

# INSTALLATION & OPERATION MANUAL

# GPO72 GAS PIZZA OVEN

**MODEL** 

GPO72 ML-114737



#### 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.

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# Installation, Operation and Care of MODEL GPO72 GAS PIZZA OVEN

#### PLEASE KEEP THIS MANUAL FOR FUTURE USE

#### **GENERAL**

Vulcan pizza ovens are produced with quality workmanship and material. Proper installation, usage and maintenance of your pizza oven will result in many years of satisfactory performance.

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

Standard features include an aluminized interior, stainless steel front, sides, top, flue deflector, and 27" legs for a single oven or 17" legs for a stacked oven (Model GPO722). Optional accessories available include a Pyrorock core plate hearth, down draft diverter for direct vent connection, porcelain enamel interior, and 115 volt cord and plug to provide electrical power to the thermostat.

Each single oven is equipped with two 50,000 BTU/hr. burners, or a total of 100,000 BTU/hr. total input per oven.

#### INSTALLATION

Before installing, verify that the electrical service (if applicable) and type of gas supply (natural or propane) agree with the specifications on the rating plate located behind the lower front panel on the left side. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer or Vulcan Company immediately.

#### **UNPACKING**

This pizza oven was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment. Immediately after unpacking, check for possible shipping damage. If the pizza oven is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Carefully unpack the pizza oven and place it in a work-accessible area as near to its final installed position as possible.

#### **LOCATION**

The equipment area must be kept free and clear of combustible substances.

When installed, minimum clearance from combustible and non-combustible construction must be 0" at the sides and 6" at the rear. The oven is suitable for installation on combustible floors.

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 48" is required.

Do not obstruct the flow of combustion and ventilation air. Adequate clearance for air openings into the combustion chamber must be provided. Make sure there is an adequate supply of air in the room to replace air taken out by the ventilating system.

Do not permit fans to blow directly at the pizza oven. Wherever possible, avoid open windows next to the pizza oven. Avoid wall-type fans which create air cross currents within the room.

#### **INSTALLATION CODES AND STANDARDS**

The pizza oven must be installed in accordance with:

#### In the United States of America:

- 1. State and local codes.
- 2. National Fuel Gas Code, ANSI-Z223.1 (latest edition). Copies may be obtained from The American Gas Association, Inc., 1515 Wilson Blvd., Arlington, VA 22209.
- 3. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

#### In Canada:

- 1. Local codes.
- 2. CAN/CGA-B149.1 Installation for Natural Gas Burning Appliances and Equipment (latest edition).
- 3. CAN/CGA-B149.2 Installation for Propane Burning Appliances and Equipment (latest edition), available from the Canadian Gas Association, 55 Scarsdale Road, Don Mills, Ontario, Canada M3B2R3.
- 4. Canadian Electrical Code, Part 2, CSA Standard C22.1 (latest edition). Copies may be obtained from The Canadian Standard Association, 178 Rexdale Blvd., Rexdale, Ontario, Canada M9W1R3.

#### **ASSEMBLY**

#### Legs

Tip the oven back. Install the two front legs with bolts through the bottom of the oven base frame. Tip the oven forward. Block up the back and install the rear legs in the same way.

#### **Optional Pyrorock Core Plate Decks**

If your oven is equipped with the optional Pyrorock core plate hearth, install the left side deck first, then the right side, then the center deck (Fig. 1). To install, just slide the decks into the oven.

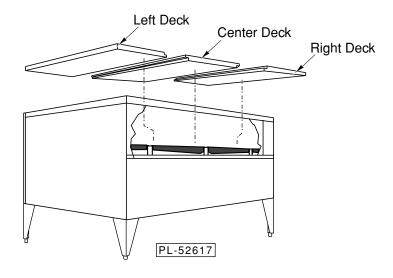


Fig. 1

#### Flue Deflector

Install the flue deflector. The hardware is provided with the pressure regulator inside the oven. To install, slide the front lip of the flue deflector under the two clips attached to the top of the oven. Then bring back to the rear. Holes in the flue deflector should line up with the holes provided in the oven. Install with the screws provided.

#### **Optional Down Draft Diverter**

When the oven is directly connected to a vent system, a down draft diverter must be used with vent pipe having a minimum inside diameter of 8". Install the down draft diverter as shown in Fig. 2. Hardware required is supplied. A connecting collar (supplied) is required.

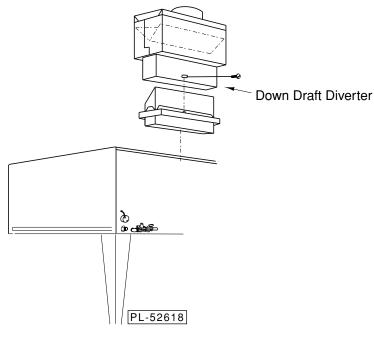


Fig. 2

#### **Assembling Stacked Ovens**

- Install the 17" legs on the lower oven and position the lower oven as near to its final location as possible. (For conversion: Legs must be changed to short legs provided in the conversion package. Discard the longer legs.)
- 2. Mount the upper oven on top of the lower oven. Be sure the flue risers are properly aligned.
- 3. Tie both ovens together at the rear with the stacking straps and the hardware provided (Fig. 3).
- 4. Install the connection pipe with unions (Fig. 3).

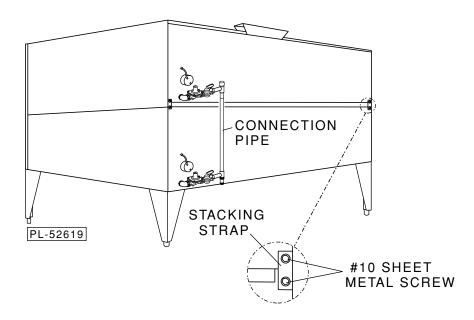


Fig. 3

#### **LEVELING**

Place a carpenter's level or pan of water on the deck of the oven. Level the oven front-to-back and side-to-side by turning the adjustable feet.

#### **GAS CONNECTION**

CAUTION: Gas supply connections and any pipe joint compound must be resistant to the action of propane gases.

Location of the gas inlet is at the rear of the oven on the left side (Fig. 4). Codes require that a gas shutoff valve must be installed in the gas line ahead of the oven (Fig. 4).

Connect gas supply. It is important that adequately sized piping be run directly to the connection point of the oven with as few elbows or tees as possible. Bring the piping down to the oven connection size at the oven. Refer to piping charts or consult the local gas company for piping size. Make sure the pipes are clean and free of obstructions.

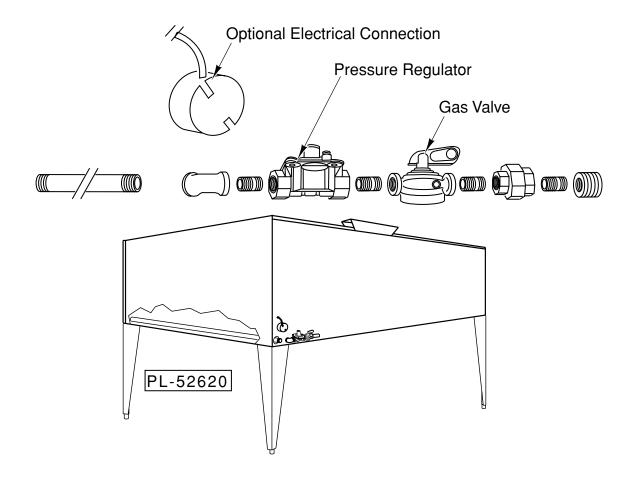


Fig. 4

Install the gas pressure regulator. Natural gas pressure regulators are preset for 3.7" W.C. (Water Column); propane gas pressure regulators are preset for 10" W.C. When connecting fittings to the rear inlet pipe projecting through the body back of the oven, hold back on this pipe with a wrench to eliminate any excess strain on the internal oven piping.

Because this oven is equipped with fixed orifices on the pilots and the two main burners, the pressure regulator must be installed to ensure the proper input. If the pressure regulator is installed in other than a horizontal position, a field adjustment of the pressure regulator will be required.

The drop in gas pressure with all appliances in operation should not exceed 1/2" water column prior to the regulator. Be sure the meter has ample capacity for all appliances on the line when all are in operation.

**WARNING:** PRIOR TO LIGHTING, CHECK ALL JOINTS IN THE GAS SUPPLY LINE FOR LEAKS. USE SOAP AND WATER SOLUTION. DO NOT USE AN OPEN FLAME.

After piping has been checked for leaks, all piping receiving gas should be fully purged to remove air.

#### **TESTING THE GAS SUPPLY SYSTEM**

When gas supply pressure exceeds ½ psig (3.45 kPa), the oven and its individual shutoff valve must be disconnected from the gas supply piping system.

When gas supply pressure is  $^{1}/_{2}$  psig (3.45 kPa) or less, the oven should be isolated from the gas supply system by closing its individual manual shutoff valve.

#### **FLUE CONNECTIONS**

**DO NOT** obstruct the flow of flue gases from the flue located on the rear of the oven. It is recommended that the flue gases be ventilated to the outside of the building through a ventilation system installed by qualified personnel.

From the termination of the flue to the filters of the hood venting system, a minimum clearance of 18" must be maintained. The hood should extend about 6" beyond all sides of the oven.

Information on the construction and installation of ventilating hoods may be obtained from the standard for "Vapor Removal from Cooking Equipment," NFPA No. 96 (latest edition), available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

Generally speaking, ovens should never be directly flue connected. However, if direct connection is unavoidable, the optional down draft diverter must be used (see page 6).

#### **ELECTRICAL CONNECTIONS (Optional 115 Volt Control)**

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE YOU ARE WORKING ON THE CIRCUIT.

**WARNING:** APPLIANCES EQUIPPED WITH A FLEXIBLE ELECTRIC SUPPLY CORD ARE PROVIDED WITH A THREE-PRONG GROUNDING PLUG. IT IS IMPERATIVE THAT THIS PLUG BE CONNECTED INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

The wiring diagram is located behind the lower front panel.

The oven is provided with a 115 Volt, 60 Hz. supply cord and plug.

Do not connect the oven to electrical supply until after gas connections have been made.

#### **ADJUSTMENTS**

All pilot lighting adjustments must be performed by a qualified installation or service person.

#### **Pilot Burner**

- 1. Remove the thermostat dial, the adjustable baffle knob, and the lower front panel cover.
- 2. Rotate the adjustment screw (Fig. 5) clockwise to decrease the pilot, or counterclockwise to increase the pilot flame.

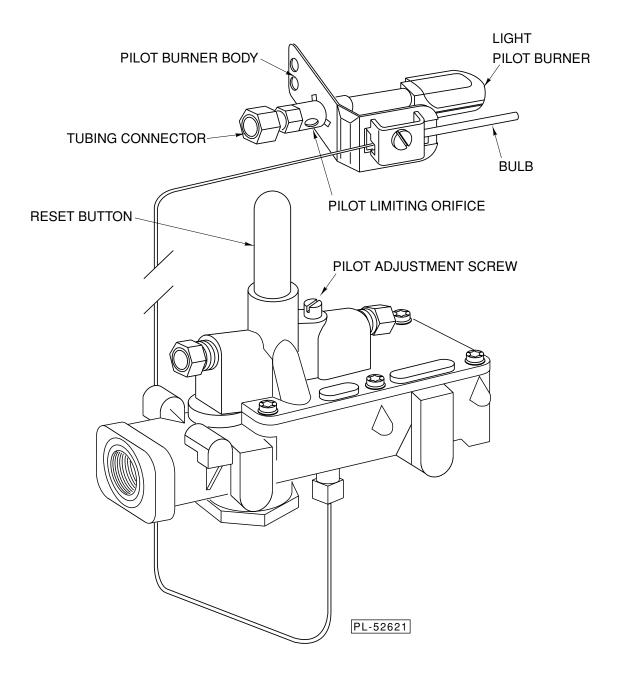


Fig. 5

#### **Air Supply**

- 1. Remove the lower front panel cover.
- 2. Turn thermostat dial to a mid-range temperature.
- 3. Adjust the air shutters (Fig. 6) until the flame is sharp but not lifting off the burner.

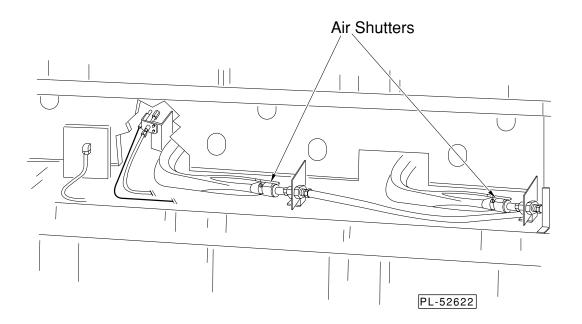


Fig. 6

#### **OPERATION**

WARNING: THE OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING AND CLEANING THE OVEN.

#### CONTROLS (Fig. 7)

Thermostat

 Regulates gas flow to the burners to maintain set temperature. Temperature range for the standard oven is 300-650°F; temperature range for the optional 115 Volt control is 300-700°F.

Baffles

 Adjustable baffles allow a positive balance of top and bottom heat. To increase top heat and reduce bottom heat, pull the baffle knobs out. To reduce top heat and increase bottom heat, push the baffle knobs in.

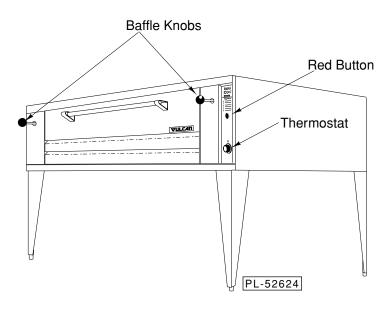


Fig. 7

#### **BEFORE FIRST USE**

Clean the protective metal oils from all surfaces of the oven. Use a non-corrosive, grease dissolving commercial cleaner, following manufacturer's directions. Rinse thoroughly and wipe dry with a soft clean cloth. Clean all accessories. Rinse thoroughly and wipe dry.

#### Optional Pyrorock Core Plate "Break-In Procedure"

If your oven is equipped with the optional Pyrorock core plate, it is critical that the following break-in procedure be followed before beginning any cooking operations. Failure to follow this procedure will void any warranty consideration. Also, once the core plates have been dried, any reintroduction of water will require that the break-in procedure be repeated.

Turn the oven on and set the thermostat to 300°F. Allow the oven to operate at this temperature for a minimum of 5 hours. This procedure will eliminate the possibility of warpage caused by water absorption.

#### LIGHTING INSTRUCTIONS

- 1. Remove lower front panel of the oven by pulling straight out.
- 2. If the pilot is out, turn the thermostat dial to the OFF position. Wait 5 minutes before relighting.
- 3. The gas valve knob must be in the ON position.
- 4. Depress the red button (see Fig. 7) and ignite the pilot. Hold red button in approximately 30-45 seconds or until pilot remains on.
- 5. If pilot fails to remain lit once red button is released, turn gas valve knob to OFF and wait 5 minutes before repeating steps 3 and 4.
- 6. Reinstall the lower front panel of the oven by pushing it into place.

#### **Lighting Instructions for the Optional 115 Volt Control**

- 1. Connect the cord and plug to a 115 volt supply.
- 2. Continue with steps 1-6 under LIGHTING INSTRUCTIONS above.

#### **USING THE GPO72 Pizza Oven**

All that is required to turn the oven on is to set the thermostat dial to the desired temperature. To turn the oven off, turn the thermostat dial to the OFF position.

For an extended shutdown, turn thermostat dial to the OFF position and turn gas valve knob to the OFF position. For optional 115 volt model, also unplug the power cord.

#### **Preheating**

After lighting the burners, allow the oven to preheat to the desired temperature. This will require approximately 30 minutes. An additional 10-15 minutes is helpful, before starting to bake, to allow temperature to stabilize throughout the oven.

#### **Baking**

Recommended pizza baking time is 7-10 minutes at 500°F to 550°F. Variations of both time and temperature may be desirable to meet individual requirements.

#### **CLEANING**

WARNING: IF APPLICABLE, DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING.

#### Daily

Clean the exterior finish of the oven with a mild solution of grease dissolving material. If this is done every day, before grease is burned on, time and work will be saved.

Clean the oven and the oven door daily, especially if there have been spillovers.

#### STAINLESS STEEL CLEANING PROCEDURES

For routine cleaning of stainless steel, use ordinary soap or detergent and water. To prevent water spots and streaks, rinse equipment thoroughly with warm water and wipe dry with a soft, clean cloth. The addition of a rinsing agent will also help prevent spotting.

Stubborn spots or stains that resist soap and water usually can be removed with a paste of water and a mild scouring powder. When applying these powders, be sure to rub in the direction of the polish lines on the stainless steel to preserve the original finish.

Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will leave a thin, oily or waxy film. To use this cleaner, simply wipe on and remove the excess with a soft dry cloth. After using, subsequent fingerprints will usually disappear when wiped lightly with a soft dry cloth or with a cloth containing a little of the cleaner. If the surface is especially soiled to start with, wash it first with soap or detergent and water.

#### **Oven Burners**

The oven burners may be removed as necessary for cleaning. Do not attempt to clean the burners while the oven is still hot. Allow the oven and burners to cool completely. To clean the burners, use a mild soapy water solution. Be sure to thoroughly dry the burners before reinstalling the burners in the oven.

#### **Burnt-On Foods and Grease**

Soaking with hot soapy water will help greatly to remove burnt-on foods and grease. Stubborn deposits can be removed with scouring powder mixed into a paste and applied with stainless steel wool or stainless steel sponges.

#### **Heat Tint**

In and around ovens where the temperatures reach 500°F or more, straw-colored or slightly darkened areas may appear on the stainless steel. This "heat tint" is caused by a slight oxidation of the stainless steel and is not harmful.

To control or minimize this condition, never use more heat than is absolutely necessary.

Heat tint can be removed by scouring vigorously with stainless steel sponges and a paste made of a scouring powder. Again, remember to rub in the direction of the polish lines.

#### **Precautions**

When scraping off heavy deposits of grease or oil from stainless steel equipment, never use ordinary steel scrapers or knives. Particles of ordinary steel may become embedded in, or lodge on, the surface of the stainless steel. These will rust, causing unsightly stains. Where it is necessary to scrape, use stainless steel, wood, plastic or rubber tools.

#### CLEANING THE OPTIONAL PYROROCK CORE PLATE

At the end of the day, set thermostat to 550°F and allow oven to cycle for 1 hour. When the oven has cooled, cooking residue will have been carbonized and can be removed by sweeping with a stiff brush. Stubborn residue can be loosened using a scraper. Remove dusty residue with a damp cloth.

The use of water to cool down or clean core plates will void the warranty. Refer to OPTIONAL PYROROCK CORE PLATE "BREAK-IN PROCEDURE" on page 12 if water has been reintroduced to the cooking surface.

#### **MAINTENANCE**

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

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE SERVICING THE OVEN.

#### LUBRICATION

Every 6 weeks, lubricate the door bearing. Use Bostik Never-Seez, Catalog # NHTC-14, which is a lubricant that may be used under high temperature conditions. The grease fitting is located on the back of the door bearing (Fig. 8).

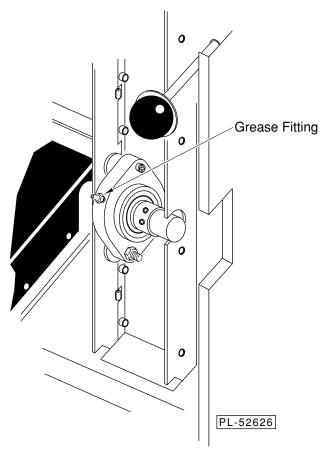


Fig. 8

#### **VENT**

Annually, when the oven is cool, check the flue and clear any obstructions.

#### **SERVICE AND PARTS INFORMATION**

To obtain service and parts information concerning this oven, contact the Vulcan Service Agency in your area (refer to listing supplied with the oven), or Vulcan Company Service Department at the address or phone number shown on the front cover of this manual.

### **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSES
Too Much Bottom Heat Uneven Baking	<ol> <li>Adjustable baffle closed.</li> <li>Overactive flue.</li> <li>Temperature too low.</li> <li>Improper operation.</li> <li>Thermostat calibration (contact your local Vulcan Service Office).</li> </ol>
Too Much Top Heat	<ol> <li>Adjustable baffle open.</li> <li>Temperature too high.</li> <li>Faulty ventilation.</li> <li>Thermostat calibration (contact your local Vulcan Service Office).</li> </ol>
Uneven Baking Side-to-Side	<ol> <li>Thermostat calibration (contact your local Vulcan Service Office).</li> <li>Oven not level side-to-side.</li> <li>Improperly installed.</li> <li>Input to burners uneven.</li> </ol>
Uneven Baking Front-to-Rear	<ol> <li>Overactive flue.</li> <li>Oven not level front-to-back.</li> <li>Door not closing properly.</li> </ol>
Dried Out Products	<ol> <li>Temperature too low.</li> <li>Baking time too long.</li> <li>Thermostat calibration (contact your local Vulcan Service Office).</li> </ol>
Pilot Outage	<ol> <li>Pilot flame too low.</li> <li>Restriction in pilot orifice.</li> <li>Problem with pilot outage gas shutoff valve.</li> <li>Draft.</li> </ol>
Poor Ignition	<ol> <li>Insufficient input.</li> <li>Poor air-gas adjustment (contact your local Vulcan Service Office).</li> <li>Restriction in pilot orifice.</li> <li>Restriction in main burner ignition ports.</li> </ol>