**

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

## **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.**

**IN THE EVENT OF A POWER FAILURE, DO NOT ATTEMPT TO OPERATE THIS DEVICE.**

**KEEP AREA AROUND OVEN CLEAR OF COMBUSTIBLES. DO NOT OBSTRUCT COMBUSTION AND VENTILATION OPENINGS ON THE OVEN.**



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# **OPERATION AND CARE OF OV210 SERIES RACK OVENS**

**KEEP THIS MANUAL FOR FUTURE USE**

## **GENERAL**

Model OV210G (Gas) and OV210E (Electric) Rack Ovens accommodate roll-in racks. They are equipped with an electronic oven control for baking and/or steaming applications. A mechanism in the ceiling rotates the rack during baking.

Model OV210G M1B is rated at 175,000 Btu/hr (natural gas). Model OV210G M2B is rated at 290,000 Btu/hr (natural gas) and 250,000 Btu/hr (propane gas). Model OV210E M1B is rated at 39 kW (electric) and model OV210E M2B rated at 52 kW (electric).

Baxter Rack Ovens are produced with quality workmanship and material. Proper installation, usage and maintenance of your rack oven will result in many years of satisfactory performance.

It is suggested that you thoroughly read this manual and carefully follow the instructions provided.

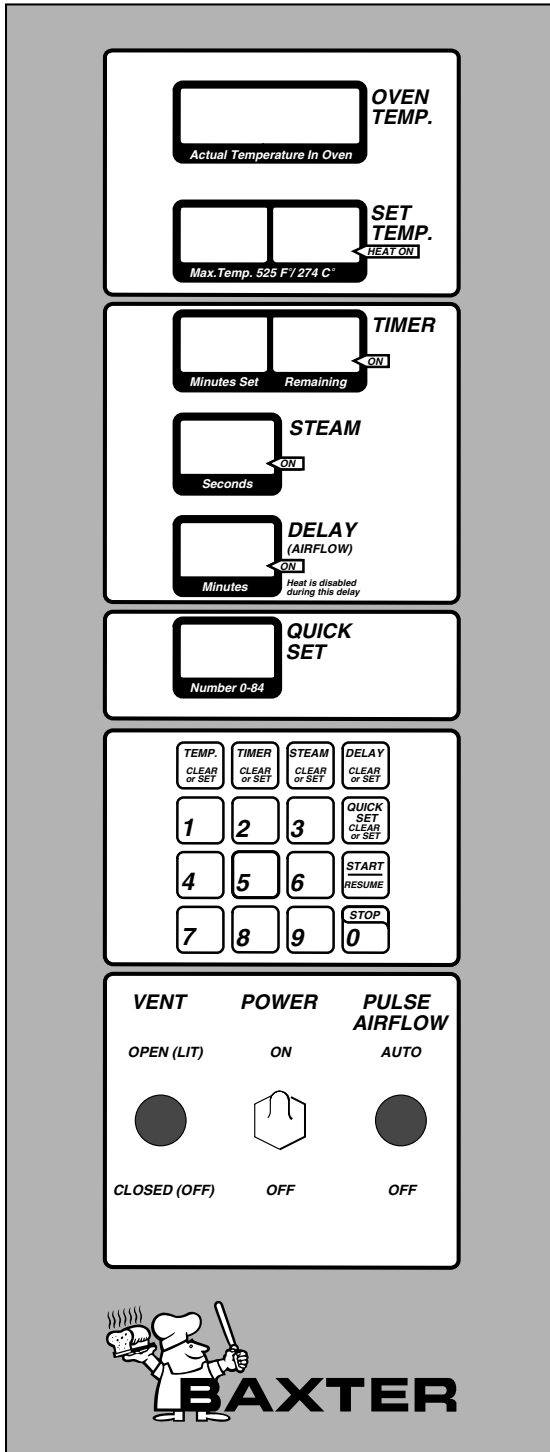
## **INSTALLATION**

OV210 series ovens must be installed, started and tested or moved only by authorized Bakery Systems trained service technicians.

# OPERATION

**WARNING:** THE RACK OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, SERVICING OR CLEANING THE OVEN.

## CONTROLS



### Control Hints

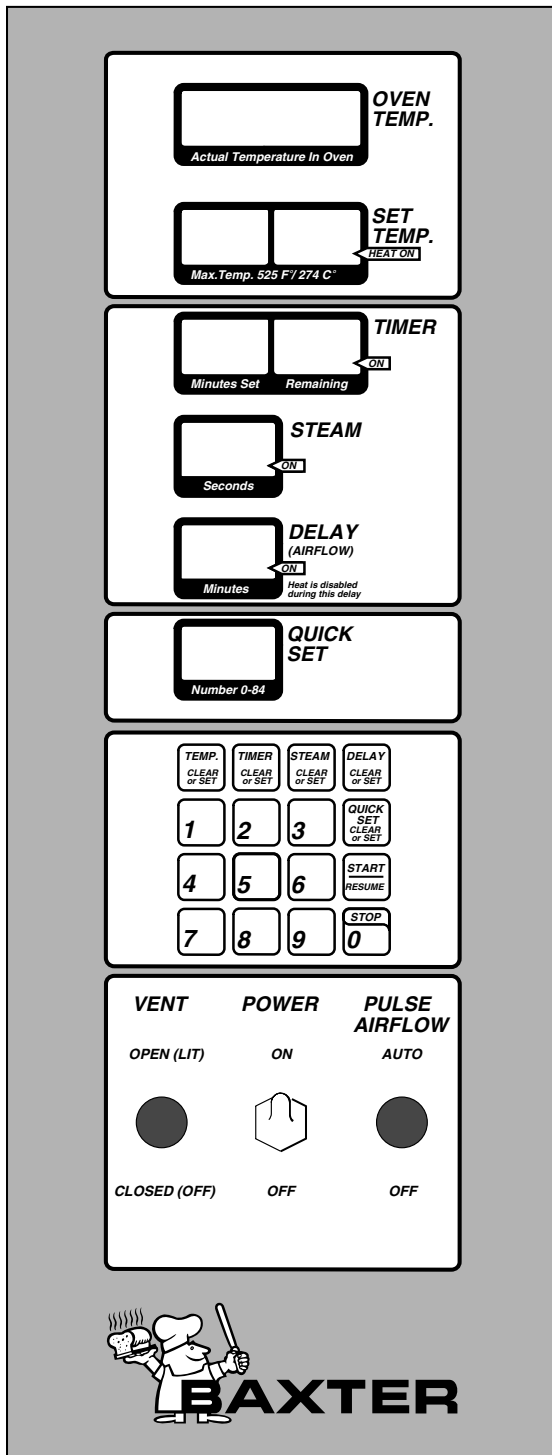
- The VENT feature helps control humidity.
- The STEAM option requires 20 to 30 minutes to recover prior to each use.
- For delicate baked goods, use the PULSE AIRFLOW option.
- When first initiated, the vent stays open for 90 seconds, then closes for 115 seconds and reopen for 5 seconds. After the first venting is complete, the vent will open for 5 seconds every 115 seconds throughout the baking cycle.

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## CONTROL GUIDE

KEY	ACTION	DISPLAY
TEMP.	Press to set the desired temperature. Enter the value using the number keypad.	SET TEMP. window displays the set temperature. The HEAT ON light will be illuminated while the oven is preheating. When the oven has reached the set temperature, the HEAT ON light will go off. The OVEN TEMP. window displays the actual oven temperature.
TIMER	Press to set the TIMER. Enter the time using the number keypad.	The TIMER window displays minutes set and minutes remaining for the current baking cycle. The ON light will blink when the TIMER is active.
STEAM	Press to set the STEAM option. Enter the amount of time for steaming on the number keypad, then press START. The ON light will blink after pressing START.	The STEAM window displays the amount of time (in seconds) set for the steam cycle. The ON light will blink when steam system is active.
DELAY	Press to set the DELAY option. Enter the desired number of minutes on the number keypad, then press START. The ON light will blink after pressing START.	The DELAY window displays the amount of time (in minutes) that the DELAY option will operate during the baking cycle. Delay minimizes airflow at the beginning of the baking cycle. Heat is disabled while the DELAY option is activated. The ON light will blink when DELAY (AIRFLOW) is active.
QUICK SET	Press to recall stored settings. Enter the Quick Set number on the number keypad.	The QUICK SET window displays the current Quick Set program.
VENT	Press to open the vent. This rapidly vents the bake chamber and begins the venting cycle. The vent can be activated at any time during the baking cycle.	VENT light is lit when the vent cycle is enabled.
POWER	Flip the toggle switch to turn the oven main power ON or OFF.	Main displays are lit when the oven is on.
PULSE AIRFLOW	Press to allow the oven fan to run intermittently (on for 2 minutes, off for 1 minute) throughout the baking cycle, resulting in a gentle bake.	PULSE AIRFLOW light is lit when the pulse airflow cycle is enabled.

## OVEN PREHEAT



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For the best results, the oven must be preheated before baking begins.

1. Turn the power switch to the ON position.
2. Press TEMP. and enter the desired baking temperature on the number keypad.
3. Confirm that the doors are closed. This enables the rack carrier to lift and rotate.
4. Allow 20 minutes after the oven has reached the set temperature for the steam system to charge. The actual oven temperature is displayed in the OVEN TEMP. window.
5. The oven is now ready for baking operations.



## **BASIC OPERATION**

**WARNING:** THE OVEN AND ITS PARTS ARE HOT. TO PREVENT BURNS, USE HOT PADS OR PROTECTIVE MITTS WHEN LOADING OR UNLOADING THE OVEN.

1. Preheat the oven.
2. Confirm that the doors are closed. This enables the rack carrier to lift and rotate.
3. Manually select baking settings:
  - Press TIMER and enter the desired value on the number keypad. Repeat this step for STEAM and DELAY. To clear an entry, press TIMER again.
4. Slowly open the doors. Wait for the rack carrier to stop and lower.

### **Loading Procedure**

1. The rack carrier is equipped with a stop on both ends. Manually flip the front carrier stop open (lead flap up) to load the rack.
2. Roll the loaded rack onto the oven rack carrier until it touches the rear carrier stop, then latch the front carrier stop.
3. Close and latch the door. This enables the rack carrier to lift and rotate.
4. Begin baking by pressing START.
5. A buzzer will sound after the TIMER expires.

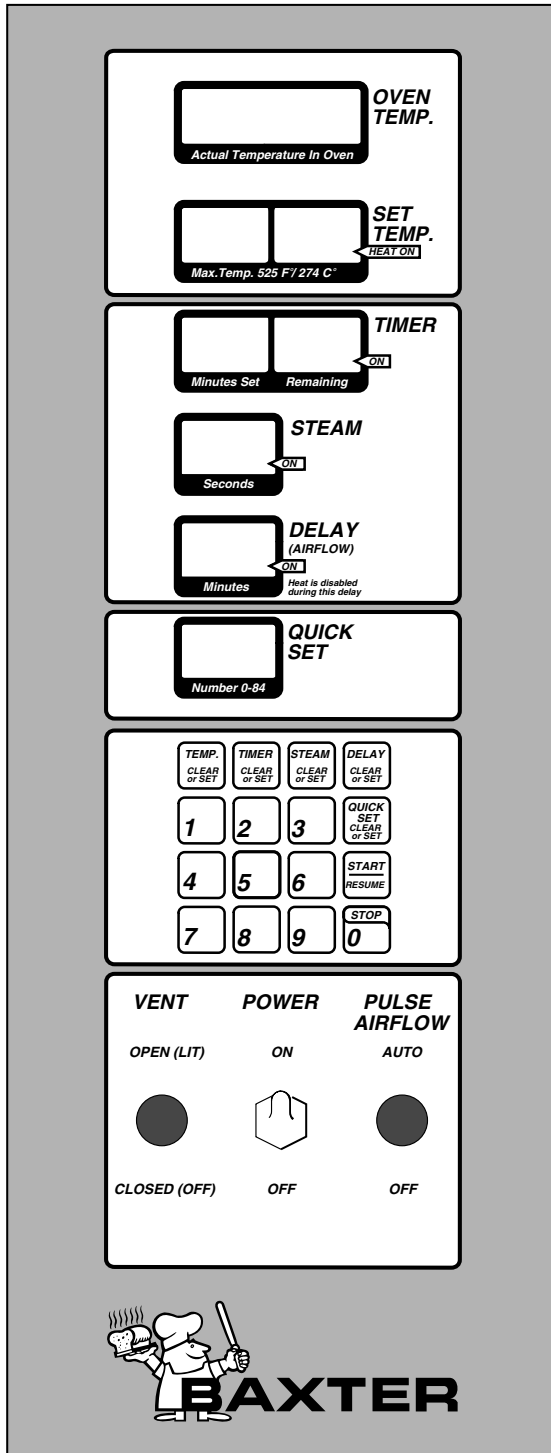
### **Unloading Procedure**

1. Press STOP or open the loading door to silence the buzzer.
2. Slowly open the doors. Wait for the rack carrier to stop and lower.
3. The rack carrier is equipped with a carrier stop on both ends. Manually flip the front carrier stop open (lead flap up).
4. Remove the rack from the rack carrier.
5. Close the loading door.

### **Operational Hints**

- During a baking cycle, the START and STOP keys control the TIMER, STEAM and DELAY settings only. They have no effect on the oven heat. When the TIMER expires, the oven heat stays at the set temperature. Care should be taken not to overbake products.
- To adjust the temperature during a baking cycle, press TEMP. and enter the new temperature.
- To adjust the TIMER, STEAM or DELAY settings, press the corresponding key and enter the new values. Press START when finished.
- If the door is opened at any time during the baking cycle, the TEMP., TIMER, STEAM and DELAY settings will pause until the door is closed. Press START to resume TIMER, STEAM and DELAY functions.

## PROGRAMMING THE QUICK SET MENU



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Quick Set stores up to 84 programs that can be stored in memory and recalled by number when needed. A program is a set of baking instructions - TEMP., TIMER, STEAM and DELAY settings - that the operator defines for any baking operation.

1. Press TEMP. and enter 99 on the number keypad. Repeat this step for TIMER, STEAM and DELAY.
2. Wait for displays to change to 0.
3. Press TEMP. and enter the desired temperature value on the number keypad. Repeat this step for TIMER, STEAM and DELAY. These settings are optional and can be left at 0 if desired. To clear an entry, press TEMP., TIMER, STEAM or DELAY again.
4. Press QUICK SET and enter the previously selected number (1 through 84) on the keypad.
5. Press START. The QUICK SET display reads 0 when the settings have been accepted.
6. Record QUICK SET program numbers, and product associated with them for future reference.
7. To store additional Quick Set settings, repeat steps 1 through 6.
8. Turn power switch to OFF for at least 3 seconds, then turn it back ON.

## **Changing Quick Set Programs**

1. When the power is turned on, the oven defaults to QUICK SET-1.
2. Press TEMP. and enter 99 on the number keypad. Repeat this step for TIMER, STEAM and DELAY.
3. Wait for displays to change to 0.
4. Press TEMP. and enter the new temperature value on the number keypad. Repeat this step for TIMER, STEAM and DELAY. These settings are optional and can be left at 0 if desired. To clear an entry, press desired entry again.
5. Press QUICK SET and enter the selected number for the QUICK SET program you want to change. Press START. The displays will read 0 when the new settings have been accepted.
6. Turn power switch to OFF for at least 3 seconds and then turn it back ON.

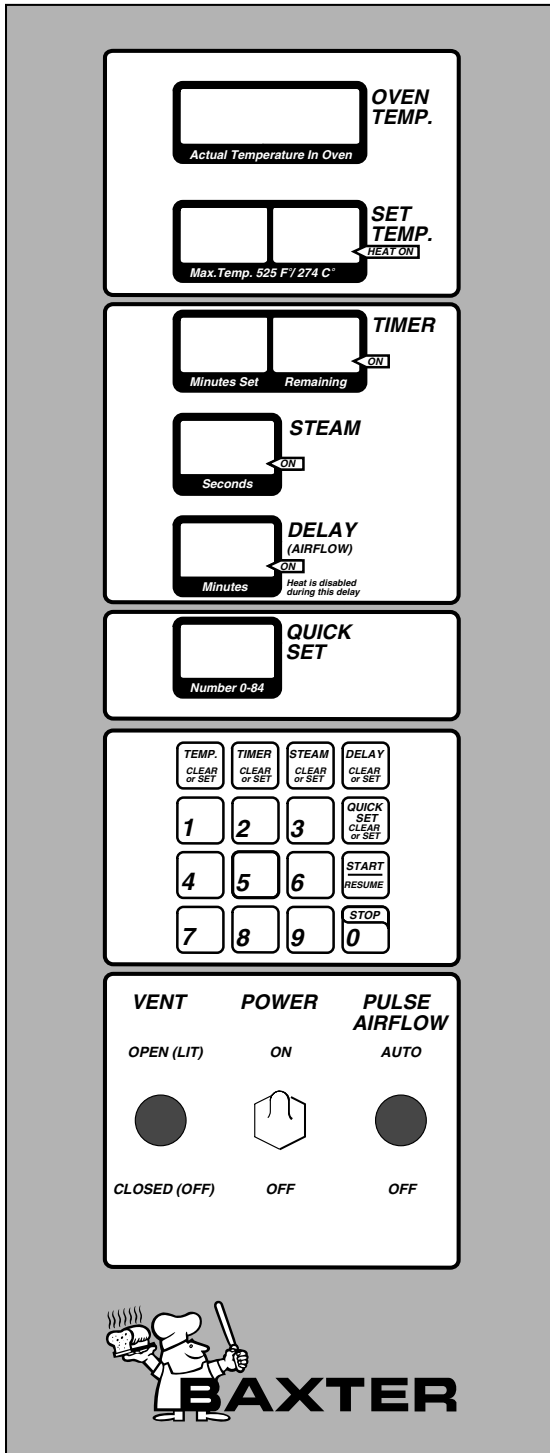
## **Using Quick Set Programs**

1. Press QUICK SET and enter the QUICK SET number (1 through 84) on the keypad for the program you want to use. The TEMP., TIMER, STEAM and DELAY settings are displayed.
2. Confirm that the oven is at the set baking temperature.
3. Slowly open the door. Wait for the rack lifting device to lower and come to a stop.
4. Roll the loaded rack onto the rack carrier until it touches the rear carrier stop and then latch front carrier stop. (See Loading and Unloading Procedures.)
5. Close and latch the door.
6. Press START.
7. A buzzer will sound after the TIMER expires. Press STOP to silence the buzzer.

## **Quick Set Hints**

- The oven defaults to the QUICK SET-1 settings when turned on. It may be helpful to set QUICK SET-1 for the desired preheat settings during oven startup.
- Any combination of bake settings can be manually entered on the control pad for one-time custom-baking operations. These settings are not saved to the Quick Set program memory.

## TEMPERATURE AND TIMER CONTROL SETTINGS



The temperature and timer controls are factory set to degrees Fahrenheit with minutes set and minutes remaining. If desired, the controls can be changed to degrees Celsius and/or hours and minutes remaining as follows:

1. Press TEMP. and enter 99 on the number keypad. Do the same for TIMER, STEAM and DELAY. Wait 5 seconds for displays to change to 0.
2. Press TEMP., then enter:
  - 0 for Fahrenheit with minutes set and minutes remaining (factory setting).
  - 1 for Celsius with minutes set and minutes remaining.
  - 2 for Fahrenheit with hours and minutes remaining.
  - 3 for Celsius with hours and minutes remaining.
3. Press QUICK SET, enter 0 on the number keypad, then press START.
4. Turn OFF the power switch for at least 3 seconds, then turn it back ON. The oven should now be in the temperature and timer mode you chose.
5. If needed, attach the HOURS-MINUTES label (located on the inside of the front control door) to the digital control panel.

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## SHUTDOWN

1. Remove all remaining product.
2. Press TEMP. to shut off heat.
3. Allow the oven to cool, then turn the power switch to the OFF position.
4. Clean the baking chamber. (See CLEANING.)
5. For lengthy shutdowns, shut off the main power and the gas and water supplies.

## CLEANING

**WARNING:** THE RACK OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, SERVICING OR CLEANING THE RACK OVEN.

- Allow the oven to cool.
- Clean the outside of the oven daily with a clean, damp cloth.
- Remove rack(s) and clean as you would any cooking utensil. Use warm, soapy water and a brush. Rinse with clear water and dry with a clean cloth.
- Using a clean cloth and warm, soapy water, wash the stainless steel interior of the oven, rinse with clear water and dry with a clean cloth.
- Gently scrape heavy buildup off door glass. Residue can be removed with a glass cleaner when oven is cool.
- Do not use cleaners containing grit, abrasive materials, bleach, harsh chemicals or chlorinated cleaners. Do not use oven cleaners. Do not use steel wool or stainless steel cleaners on stainless steel surfaces. Stainless steel polish can be used on the exterior of the oven, never on the interior. When polishing, follow the grain of the stainless steel.
- Never spray down the oven with water or steam.

# MAINTENANCE

**WARNING:** THE RACK OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, SERVICING, OR CLEANING THE OVEN.

**WARNING:** DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

## GENERAL

### As Needed

- Inspect the area around the oven. The area must be free and clear from combustibles. There must be no obstructions to the airflow.

### Daily

- Clean Exterior

### Weekly

**NOTE:** Do not change air shutters' settings when cleaning oven interior.

- Clean the oven interior and remove loose debris. (See Cleaning.)
- Clean the windows
- Empty grease catcher if equipped.

### Monthly

- Clean exhaust hood filters (if equipped) with soap and water.

### Bi-Monthly

- Owner Preventive Maintenance

## PREVENTIVE MAINTENANCE

The rack oven should be kept on a regular preventive maintenance schedule. Ovens require specific preventive maintenance based on usage and environmental factors. The failure to have the oven properly maintained by following recommended preventive maintenance procedures may result in higher repair costs, shortened equipment life, or unsafe operating conditions.

The performance of routine preventive maintenance on any rack oven, which is the owner's responsibility, will help to ensure continued safe and reliable operation.

A preventive maintenance program is your best option for continued safe and reliable oven operation. We believe that an authorized service agency is your best choice for performing preventive maintenance.

## SERVICE AND PARTS INFORMATION

Contact your authorized service agency.

# TROUBLESHOOTING

### Burners Will Not Light (Gas Ovens Only)

1. Turn the power switch OFF and wait 5 minutes.
2. Make sure the gas shutoff valve is in the ON position.
3. Turn the power switch ON.

**NOTE:** If the oven does not light on the second attempt, turn the gas shutoff valve to the OFF position and call for authorized service.

# OWNER PREVENTIVE MAINTENANCE PROCEDURE

## INTRODUCTION

This owner preventive maintenance (PM) section includes procedures to inspect for proper operation and cleaning of components. Owner PM procedures are written for gas ovens. They can also be used for electric ovens by omitting the steps that refer to components found only on gas ovens. Owner PM should be conducted bi-monthly per OSHA Bakery Oven Inspection Standard 29 CFR 1910.263(l)(9)(ii). A convenient PM checklist is provided at the end of this section.

**NOTE:** This PM procedure does not discuss repair or replacement of components. Upon completion of the PM procedure you will need to contact a qualified servicer for any needed repairs.

## Tools Used For Inspection Procedure

- Standard set of hand tools
- Vacuum cleaner - shop vac

## PREVENTIVE MAINTENANCE PROCEDURE

**WARNING:** DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

**WARNING:** SHUT OFF THE GAS BEFORE SERVICING THE UNIT.

**WARNING:** CERTAIN PROCEDURES IN THIS SECTION REQUIRE ELECTRICAL TEST OR MEASUREMENTS WHILE POWER IS APPLIED TO THE MACHINE. EXERCISE EXTREME CAUTION AT ALL TIMES. IF TEST POINTS ARE NOT EASILY ACCESSIBLE, DISCONNECT POWER AND FOLLOW LOCKOUT / TAGOUT PROCEDURES, ATTACH TEST EQUIPMENT AND REAPPLY POWER TO TEST.

## Inspect Oven Lamps

1. Lamps should be on when oven is powered.
2. If not, replace lamps.
  - A. Remove screws securing lamp compartment cover (Fig. 1) and pull cover towards you to disengage cover from rear tabs.
3. Twist lamp (Fig. 2) to disengage from lamp sockets (Fig. 2) and carefully withdraw lamp from area.
4. Reverse procedure to install new lamps.

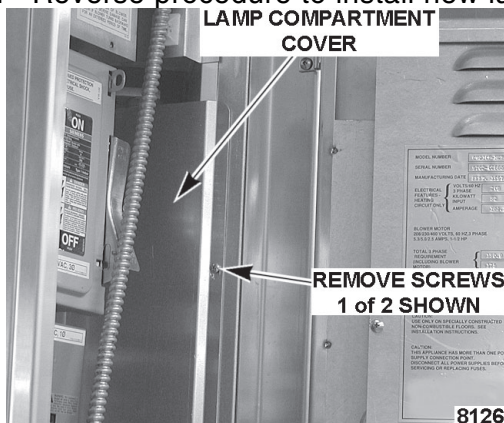


Fig. 1

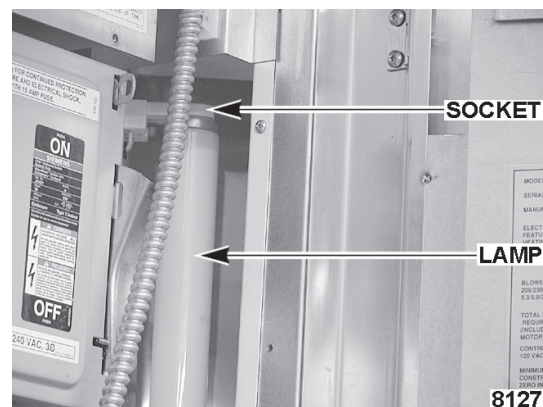


Fig. 2

## Clean and Vacuum Components and Control/Burner Areas

1. Clean the control/burner compartment (Fig. 3) area of dust and/or lint accumulation.
2. Vacuum the control/burner compartment floor of dust and/or lint accumulation.
3. Gain access to the top of oven and clean dust that may have accumulated on top of circulation blower motor (Fig. 4).
4. Clean cabinet blower screen located at top of the control compartment (M2B only).



Fig. 3

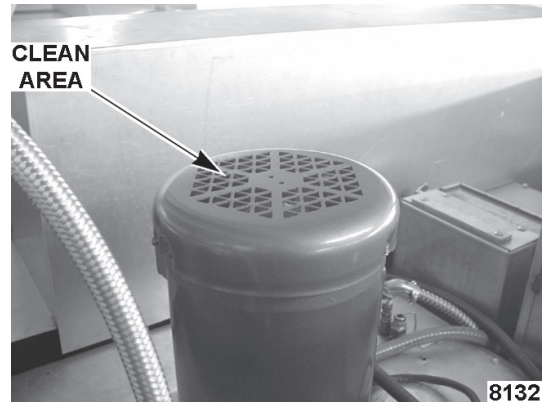


Fig. 4

## Inspect Rack Lift and Rotation Assemblies

1. Check rack lift assembly for proper operation.
  - A. Open door. Rack lift should lower to correct height of rack and be in forward loading position to accept rack entry.
  - B. The oven rack should be easily rolled in and out of oven and the wheels completely off the oven floor when raised.
2. Check and tighten all set screws on carrier.



## Inspect Door Components

1. Check loading door latch.
  - A. Check door gasket for good condition. If door gasket needs replacement, contact your authorized service agency.
  - B. Check loading door latch (Fig. 5), latch must fully extend when door is closed and contacting door gasket. Leave about  $\frac{1}{8}$ " gap between latch and striker for heat expansion.
  - C. Adjust strike in or out as required by loosening one screw (Fig. 6) on each side of strike.
  - D. Tighten screws.



Fig. 5

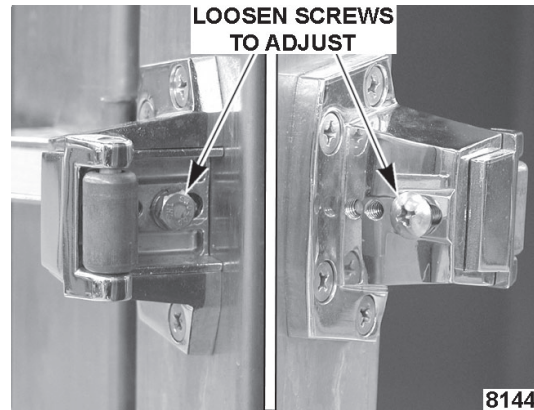


Fig. 6

2. Check door sweep.
  - A. The door sweep should hit the ramp approximately  $\frac{1}{8}$ " evenly across door width, when door is in the closed position.
  - B. Turn oven On.
  - C. If air blows out from underneath the door (or steam), door will need adjusted. If door sweep needs replacement or adjustment, contact an authorized service agency.
3. Check interior door release (Fig. 7) for proper operation.
4. Check door switch for proper operation.
  - A. When door switch actuator rod (Fig. 8) is in the down position (door open), the rod should extend  $\frac{3}{8}$ " to  $\frac{7}{16}$ " from the underside of the header and easily slide up ramp as door is closed (Fig. 8). Slide ramp should be positioned as shown below. If not, reform ramp as necessary.



Fig. 7

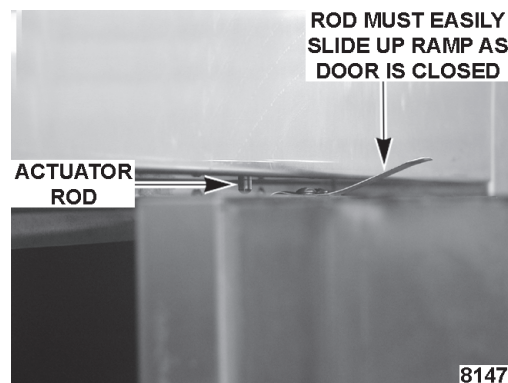


Fig. 8

## Inspect Air Louvers

1. Check air louvers (shutters) (Fig. 9) inside oven and tighten any loose screws.
2. Check oven interior, tighten or replace loose or missing panel screws. Also check floor anchors.



Fig. 9

## Inspect Cavity Vent

1. Check vent for proper operation.
  - A. Push vent button (Fig. 10) on control panel to open vent and then push again to close vent.
  - B. Visually check that vent opens (Figs. 11 and 12) and closes when button is pressed.

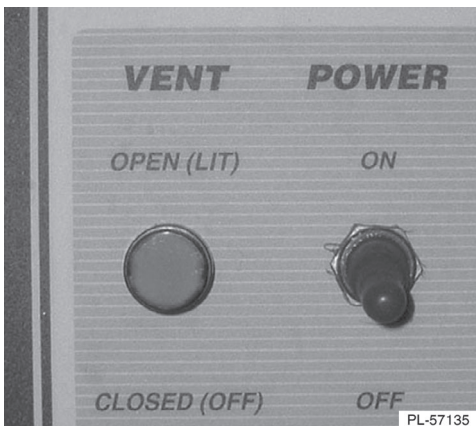


Fig. 10



Fig. 11

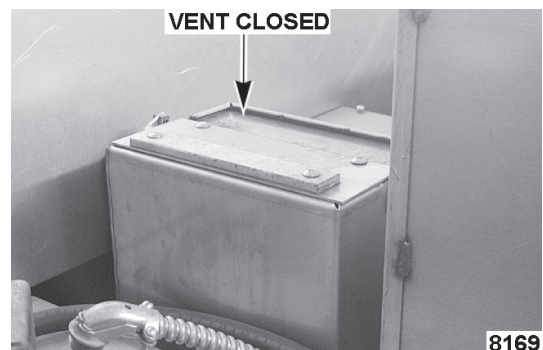


Fig. 12

## Visually Inspect Electrical Connections

1. Inspect all wiring connections for discoloration. If discoloration visible, contact an authorized service agency.

## Verify Ignition Module Safety Lockout Functions (Gas Ovens)

1. Verify ignition module safety lockout functions.
  - A. Turn the oven on and close the door.
  - B. Set the oven control to call for heat, make sure convection fan is running and the burner has established a flame.
  - C. Locate the six burner status lights as shown in diagram.

All six status lights (Fig. 13) should be lit and indicate the following:

Light #1	High limit closed
Light #2	Burner blower running and airflow pressure switch is closed
Light #3	Purge complete (steady on) or burner airflow (blinking)
Light #4	Thermostat closed (TH1) cycles on and off with thermostat
Light #5	Ignition control powered
Light #6	Gas valve powered

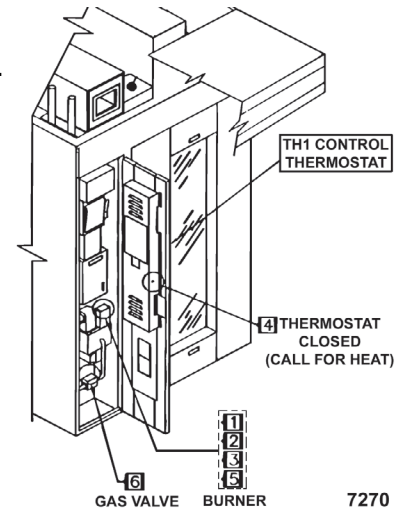


Fig. 13

- D. If the results have been obtained, proceed to step 2.
  - E. If the results have not been obtained, contact an authorized service agency.
2. Verify hood exhaust air pressure switch operation.

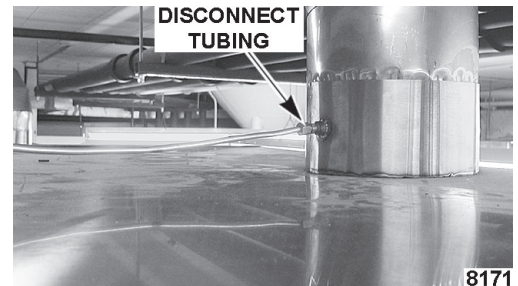


Fig. 14

- A. Set oven to call for heat, make sure convection fan is running.
- B. Gain access to the top of the oven and disconnect tubing (Fig. 14) from exhaust vent collar. Burner should go out.
- C. Reconnect tubing and burner should re-establish a flame. If not, contact an authorized service agency.

## Verify Operation of Steam

1. Check steam system for proper operation
  - A. Turn the water supply ON.
  - B. Turn oven ON and set to normal bake temperature.
  - C. Allow to cycle three times to stabilize temperature.
  - D. Set control to call for steam.
  - E. Observe operation. If steam is not observed, contact an authorized service agency.

**After completion of the owner PM procedure, you will need to contact a qualified servicer for any needed repairs.**

**Keep a copy of the Owner Preventive Maintenance Checklist for your records.**

**COPY AS NEEDED**

MODEL/SERIAL NUMBERS

**RECOMMENDED OWNER  
PREVENTIVE MAINTENANCE CHECKLIST**

**BAKERY RACK OVENS - GAS**

**CHECK FOR PROPER OPERATION OR CLEAN. CALL FOR SERVICE AS NECESSARY**

Inspect oven lamps																				
Clean and vacuum components and burner areas																				
Inspect rack lift and rotation assemblies																				
Inspect door components																				
Inspect air louvers																				
Inspect cavity vent																				
Visually inspect electrical connections																				
Verify ignition module safety lockout functions																				
Verify operation of steam																				

√ =PROCESS COMPLETED

PM Frequency:  Bi-monthly  
Type of Gas  Natural Gas \_\_\_\_\_  Propane \_\_\_\_\_

Location: \_\_\_\_\_ Store No. \_\_\_\_\_

Inspector: \_\_\_\_\_ Date Completed: \_\_\_\_\_

Service Notified for Necessary Repairs: \_\_\_\_\_  
(Date)

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Inspector Signature)