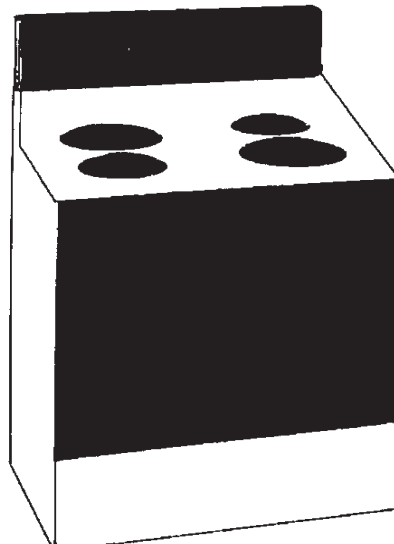


Base manual covers general information
on Manual Clean Gas Ranges.
Refer to individual Technical Sheets
for information on specific models.

Service

Manual Clean Gas Ranges



This manual is to be used by qualified appliance technicians only. Amana does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

Amana

RS2310004
Revision 1
September 1999

Table of Contents

Important Information	4	Installation Instructions Sealed Burner	
Introduction		Packing Material	19
General Information	5	Range Location	19
Model Identification and Ordering		Cabinet Opening	19
Replacement Parts	5	Minimum Clearances to Combustible Surface	19
Amana Cooking Products Nomenclature	5	Special Countertop Conditions	20
Safety Information		Electrical Connection Requirements	20
Safety Practices for Servicer	7	Electrical Connection Clearance	20
Servicing	7	Gas Connection Requirements	20
Receiving Oven	7	Gas Supply Location	21
Using the Oven	8	Gas Supply Pressure	21
Baking, Broiling, and Roasting	8	Pressure Regulator Location	21
Connecting Range to Gas	8	Converting for Use with Natural Gas or	
Electrical Requirements	9	Propane Gas	22
Extension Cord	9	Anti-tip Bracket Installation	24
Grounding	9	Gas Connection	25
Product Safety Devices	10	Testing for Gas Leaks	26
Installation Instructions Open Burner		Seal Openings	26
Packing Material	11	Place Range	26
Range Location	11	Removal and Replacement of Range	26
Cabinet Opening	11	Place Grates and Burner Caps	26
Minimum Clearances to Combustible Surface	11	Test and Adjusting Surface Burner Flame	27
Special Countertop Conditions	12	Test and Adjust Oven Burner Flame	27
Gas Connection Requirements	12	General Information	
Gas Supply Location	12	Operating Surface Burners	28
Gas Supply Pressure	12	Operating Surface Burner during a Power Failure	28
Pressure Regulator Location	12	Cooking Utensils	29
Converting for Use with Natural Gas or		Prepare to Bake	30
Propane Gas	13	Baking	30
Anti-tip Bracket Installation	15	Adjusting Factory Set Baking Temperature	31
Gas Connection	16	Prepare for Broiling	31
Testing for Gas Leaks	16	General Care and Cleaning	
Seal Openings	17	Removing Oven Door	32
Place Range	17	Remove Grid, Pan, and Rack	32
Removal and Replacement of Range	17	Removing Oven Bottom	32
Igniting and Adjusting Top Burner Pilot Flame	17	Open Burner Care and Cleaning	
Test and Adjusting Surface Burner Flame	17	Removing Rangetop and Grates	33
Remove Shipping Screws	18	Removing Surface Burners	33
Place Rangetop and Grates	18	Cleaning Surface Burners	34
Ignite Oven Burner Pilot	18	Sealed Burner Care and Cleaning	
Test and Adjust Oven Burner Flame	18	Place Grates and Burner Caps	36

Table of Contents

Testing Procedures

Oven with Constant Burning Pilot	38
Oven with Pilot Spark Ignitor	38
Top Burners with Constant Burning Pilots	39
Top Burners with Spark Ignitor	39
Oven System—Pilot Ignition	40
Oven Pilot	40
Safety Valve	40
Oven Thermostat	40
Spark Module 4 + 1 and 2 + 1	40
Top Burner Spark Ignitors	41
Thermostat Spark Switch and Spark Switch Valve Test	41
Oven Light Switch	42

Troubleshooting Procedures

Pilot Ignition Models	43
Non—Sealed Top Burners	45
Sealed Top Burners	46
Bake and Broil Burners	47

Disassembly Procedures

Moving and Replacing Range	48
Open Burner Maintop	48
Sealed Burner Maintop	48
Control Panel	48
Surface Valve and Spark Switch	48
Backguard	48
Open Burner	48
Sealed Burner	48
Oven Burner Ignitor	48
Oven Burner	48
Safety Valve	49
Top Burner Venturi	49
Pressure Regulator	49
Manifold	49
Oven Thermostat	49
Oven Light Bulb/Oven Light Socket	49
Oven Liner Removal	49
Oven Door	49
Door Disassembly (solid door)	50
Door Gasket (solid door)	50
Door Disassembly (frameless)	50
Oven Door Hinge	50
Side Panel Removal	50
Power Cord	50

Appendix A

Clock and Timer	A-2
-----------------------	-----

Appendix B

Clock and Timer	B-2
-----------------------	-----

Important Information

Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime a product may require service. Products should be serviced only by a qualified service technician who is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments and the appropriate service manual. **REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL BEFORE BEGINNING REPAIRS.**

Important Notices for Consumers and Servicers



WARNING

To avoid risk of serious injury or death, repairs should not be attempted by an unauthorized personal, dangerous conditions (such as exposure to electrical shock) may result.



CAUTION

Amana will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, assume responsibility for any personal injury or property damage which may result.

To locate an authorized servicer, consult your telephone book or dealer from whom you purchased this product. For further assistance, contact: 1 (800) 628-5782 first, if no answer call number listed below.

CONSUMER AFFAIRS DEPT.
AMANA APPLIANCES
AMANA, IOWA 52204

**OR
CALL**

1 (800) 843-0304

If outside the United States contact:

AMANA
ATTN: CONSUMER AFFAIRS DEPT
AMANA, IOWA 52204, USA
Telephone: (319) 622-5511
Facsimile: (319) 622-2180
TELEX: 4330076 AMANA
CABLE: "AMANA", AMANA, IOWA, USA

Recognize Safety Symbols, Words, and Labels



DANGER

DANGER - Immediate hazards which **WILL** result in severe personal injury or death.



WARNING

WARNING - Hazards or unsafe practices which **COULD** result in severe personal injury or death.



CAUTION

CAUTION - Hazards or unsafe practices which **COULD** result in minor personal injury or product or property damage.

Introduction

General Information

This manual provides basic instructions and suggestions for handling, installing and servicing Amana gas ranges.

The directions, information, and warnings in this manual are developed from experience with, and careful testing of the product. If the unit is installed according to this manual, it will operate properly and will require minimal servicing. A unit in proper operating order ensures the consumer all the benefits provided by clean, modern gas cooking.

This manual contains basic information needed by authorized Amana service technicians to install and service Amana gas ranges. There may be, however, some parts which need further explanation. Refer to individual technical sheets or Amana maintains a toll-free technical support line to answer questions from authorized service technicians.

The number is 1-800-AMANA99.

Model Identification and Ordering Replacement Parts

Unit's model and manufacturing numbers are recorded on its rating label. Rating label is located on the storage door frame. It can be seen by opening the storage door. Before ordering parts, write down the correct model and manufacturing numbers from rating label. This avoids incorrect shipments and delays. Please refer to parts catalog when ordering replacement parts.

Amana Cooking Products Nomenclature

Brand	Product	Fuel/Type	Configuration	Convection	Width/Cleaning	Feature Level	Additional Feature	Series	Color
A=Amana C=Caloric N=Int'l Z=Canadian	R=Range	G=Gas Sealed Burner O=Gas Open Burner E=Electric R=Rough Top Electric T=Radiant Electric H=Halogen Electric	=Free-Standing S=Slide-In D=Downdraft	=No Convection C=Convection	1=20" Manual(DI) 2=24" Manual(DI) 3=30" Manual(DI) 5=30" Manual(FI) 6=30" Electric S/C 7=30" Gas S/C 8=30" Convection	1=Least 2= 3= 4= 5= 6= 7= 8= 9=Most	5= Slide-In	0	E=Ebony K=Chrome Top L=Almond(Blk Door) W=White(Blk Door) LL=Almond/Almond SS=Stainless WW=White/White

Safety Information

As with all appliances, there are certain rules to follow for safe operation. Verify everyone who operates oven is familiar with the operations and with these precautions.

Use appliance only for its intended purpose as described. Pay close attention to the safety sections of this manual. Recognize the safety section by looking for the symbol or the word safety.

Recognize this symbol as a safety precaution.



WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Extinguish any open flame.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call fire department.

Installation and service must be performed by an authorized installer, service agency or gas supplier.



WARNING

To avoid risk of electrical shock, property damage, personal injury, or death, verify wiring is correct, if components were replaced. Verify proper and complete operation of unit after servicing.



WARNING

This gas appliance contains or produces a chemical or chemicals which are known to the state of California to cause cancer, birth defects, or other reproductive harm. To reduce the risk from substances in the fuel or from fuel combustion make sure this appliance is installed, operated and maintained according to the instructions in this manual.

Due to the nature of cooking, fires can occur as a result of overcooking or excessive grease. Although a fire is unlikely, if one occurs proceed as follows:

Oven Fires

1. Do not open the oven door.
2. Turn all controls to OFF.
3. As an added precaution turn off the electricity at the main circuit breaker or fuse box and the gas at the main supply valve.
4. Allow the food or grease to burn itself out in the oven.

If smoke or fire persist call the local fire department.

To avoid the risk of property damage or personal injury do not obstruct the flow of combustion or ventilation air to the oven.

To avoid the risk of electrical shock, serious personal injury or death: Make sure your oven has been properly grounded and always disconnect the electrical supply before servicing this unit.

NOTE: The maximum gas supply pressure for these models must not exceed 14 inches W.C.P.

Safety Information

Safety Practices for Servicer

Safe and satisfactory operation of gas ranges depends upon its design and proper installation. However, there is one more area of safety to be considered:

Servicing

Listed below are some general precautions and safety practices which should be followed in order to protect the service technician and consumer during service and after service has been completed.

1. Gas smell—Extinguish any and all open flames and open windows.
2. Turn gas off—Service range with gas turned off unless testing requires it.
3. Checking for gas leaks—Never check for leaks with any kind of open flame. Soap and water solution should be used for this purpose. Apply solution to suspected area and watch for air bubbles which indicates a leak. Correct leaks by tightening fittings, screws, connections, applying approved compound, or installing new parts.
4. Using lights—Use a hand flashlight when servicing ranges or checking for gas leaks. Electric switches should not be operated where leaks are suspected. This will avoid creating arcing or sparks which could ignite the gas. If electric lights are already turned on, they should not be turned off.
5. Do not smoke—Never smoke while servicing gas ranges, especially when working on piping that contains or has contained gas.
6. Check range when service is completed—After servicing, make visual checks on electrical connection, and check for gas leaks. Inform consumer of the condition of range before leaving.
7. Adhere to all local regulations and codes when performing service.

Receiving Oven

- Installer needs to show consumer location of the range gas shut-off valve and how to shut it off.
- Authorized servicer must install the range, in accordance with the Installation Instructions. Adjustments and service should be performed only by authorized servicer.
- Plug range into a 120-volt grounded outlet only. Do not remove round grounding prong from the plug. If in doubt about grounding of the home electrical system, it is consumer's responsibility and obligation to have an ungrounded outlet replaced with a properly grounded three-prong outlet in accordance with the National Electrical Code. Do not use an extension cord with this appliance.
- Insure all packing materials are removed from the range before operating it, to prevent fire or smoke damage should the packing material ignite.
- Ensure range is correctly adjusted by a qualified service technician or installer for the type of gas (Natural or LP). Some ranges can be converted for use with Natural or LP gas.
- With prolonged use of a range, high floor temperatures could result. Many floor coverings will not be able to withstand this kind of use. Never install range over vinyl tile or linoleum that cannot withstand high temperatures. Never install range directly over carpeting.

Safety Information

Using the Oven

- Do not leave children alone or unattended where a range is hot or in operation. They could be seriously burned.
- Do not allow anyone to climb, stand or hang on the door. They could damage the range and cause severe personal injury.
- Wear proper apparel. Loose fitting or hanging garments should never be worn when using oven. Flammable material could ignite if brought in contact with flame or hot oven surfaces which may cause severe burns.
- Never use range for warming or heating a room. This may cause burns, injuries, or a fire.
- Do not use water on grease fires.
- Do not let grease or other flammable materials collect in or around range.
- Do not repair or replace any part of range unless it is recommended in this manual.
- Use only dry potholders. Moist or damp potholders used on hot surfaces may result in a burn from steam. Do not let a potholder touch the flame. Do not use a towel or a bulky cloth as a potholder.
- Never leave range unattended while cooking. Boilovers can cause smoking and may ignite.
- Only certain types of glass/ceramic, earthenware, or other glazed utensils are suitable for oven use. Unsuitable utensils may break due to sudden temperature change.
- Use care when opening oven door. Let hot air or steam escape before removing or replacing food.
- Do not heat unopened food containers in oven. Build-up of pressure may cause a container to burst and result in injury.
- Keep range vent ducts unobstructed.
- Place oven racks in desired location while oven is cool. If a rack must be moved while oven is hot, use a dry potholder.
- Do not use aluminum foil to line oven bottom or racks. Aluminum foil can cause a fire will seriously affect baking results, and damage to porcelain surface's.
- Do not touch interior surfaces of oven during or immediately after use. Do not let clothing or other flammable materials come in contact with bake or broil burners.
- Other areas of the oven can become hot enough to cause burns, such as vent openings, window, oven door and oven racks.
- To avoid steam burns, do not use a wet sponge or cloth to wipe up spills on hot cooking area.
- Do not store combustible or flammable materials, such as, gasoline or other flammable vapors and liquids near or in oven.

- Do not clean oven door gasket located on back of the door. Gasket is necessary to seal the oven and can be damaged as a result of rubbing or being moved.
- Do not drape towels or any materials on oven door handles. These items may ignite causing a fire.



CAUTION

Do not store items of interest to children in cabinets above range. Children may climb on oven to reach these items and become seriously injured.

Baking, Broiling, and Roasting

- Do not use oven area for storage.
- Stand back from range when opening door of a hot oven. Hot air or steam can cause burns to hands, face, and eyes.
- Do not use aluminum foil anywhere in the oven. This could result in a fire hazard and damage the range.
- Use only glass cookware appropriate for use in gas ovens.
- Always remove broiler pan from oven when finished broiling. Grease left in pan can catch fire if oven is used without removing grease from the broiler pan.
- When broiling, meat that is close to the flame may ignite. Trim any excess fat to help prevent excessive flare-ups.
- Make sure broiler pan is placed correctly to reduce any possibility of grease fires.
- Should a grease fire occur in the broiler pan, turn off oven, and keep oven door closed until fire burns out.

Connecting Range to Gas

Install manual shut-off valve in gas line for easy accessibility outside range. Be aware of the location of the shut-off valve.

Safety Information

Electrical Requirements

120-volt, 60 Hertz, 15 amp, individual circuit which is properly grounded, polarized, and protected by a circuit breaker or fuse.

Extension Cord

Due to possible pinching during installation, extension cords should not be used on products.

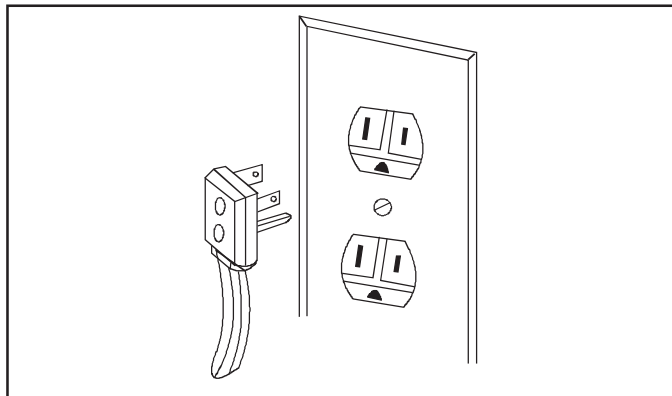
Extension cords will adversely affect the performance of glow bar ignitor and spark system.

Grounding

NOTE: This appliance must be properly grounded, for personal safety.

Power cord on this appliance is equipped with a three-prong grounding plug. This matches standard three-prong grounding wall receptacle to prevent possibility of electric shock from this appliance.

Consumer should have wall receptacle and circuit checked by qualified electrician to verify receptacle is properly grounded.

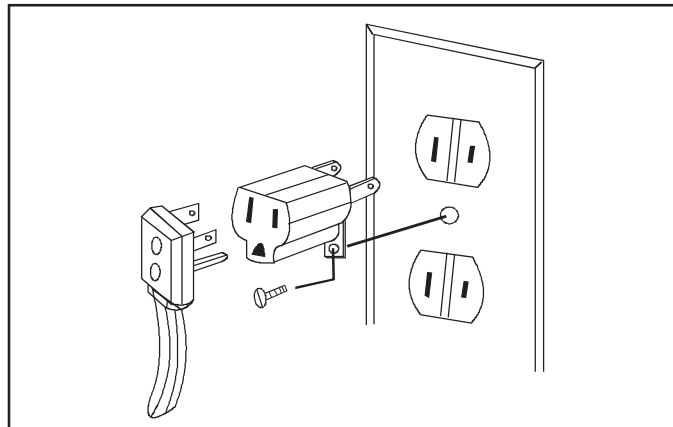


Where standard two-prong wall receptacle is encountered, it is consumers responsibility and obligation to have it replaced with a properly grounded three-prong wall receptacle.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD (GROUND) PRONG FROM POWER CORD.

For 15 amp. circuits only. Do not use an adapter on 20 amp. circuit. Where local codes permit, a TEMPORARY CONNECTION may be made to properly grounded two-prong wall receptacle by the use of a UL listed adapter available at most hardware stores.

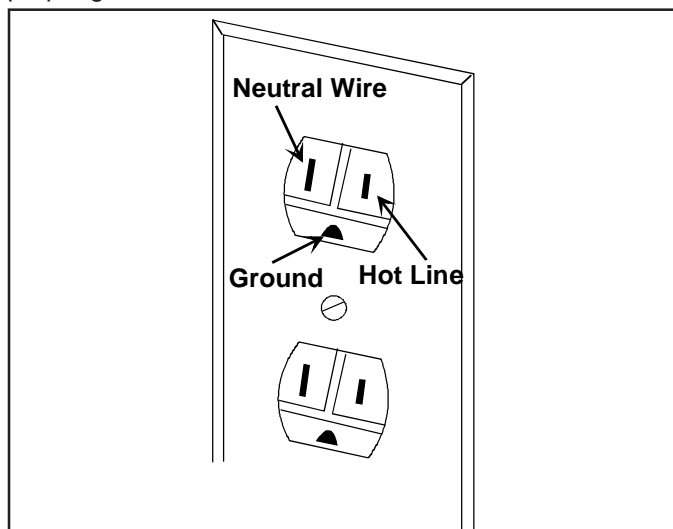
Larger slot on adapter must be aligned with larger slot in the wall receptacle to provide proper polarity.



WARNING

Attaching adapter ground terminal to wall receptacle cover screw does not ground appliance unless the cover screw is metal and not insulated, and wall receptacle is grounded through the house wiring. Consumer should have circuit checked by a qualified electrician to verify receptacle is properly grounded.

When disconnecting power cord from adapter, always hold adapter with one hand. If this is not done, adapter ground terminal is very likely to break with repeated use. Should this happen, DO NOT USE appliance until a proper ground has been established.



NOTE: Circuit tester can be use to verify voltage is present at the outlet, connect one lead to hot line and the other lead to ground, circuit tester should light.

Safety Information

Product Safety Devices

Safety devices and features have been engineered into the product to protect consumer and servicer. Safety devices must never be removed, bypassed, or altered in such a manner as to defeat the purpose for which they were intended. Listed below are various safety devices together with the reason each device is incorporated in the gas ranges.

Pressure Regulator

Maintains proper and steady gas pressure for operation of oven controls. Regulator must be set for the type of gas being used **Natural** or **LP**. After servicing regulator, make certain it is set properly before completing service.

Gas Burner Orifices

Universal orifices are used on most valves. They must be adjusted or set for the type of gas being used **Natural** or **LP**. After servicing a valve or orifice verify it is adjusted properly before completing service.

Oven Safety Valve

Oven valve is designed to be a safety valve. Two basic designs are used in gas ranges.

Hydraulic type valve
Electric type valve

Both types are safety valves because they are indirectly operated by the oven thermostat, which controls a pilot flame or electric ignitor, to open and close the oven valve.

Latch Assembly

Locks the door during self-cleaning cycle. Prevents possible injury to consumer by preventing door opening at high temperatures where ignition of soil could take place with the inrush of air.

Grounded Oven Frame

Ground prong on power cord is connected to the frame, usually a green lead fastened by a screw. In addition, any part or component capable of conducting an electric current is grounded by its mounting.

If any ground wire, screw, strap, nut, etc. is removed for service, or any reason, it must be reconnected to its original position with original fastener before the appliance is put into operation again.

Failure to do so can create a possible shock hazard.

Installation Instructions Open Burner

Packing Material

Remove protective packing material from range. Tape residue can be cleaned with a soft cloth and alcohol.

Range Location

Choose a location based on following factors.

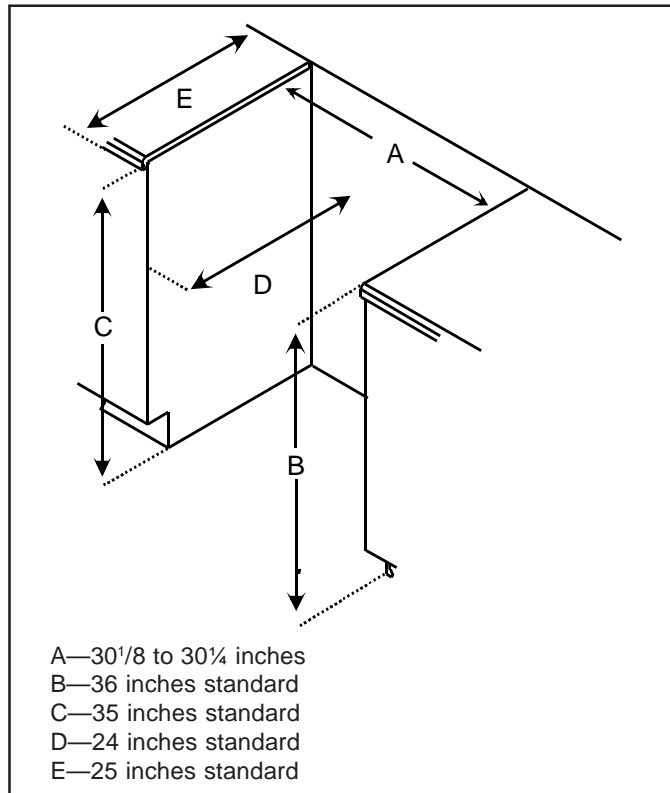
- Drafts caused by home heating and air conditioning and open doors or windows can disrupt ventilation air pattern. Range should not be installed near windows or doors.
- Make sure there is adequate space for proper installation.
- Carefully read all instructions before beginning installation.

Cabinet Opening

WARNING

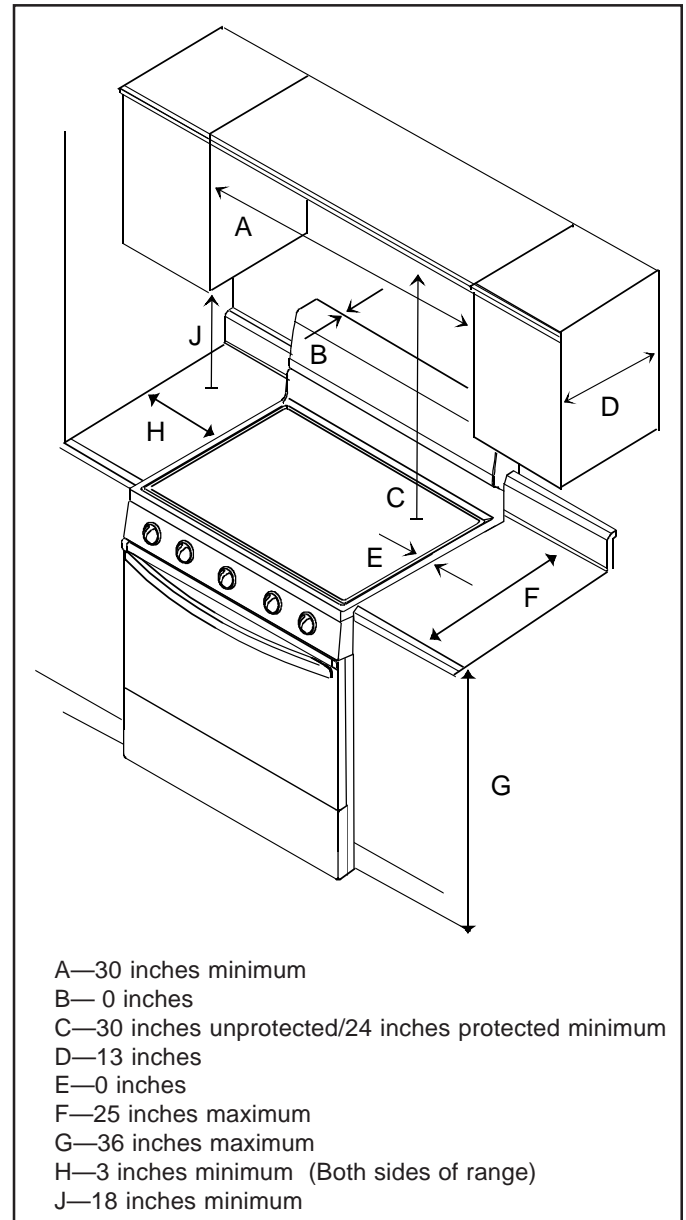
To avoid risk of burns or fire by reaching over elements, cabinet storage space located above range should be avoided. If cabinet storage is provided, install a range hood that projects horizontally a minimum of 5 inches beyond the cabinet bottom to reduce the risk.

Range should extend approximately 2 inches from cabinet front to oven door handle. Use dimensions in figure below and shown in "Special Countertop Conditions" section to prepare cabinet opening.



Minimum Clearances to Combustible Surfaces

- Minimum clearance to rear wall is 0 inches.
- Minimum clearance to a vertical right or left side wall extending above cooking surface is 3 inches.
- Minimum clearance to countertop/cabinet on each side is 0 inches.
- Minimum of 30 inches between top of cooking surface and bottom of an unprotected wood or metal cabinet.
- 24 inches between cooking surface and protected wood or metal cabinet above range. Cabinet bottom must be protected by at least 1/4 inch thick millboard with not less than No. 28 MSG sheet steel, .015 inch thick stainless steel, .024 inch thick aluminum, or .020 inch thick copper.



Installation Instructions Open Burner

Special Countertop Conditions

Countertops such as ceramic tile tops cause cabinet and countertop to be higher than 36 inches. Follow instructions below when countertop is higher than 36 inches.

1. Raise leveling legs to maximum level.
2. Measure from floor to side trim. If measurement is less than height of countertop, floor must be shimmed.
3. Shim floor using a piece of plywood same size as range opening. Secure plywood to floor. Plywood must be as secure as original flooring.
4. Install anti-tip bracket(s) and slide range into place.

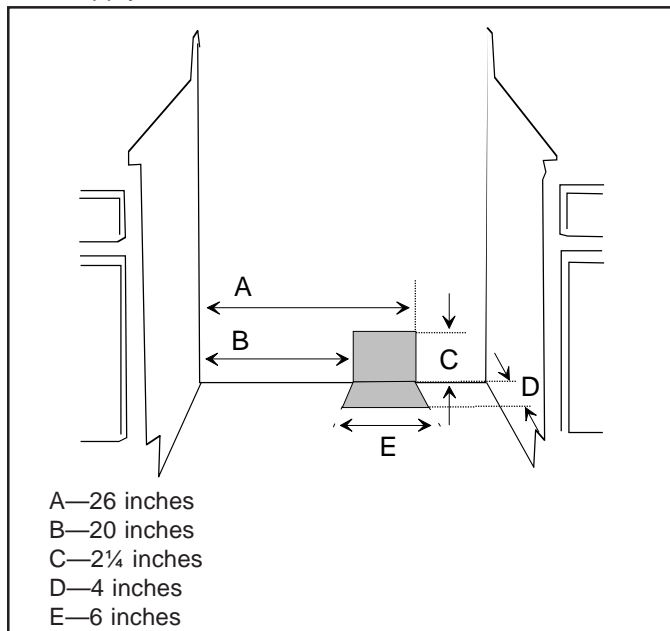
Gas Connection Requirements

Before connecting this appliance to the gas supply piping system, confirm installation meets the requirements of local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-Latest Edition.

The installation of appliances designed for manufactured (mobile) home installation must conform with Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such standard is not applicable, the Standard for Manufactured Home Installation, ANSI Z225.1/NFPA 501A-Latest Edition, and with local codes where applicable.

Gas Supply Location

Gas supply must be located in the area shown.



Gas Supply Pressure

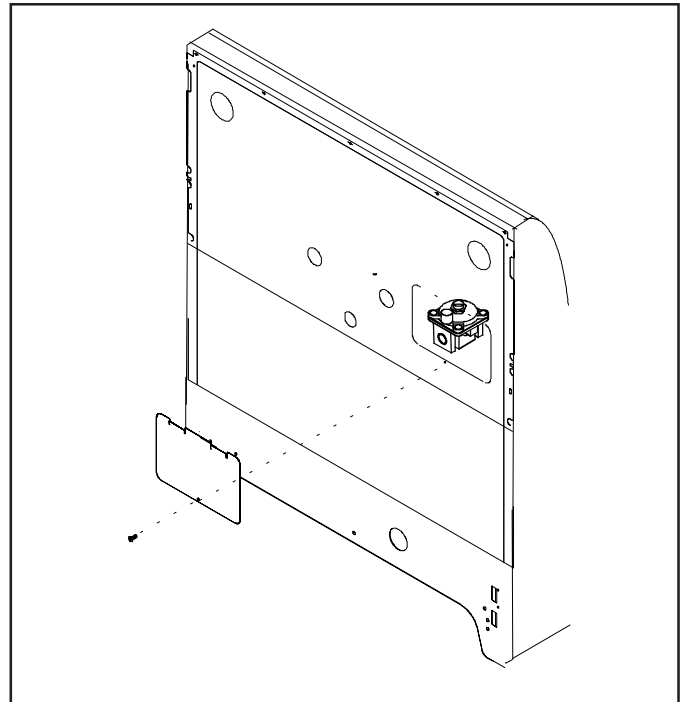


To avoid property damage, maximum gas supply pressure must not exceed 14" WCP.

- Appliance and individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5kPa) (14" WCP).
- Appliance must be isolated from gas supply piping system by closing manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5kPa) (14" WCP).
- Gas supply pressure for checking regulator setting must be at least 1" WCP above manifold pressure shown on rating label.

Pressure Regulator Location

Remove rear cover to expose pressure regulator.



Installation Instructions Open Burner

Converting for Use with Natural Gas or Propane Gas

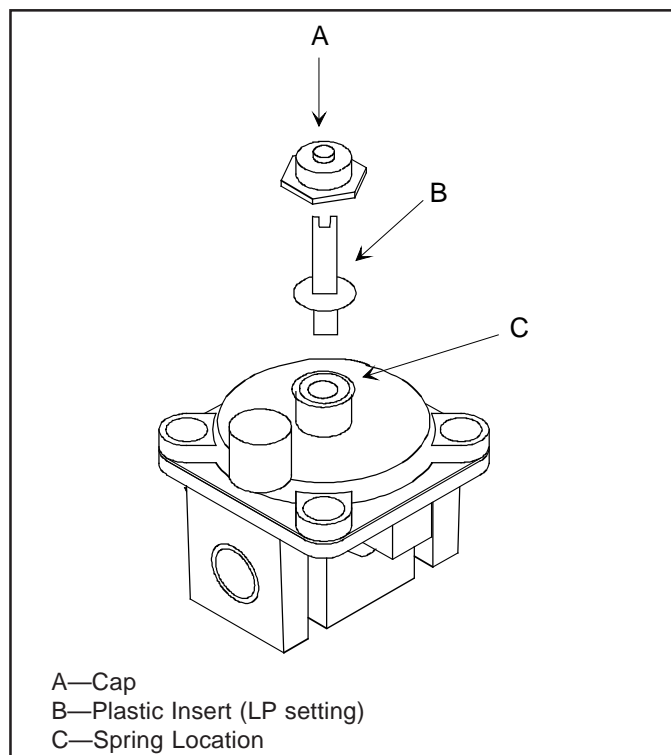
This range arrives from factory adjusted for use with natural gas. If using LP/propane gas is desired, range must be converted. See "Type 1" or "Type 2" regulator.

WARNING

To avoid electric shock that can cause personal injury or death, disconnect main electrical supply to range before servicing.

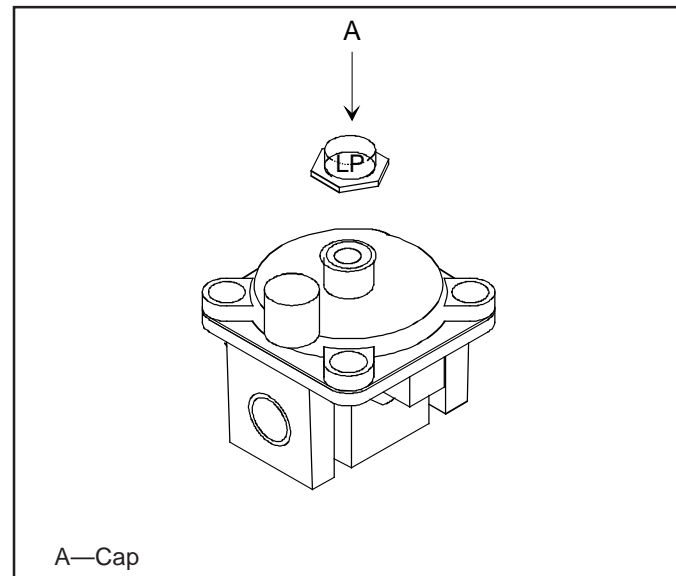
Converting Type 1 Pressure Regulator for Use with LP/Propane

1. Remove pressure regulator cap with a wrench.
2. Remove plastic insert from pressure regulator cap.
 - Plastic insert fits tightly in cap.
3. Reverse plastic insert and carefully push plastic insert firmly into hole in pressure regulator cap.
 - Cap must show "LPG10" or "LP10".
4. Place pressure regulator cap on pressure regulator and tighten.
 - Insert should not disturb spring in body of regulator.



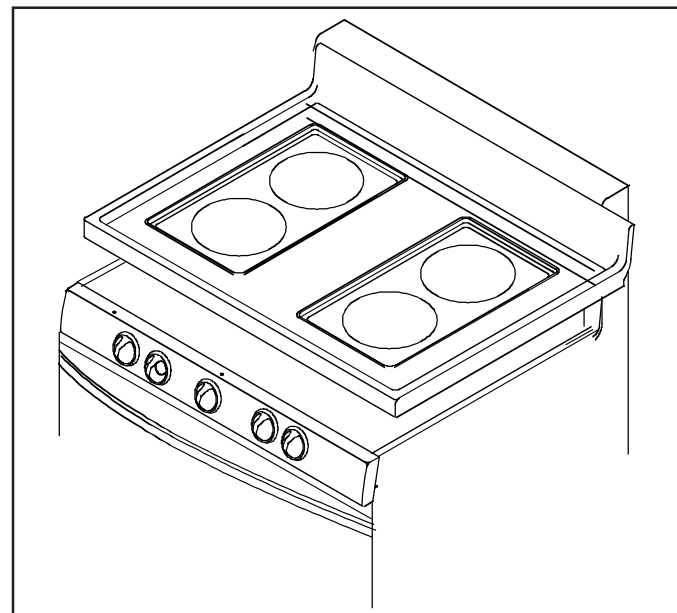
Converting Type 2 Pressure Regulator for Use with LP/Propane

1. Remove pressure regulator cap with a wrench.
2. Reverse pressure regulator cap.
 - Cap must show "LP".
3. Place pressure regulator cap on pressure regulator and tighten.



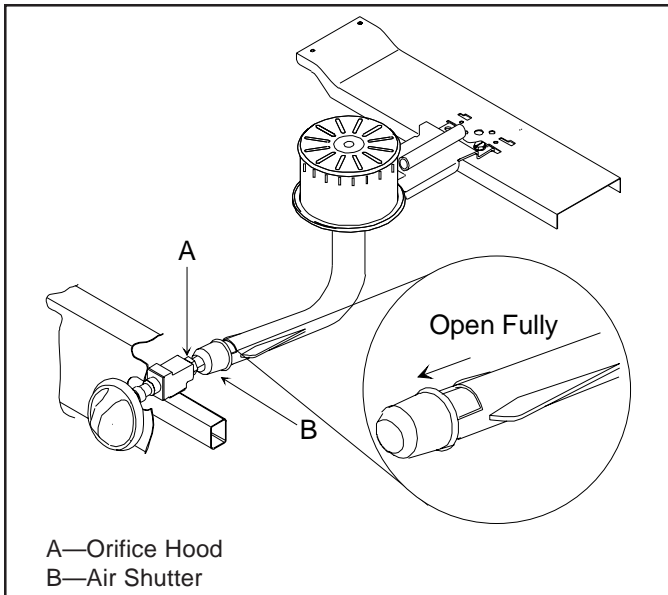
Converting Surface Burners for Use with LP/Propane

1. Lift the rangetop off of the range.
 - A peg on each side of rangetop holds rangetop in place.



2. Turn all 4 orifice hoods (tighten) counterclockwise when facing front of range 1½ to 2 turns or until snug.
 - Use ½-inch wrench.
 - Do not over tighten orifice hoods. If orifice hoods are over tightened, gas supply can be cutoff or orifice hood threads can strip.

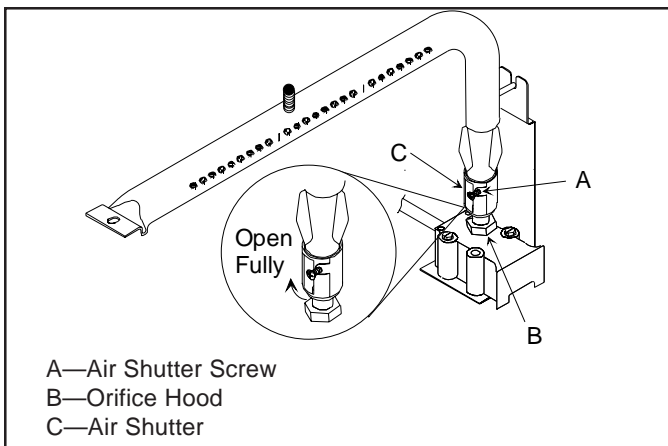
Installation Instructions Open Burner



3. Pull all 4 air shutters fully open.

Converting Oven Burner for Use with LP\Propane

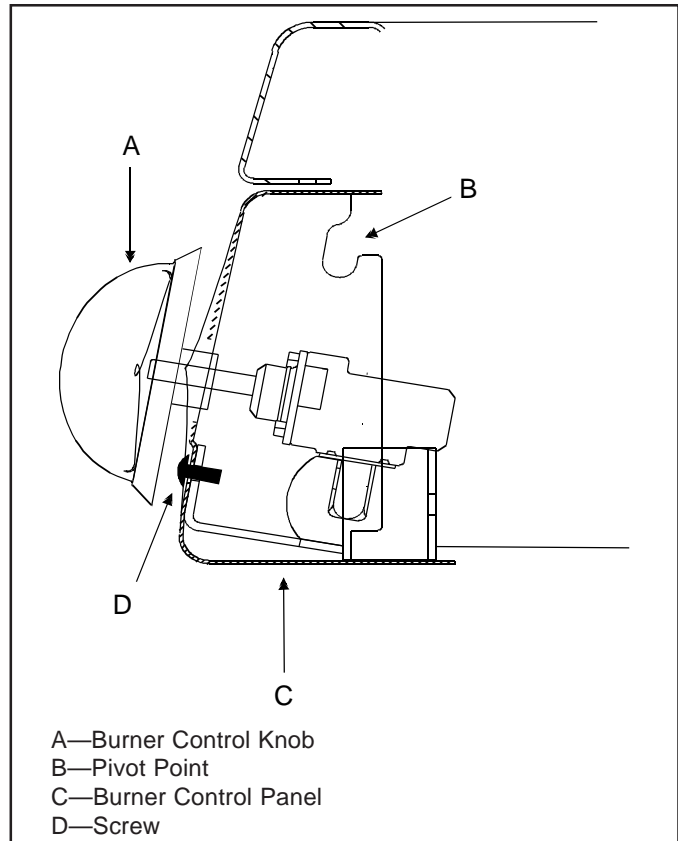
1. Open broiler door and remove broiler rack, pan, and grid.
2. Through rectangular hole on rear of broiler cavity, turn orifice hood (tighten), clockwise when facing front of range, 1½ to 2 turns or until snug.
 - Do not overtighten orifice hoods. Orifice hoods can strip.



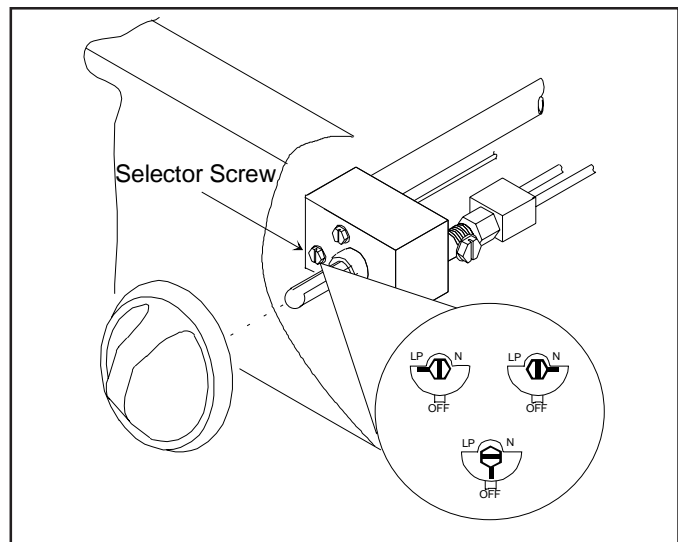
3. Open air shutter fully.

Converting Oven Thermostat for Use with LP\Propane

1. Remove all (5) control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside.



4. Turn the selector screw on oven thermostat so the pointer is towards "LP".
5. Reverse steps 1–3 to replace control panel and knobs.



Installation Instructions Open Burner

Converting Type 1 Pressure Regulator for Use with Natural Gas

1. Remove pressure regulator cap with a wrench.
2. Remove plastic insert from pressure regulator cap.
 - Plastic insert fits tightly in cap.
3. Reverse plastic insert and carefully push plastic insert firmly into hole in pressure regulator cap.
 - Insert must show "NAT" or be blank.
4. Place pressure regulator cap on pressure regulator and tighten.
 - Insert should not disturb spring in body of regulator.

Converting Type 2 Pressure Regulator for Use with Natural Gas

1. Remove pressure regulator cap with a wrench.
2. Reverse pressure regulator cap.
 - Insert shows "NAT" or is blank.
3. Place pressure regulator cap on pressure regulator and tighten.

Converting Surface Burners for Use with Natural Gas

1. Lift the rangetop off of the range.
2. Turn all 4 orifice hoods (loosen) clockwise when facing front of range 1½ to 2 turns.
 - Use ½-inch crescent wrench.
3. Close all 4 air shutters to approximately 1/8 inch.

Converting Oven Burner for Use with Natural Gas

1. Remove broiler drawer.
2. Turn orifice hood counterclockwise (loosen) 2 full turns.
3. Close air shutter to approximately 3/8 inch.
4. Replace broiler door.

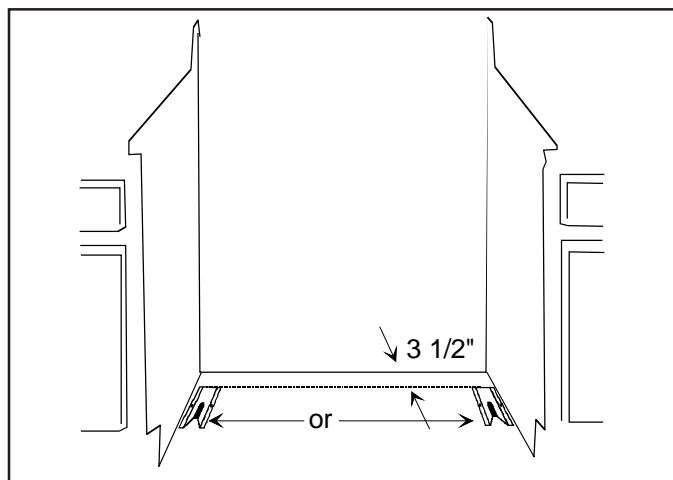
Converting Oven Thermostat for Use with Natural Gas

1. Remove 4 burner control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside.
4. Turn the selector screw so the pointer is towards "N".
5. Reverse steps 1-3 to replace control panel and knobs.

Anti-tip Bracket Installation

To reduce risk of range tipping, secure range with a properly installed anti-tip bracket.

1. Measure 3½ inches from back wall on right and left side of cabinet cutout. Mark measurements on floor and draw a straight line connecting marks.
2. Position anti-tip bracket.
 - If range is installed beside cabinet(s), place anti-tip bracket with back edge on line drawn on floor and side of bracket against cabinet.
 - If range is not installed beside cabinet(s), position range where it will be installed. Draw a line along side of range on floor from front to back. Remove range. Place anti-tip bracket with back edge over line drawn 3½ inches from back wall and side of bracket over line drawn along side of range on floor.
 - Anti-tip bracket can be installed on either right or left side.

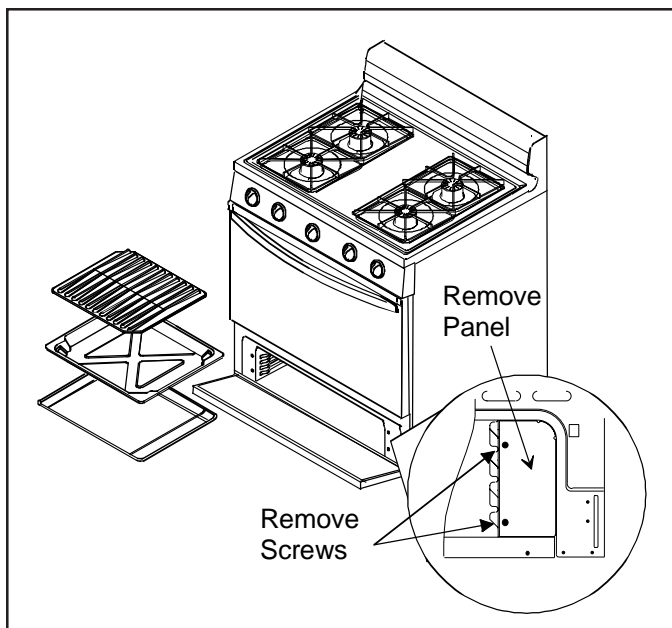


3. Mark 2 hole locations in anti-tip bracket.
4. Drill 2 holes.
 - If drilling into wood, use a 3/32 inch drill bit.
 - If drilling into concrete, use a 3/16 inch masonry drill bit and insert plastic anchors.
5. Secure bracket to floor using screws supplied.
6. After range is slide into position, verify the range leveling leg has engaged anti-tip bracket.

Installation Instructions Open Burner

Verifying anti-tip bracket position

1. After range is in place, open broiler door and remove broiler rack, pan, and grid.
2. Remove screws in front of broiler area on side of range that anti-tip bracket is installed.
3. Remove panel and look towards back of oven and check anti-tip bracket has engaged bracket.
4. Reinstall panel after checking anti-tip bracket.



Gas Connection

Connect gas supply to regulator using hard pipe or flexible connector (Check local codes). Pressure regulator supplied with this appliance has a 1/2 inch NPT female connection.

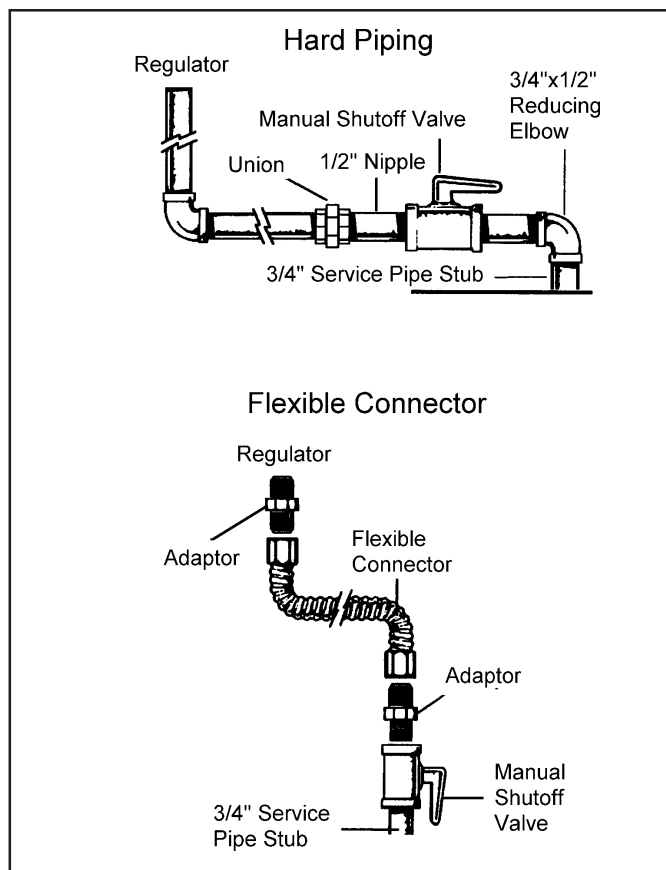
- A manual shutoff, not supplied with range, must be installed in an accessible location outside of range.
- Use joint compound that is resistant to action of propane gas on all male pipe threads.
- Use supplied pressure regulator only.
- Do not overtighten gas fitting when attaching to pressure regulator. Overtightening may crack regulator.
- Support pressure regulator with wrench when installing gas fitting.



WARNING

To avoid property damage or personal injury, only use a new flexible connector that is AGA/CGA design certified.

- Do not use an old connector.
- Do not reuse a connector after moving appliance.
- Refer to National Fuel Gas Code or local codes for supply pipe size requirements, to assure sufficient gas is supplied to the unit.



Testing for Gas Leaks

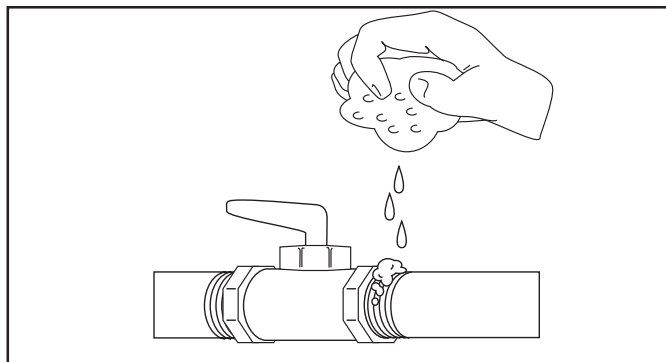
After final gas connection is made, turn on manual gas valve and test all connections in gas supply piping and range for gas leaks.



WARNING

To avoid property damage or serious personal injury, never use a lighted match to test for gas leaks.

1. Place soap suds on connections.
 - Bubbles appear if leak is present.
2. If bubbles appear, shut off gas supply valve.
3. Tighten joint if leak is at factory fitting.
 - If leak is not at factory fitting, unscrew, apply more joint compound, and tighten to correct leak.
4. Retest connection for leak after tightening.
 - Retest any connections that were disturbed.



Installation Instructions Open Burner

Seal Openings

Openings in wall behind the range or on floor under range must be sealed before sliding range into position.

Place Range

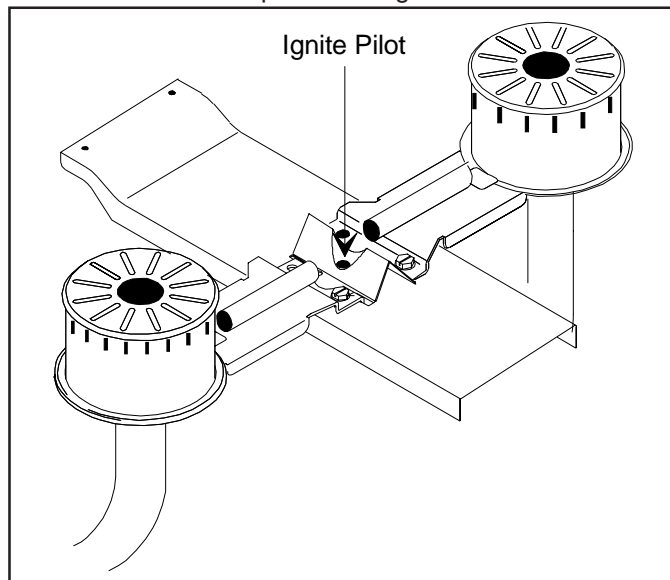
1. Slide range into place.
 - Leveling legs must be extended out $\frac{1}{4}$ inch to engage anti-tip bracket.
2. Carefully level range using legs provided. Range must be level to cook and bake uniformly.
 - Place a level on top oven rack or on top of range when leveling.

Removal and Replacement of Range

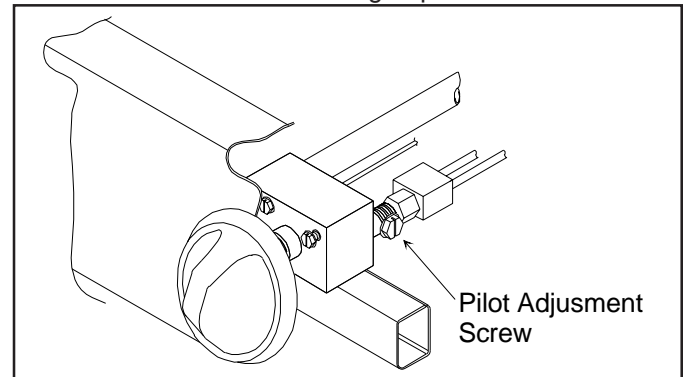
1. Turn off gas valve and disconnect gas supply.
2. Remove range and place aside.
3. Remove anti-tip bracket and reinstall anti-tip bracket into new location using instructions in this manual.
4. To reinstall range, follow instructions in "Installation" section of this manual.
 - Do not reuse a flexible connector after moving appliance.

Igniting and Adjusting Top Burner Pilot Flame

1. Check that all burner control knobs are in the OFF position.
2. Remove grates and lift off rangetop.
3. Ignite both top burner pilots with match.
 - Pilot flame should be $\frac{1}{4}$ to $\frac{3}{8}$ inch high and centered in the pilot housing.

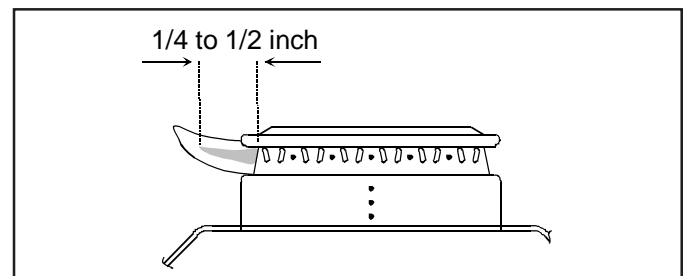


4. If necessary, adjust pilot flame size. Remove rangetop if necessary.
 - Tighten or loosen pilot adjustment screw, located behind oven temperature knob, until flame is $\frac{1}{4}$ to $\frac{3}{8}$ inch high and centered in pilot housing.
 - If flame is too high, black marks (carbon) will form on the bottom of the rangetop.

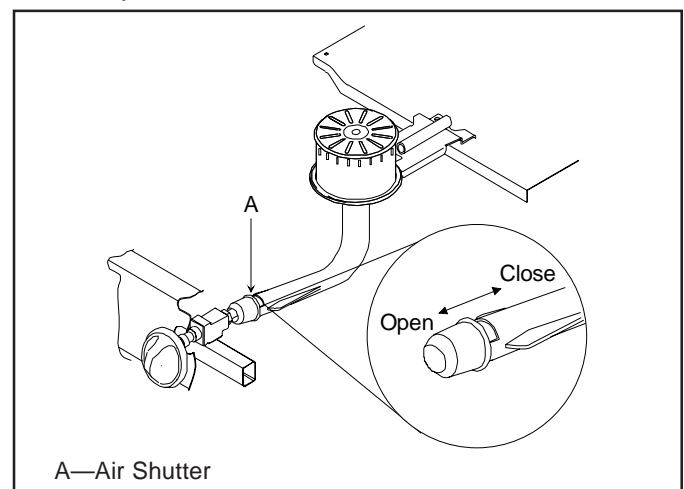


Test and Adjusting Surface Burner Flame

Turn on burner. See "Operating Surface Burners" section for burner operating instructions. Surface burner should ignite within 4 seconds. Properly adjusted surface burner flames are clean and blue with a distinct inner cone approximately $\frac{1}{4}$ inch to $\frac{1}{2}$ inch long. Some yellow flame is normal when burning LP/Propane.



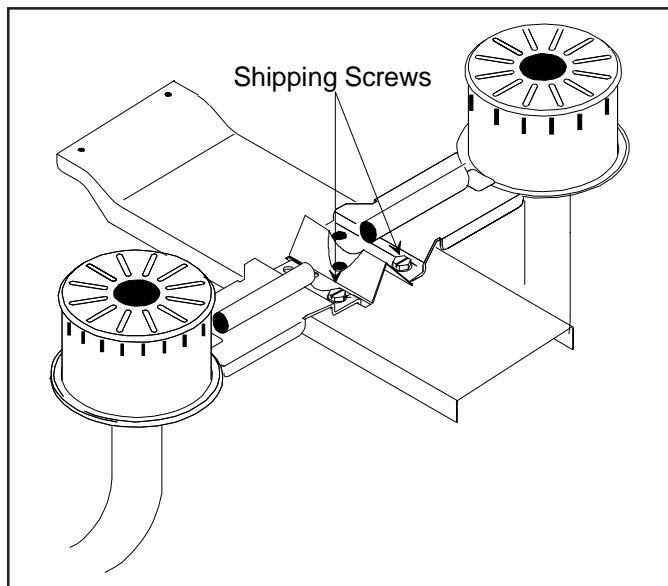
Remove rangetop to adjust air shutters. If burner flame is blowing or noisy, reduce airflow to burner (close shutter). If burner flame does not hold its shape, increase airflow to burner (open shutter). Repeat test if necessary.



Installation Instructions Open Burner

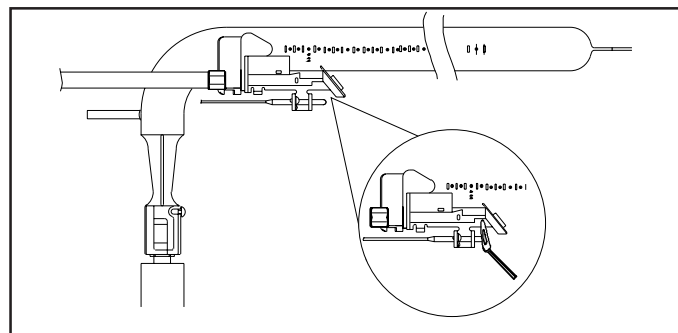
Remove Shipping Screws

Remove shipping screws.



Ignite Oven Burner Pilot

1. Open broiler door and remove broiler pan, grid, and rack.
2. In rear of broiler cavity, hold a match near pilot as shown in illustration.
3. Quickly remove hand and match when pilot ignites.

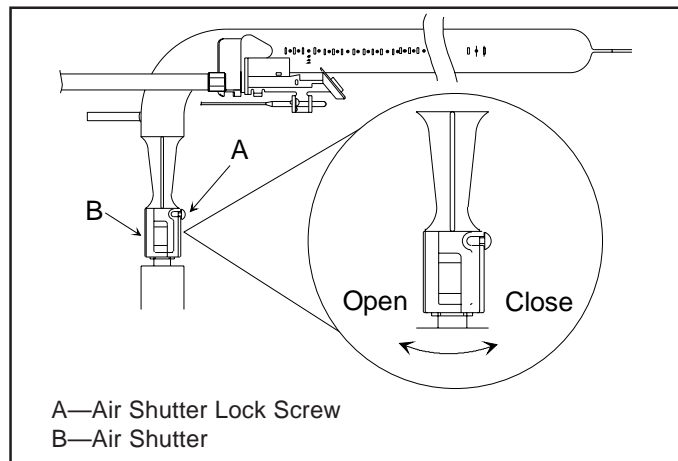


Test and Adjust Oven Burner Flame

Turn on oven burner. See "Baking" section for oven burner operating instructions. Properly adjusted oven burner flames are blue with a distinct deep blue inner cone approximately $\frac{1}{2}$ inch long. When using natural gas, flame should not have any yellow flame when burning. Some yellow flame when burning LP\propane gas is normal.

Flame should not be visible in the oven cavity when burning and should not extend into the oven cavity beyond the removable oven bottom.

- If burner flame is blowing or noisy, reduce airflow to burner.
 - If burner flame is yellow and does not hold its shape, increase airflow to burner.
1. Check that oven temperature knob is in OFF position.
 2. Open broiler door and remove broiler pan, grid, and rack.
 3. Through rectangular hole in rear of broiler cavity, loosen air shutter lock screw and open or close air shutter.
 - Tighten air shutter lock screw after adjusting.

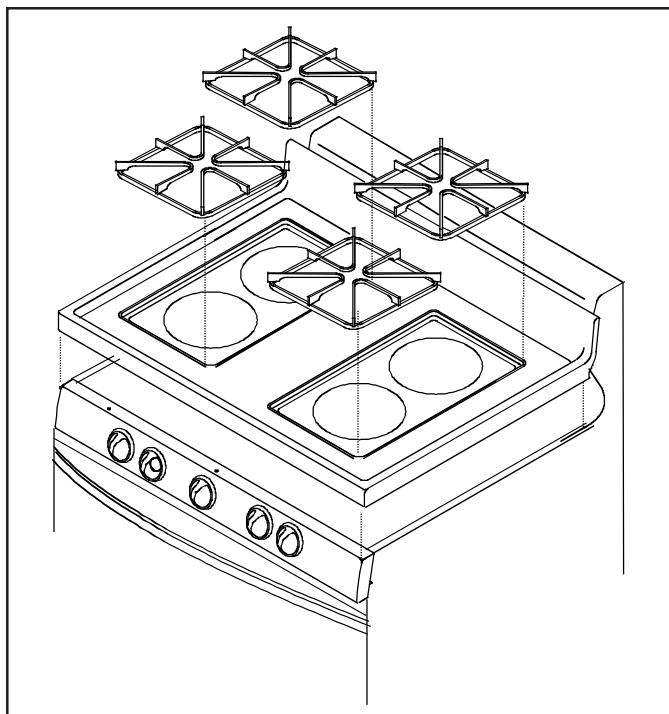


A—Air Shutter Lock Screw
B—Air Shutter

4. Repeat test if necessary.
5. Replace broiler pan, grid, and rack.

Place Rangetop and Grates

Replace rangetop and place grates over burners. A peg on each side of range holds rangetop in place.



Installation Instructions Sealed Burner

Packing Material

Remove protective packing material from range. Tape residue can be cleaned with a soft cloth and alcohol.

Range Location

Choose a location based on following factors.

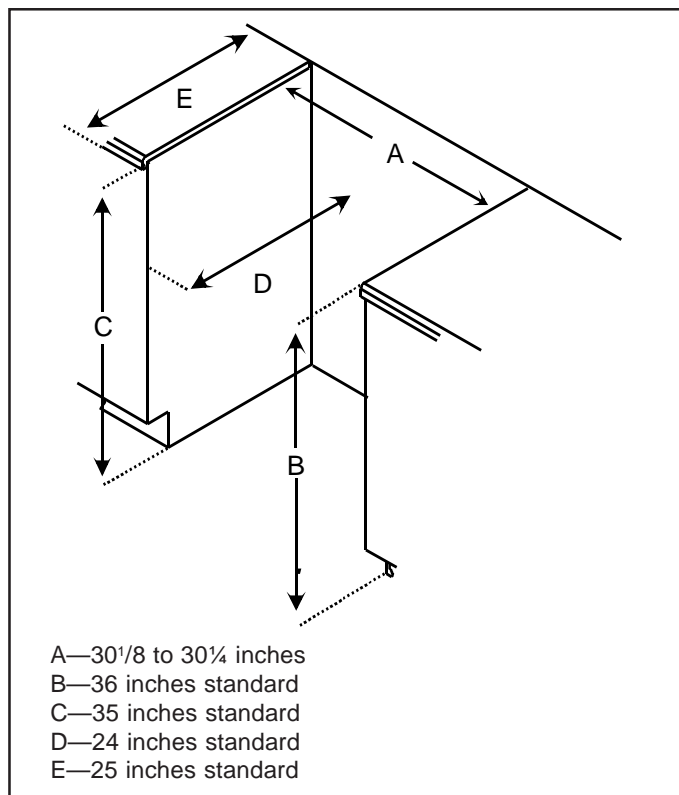
- Drafts caused by home heating and air conditioning and open doors or windows can disrupt ventilation air pattern. Range should not be installed near windows or doors.
- Make sure there is adequate space for proper installation.
- Carefully read all instructions before beginning installation.

Cabinet Opening

WARNING

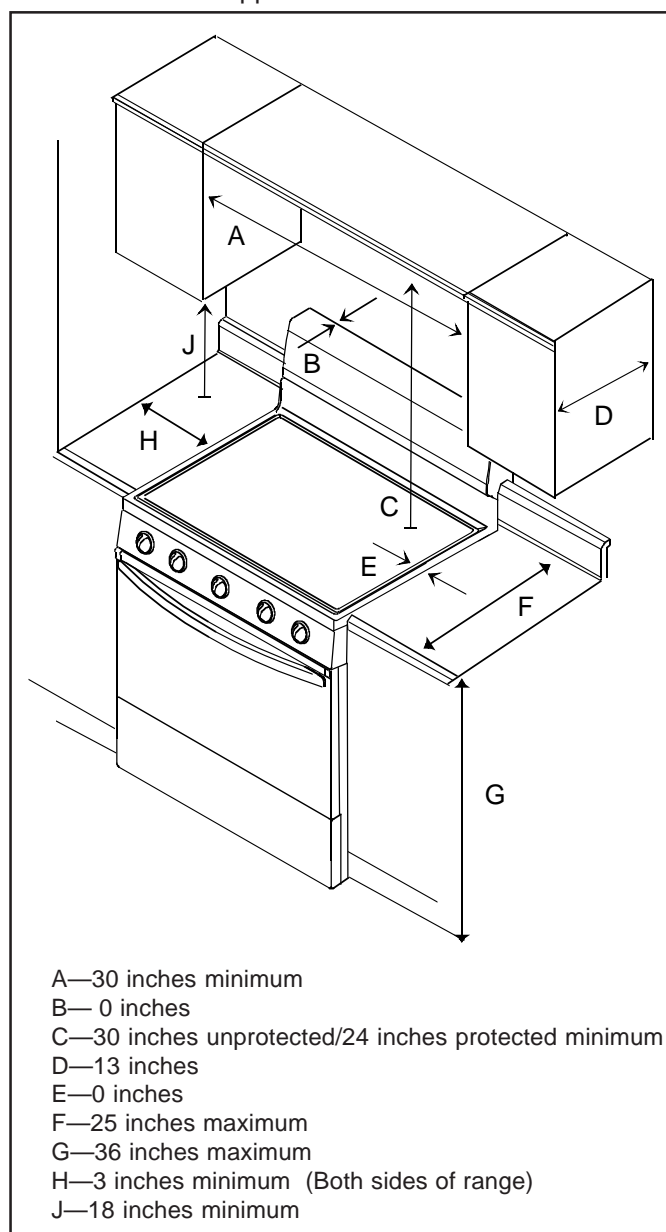
To avoid risk of burns or fire by reaching over burners, cabinet storage space located above range should be avoided.

Range should extend approximately 2 inches from cabinet front to oven door handle. Use dimensions in figure below and shown in *Special Countertop Conditions* section to prepare cabinet opening.



Minimum Clearances to Combustible Surfaces

- Minimum clearance to rear wall is 0 inches.
- Minimum clearance to a vertical right or left side wall extending above cooking surface is 3 inches.
- Minimum clearance to countertop/cabinet on each side is 0 inches.
- Minimum of 30 inches between top of cooking surface and bottom of an unprotected wood or metal cabinet.
- 24 inches between cooking surface and protected wood or metal cabinet above range. Cabinet bottom must be protected by at least ¼ inch thick millboard with not less than No. 28 MSG sheet steel, .015 inch thick stainless steel, .024 inch thick aluminum, or .020 inch thick copper.



Installation Instructions Sealed Burner

Special Countertop Conditions

Countertops such as ceramic tile tops cause cabinet and countertop to be higher than 36 inches. Follow instructions below when countertop is higher than 36 inches.

1. Raise leveling legs to maximum level.
2. Measure from floor to side trim. If measurement is less than height of countertop floor must be shimmed.
3. Shim floor using a piece of plywood same size as range opening. Secure plywood to floor. Plywood must be as secure as original flooring.
4. Install anti-tip bracket(s) and slide range into place.

Electrical Connection Requirements

WARNING

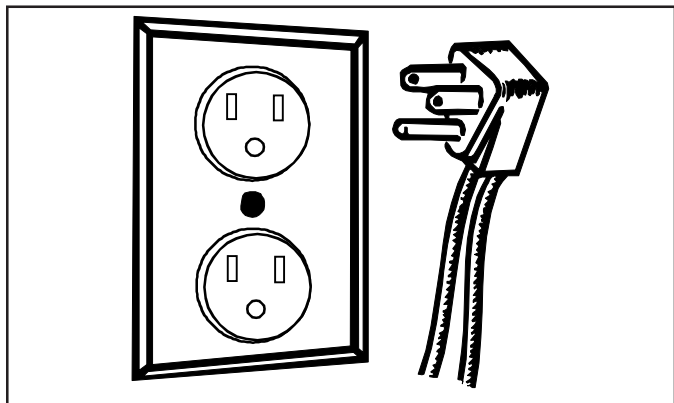
To avoid the risk of serious electrical shock or property damage, do not cut or remove the third (ground) prong from the power plug. A 3-wire grounded conductor system must be used. Relying on the flexible connector, hard piping or any other part of the gas supply line as a ground may cause fire, electrical shock and/or erratic control operation.

Range must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70-Latest Edition.

In Canada, electrical connections are to be made in accordance with CSA C22.1 Canadian Electrical Code. All electrical connections are to be made in accordance with CSA standards Z240.6.1 electrical requirements for mobile homes.

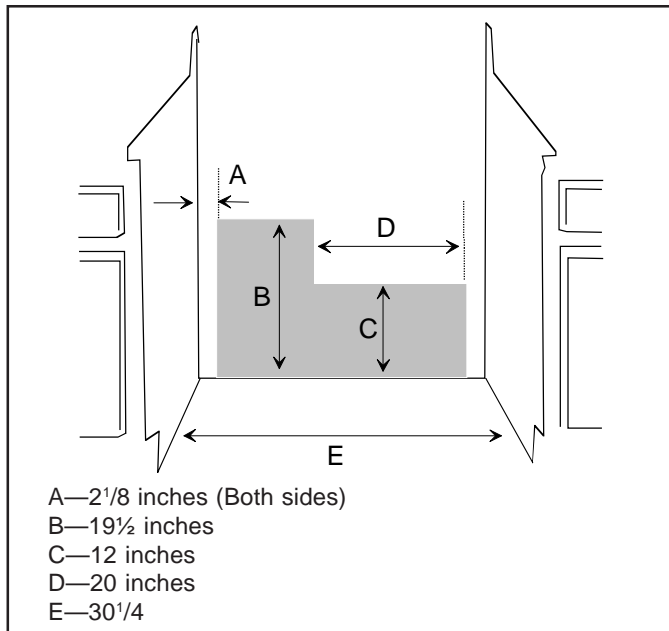
Use a dedicated 120 volt, 60 hertz, 3-prong receptacle protected by a 15 amp circuit breaker or time delay fuse. A qualified electrician should confirm the outlet is properly grounded.

If a 2-prong outlet is encountered, range owner must replace outlet before using range. Do not cut off cord, use plug adapter or extension cord, or remove grounding plug.



Electrical Connection Clearance

Electrical connection must be located in the shaded area shown. Electrical connection must not interfere with gas connection.



Gas Connection Requirements

Before connecting this appliance to the gas supply piping system, confirm installation meets the requirements of local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-Latest Edition.

When installed in mobile housing, installation is to be in accordance with CSA standard Z241.1 gas equipped mobile housing.

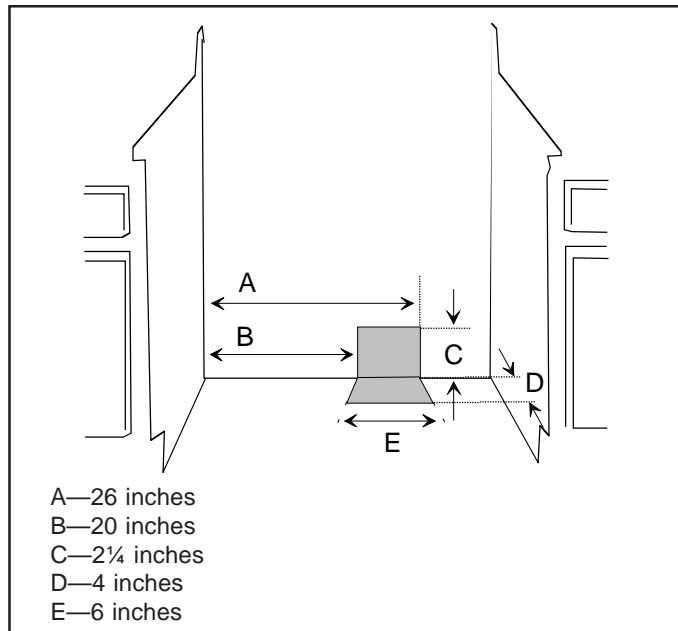
The installation of appliances designed for manufactured (mobile) home installation must conform with Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such standard is not applicable, the Standard for Manufactured Home Installation, ANSI Z225.1/NFPA 501A-Latest Edition, or with local codes or the standard CAN/CSA-z240MH, "Mobile Homes", and with local codes where applicable.

The installation of appliances is to be in accordance with CAN1-B149.1 or B149.2 installation code for gas burning appliances and equipment and/or local codes. Part 1 and/or local codes.

Installation Instructions Sealed Burner

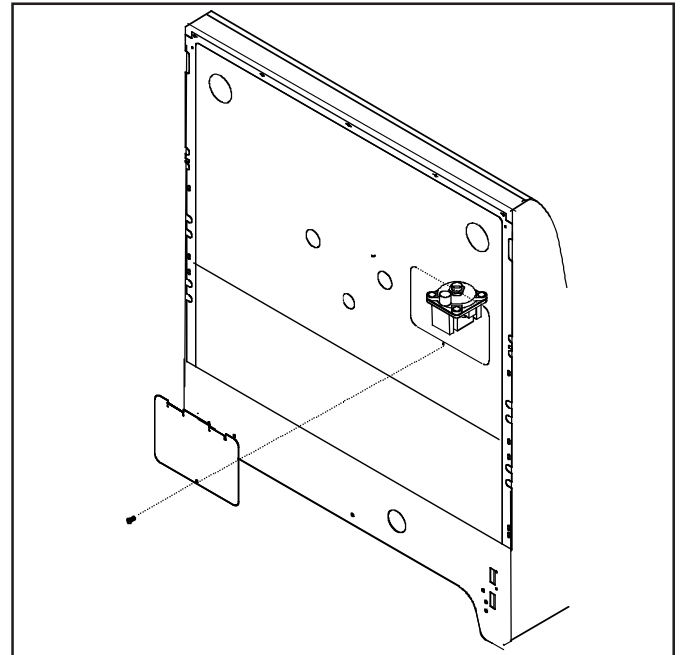
Gas Supply Location

Gas supply must be located in the shaded area shown. Gas connection must not interfere with the electrical connection.



Pressure Regulator Location

Remove rear cover to expose pressure regulator.



Gas Supply Pressure



CAUTION

To avoid property damage, maximum gas supply pressure must not exceed 14" WCP.

- Appliance and individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa) (14" WCP).
- Appliance must be isolated from gas supply piping system by closing manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa) (14" WCP).
- Gas supply pressure for checking regulator setting must be at least 1" WCP above manifold pressure shown on rating label.

Installation Instructions Sealed Burner

Converting for Use with Natural Gas or Propane Gas

This range arrives from factory adjusted for use with natural gas. If using LP/propane gas is desired, range must be converted. See "Type 1" or "Type 2" regulator.

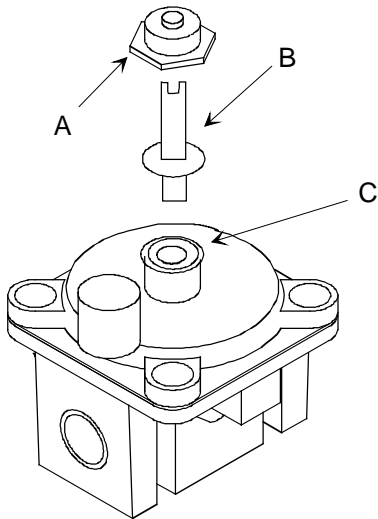


WARNING

To avoid electric shock that can cause personal injury or death, disconnect main electrical supply to range before servicing.

Converting Type 1 Pressure Regulator for Use with LP/Propane

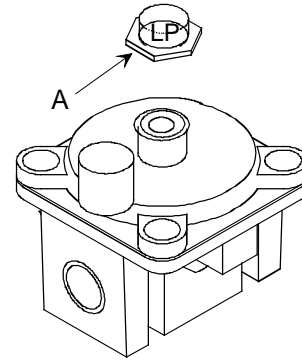
1. Remove pressure regulator cap with a wrench.
2. Remove plastic insert from pressure regulator cap.
 - Plastic insert fits tightly in cap.
3. Reverse plastic insert and carefully push plastic insert firmly into hole in pressure regulator cap.
 - Insert must show "LPG10" or "LP10".
4. Place pressure regulator cap on pressure regulator and tighten.
 - Insert should not disturb spring in body of regulator.



A—Cap
B—Plastic Insert (LP setting)
C—Spring Location

Converting Type 2 Pressure Regulator for Use with LP/Propane

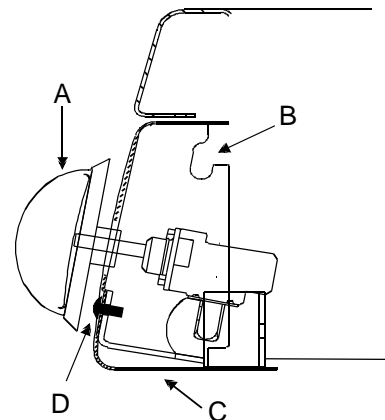
1. Remove pressure regulator cap with a wrench.
2. Reverse pressure regulator cap.
 - Cap must show "LP".
3. Place pressure regulator cap on pressure regulator and tighten.



A—Cap

Converting Surface Burners for Use with LP/Propane

1. Remove 5 control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside. See *Pivot Point* in figure.
 - Gas valve and orifice hood are visible after burner control panel is removed.



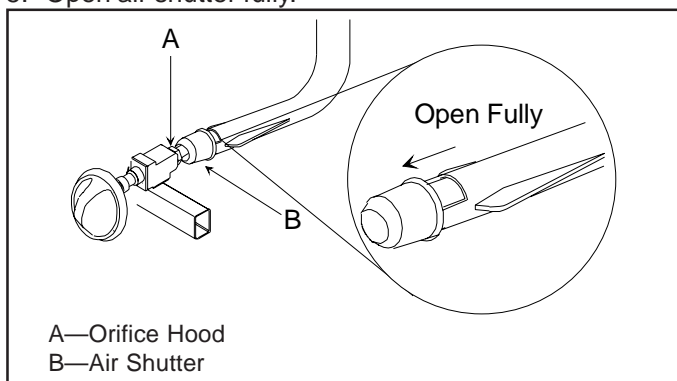
A—Burner Control Knob
B—Pivot Point
C—Burner Control Panel
D—Screw

4. While facing range front, turn orifice hoods counterclockwise $1\frac{1}{2}$ to 2 turns or until snug.
 - Use $\frac{1}{2}$ inch open end or 90° offset open end wrench.

Installation Instructions Sealed Burner

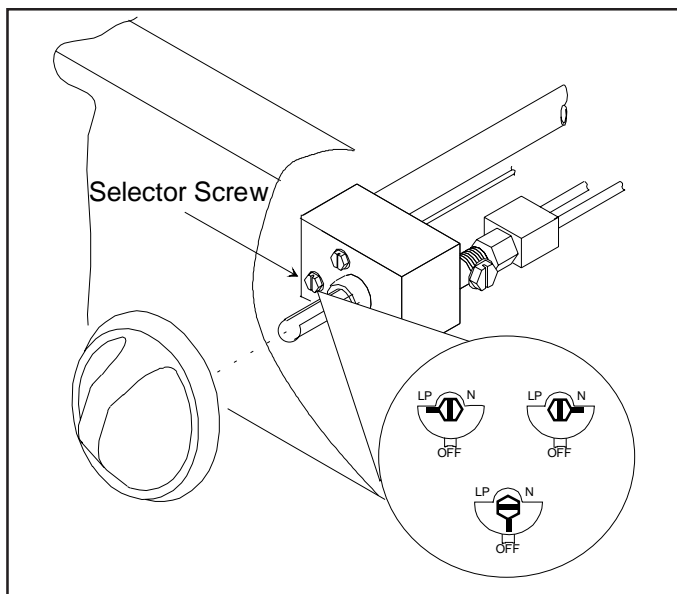
- Do not over tighten orifice hoods. If orifice hoods are over tightened, gas supply can be cutoff or orifice hoods can strip.

5. Open air shutter fully.



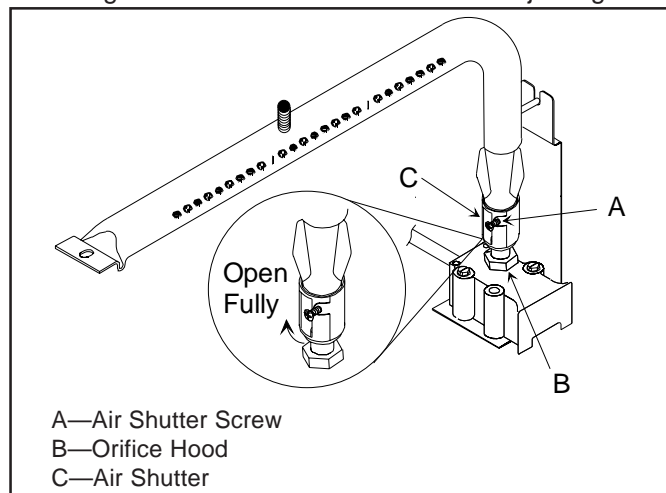
Converting Oven Thermostat for Use with LP\Propane

- Remove all (5) control knobs from range.
 - Exposes 2 screws on burner control panel.
- Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
- Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside.
- Turn the selector screw on oven thermostat so the pointer is towards "LP".
- Reverse steps 1–3 to replace control panel and knobs.



Converting Oven Burner for Use with LP\Propane

- Open broiler door and remove broiler rack, pan, and grid.
- Through rectangular hole on rear of broiler cavity, turn orifice hood (tighten), clockwise when facing front of range, 1½ to 2 turns or until snug.
 - Do not overtighten orifice hoods. Orifice hoods can strip.
- Loosen air shutter lock screw and open air shutter fully.
 - Tighten air shutter lock screw after adjusting.



Converting Type 1 Pressure Regulator for Use with Natural Gas

- Remove pressure regulator cap with a wrench.
- Remove plastic insert from pressure regulator cap.
 - Plastic insert fits tightly in cap.
- Reverse plastic insert and carefully push plastic insert firmly into hole in pressure regulator cap.
 - Insert must show "NAT" or be blank.
- Place pressure regulator cap on pressure regulator and tighten.
 - Insert should not disturb spring in body of regulator.

Converting Type 2 Pressure Regulator for Use with Natural Gas

- Remove pressure regulator cap with a wrench.
- Reverse pressure regulator cap.
 - Insert shows "NAT" or is blank.
- Place pressure regulator cap on pressure regulator and tighten.

Installation Instructions Sealed Burner

Converting Surface Burners for Use with Natural Gas

1. Remove 5 control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside.
 - Gas valve and orifice hood are visible after burner control panel are removed.
4. While facing range front, turn orifice hoods clockwise $1\frac{1}{2}$ to 2 turns.
 - Use $\frac{1}{2}$ inch, 90° offset crescent wrench.
5. Close air shutter to approximately $\frac{3}{8}$ inch.

Converting Oven Burner for Use with Natural Gas

1. Open broiler door and remove broiler rack, pan, and grid.
2. Turn orifice hood counterclockwise (loosen) 2 full turns.
3. Close air shutter to approximately $\frac{3}{8}$ inch.
4. Replace broiler door.

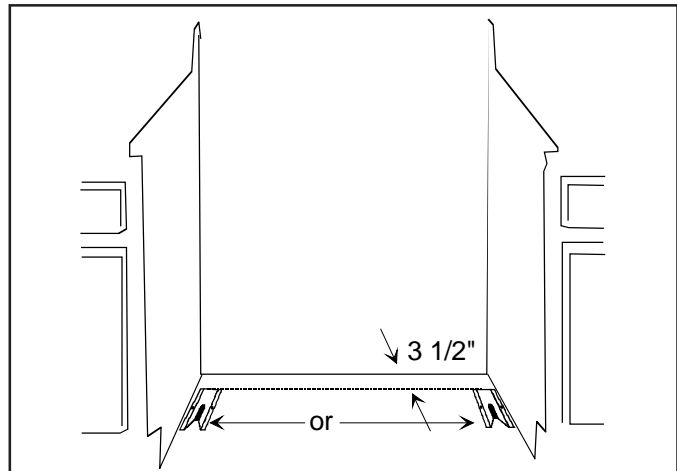
Converting Oven Thermostat for Use with Natural Gas

1. Remove 5 control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside.
4. Turn the selector screw so the pointer is towards "N".
5. Reverse steps 1-3 to replace control panel and knobs.

Anti-tip Bracket Installation

To reduce risk of range tipping, secure range with a properly installed anti-tip bracket.

1. Measure $3\frac{1}{2}$ inches from back wall on right and left side of cabinet cutout. Mark measurements on floor and draw a straight line connecting marks.
2. Position anti-tip bracket.
 - If range is installed beside cabinet(s), place anti-tip bracket with back edge on line drawn on floor and side of bracket against cabinet.
 - If range is not installed beside cabinet(s), position range where it will be installed. Draw a line along side of range on floor from front to back. Remove range. Place anti-tip bracket with back edge over line drawn $3\frac{1}{2}$ inches from back wall and side of bracket over line drawn along side of range on floor.
 - Anti-tip bracket can be installed on either right or left side.

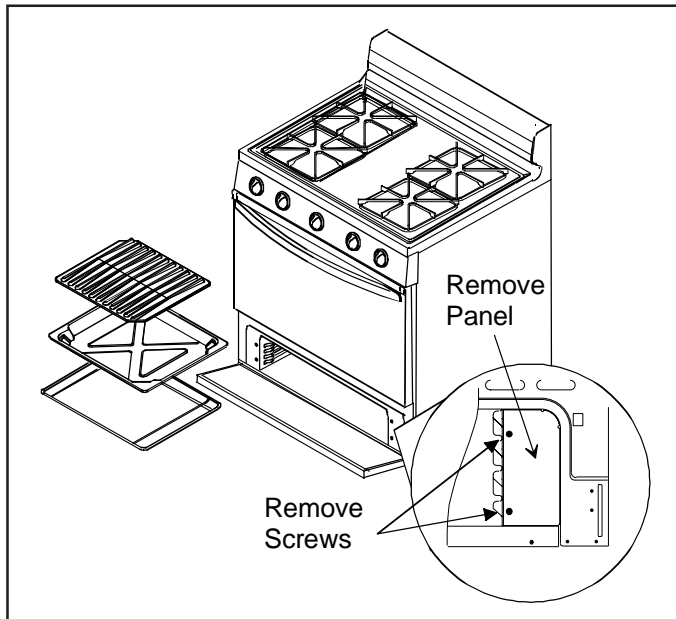


3. Mark 2 hole locations in anti-tip bracket.
4. Drill 2 holes.
 - If drilling into wood, use a $\frac{3}{32}$ inch drill bit.
 - If drilling into concrete, use a $\frac{3}{16}$ inch masonry drill bit and insert plastic anchors.
5. Secure bracket to floor using screws supplied.
6. After range is slide into position, verify the range leveling leg has engaged anti-tip bracket.

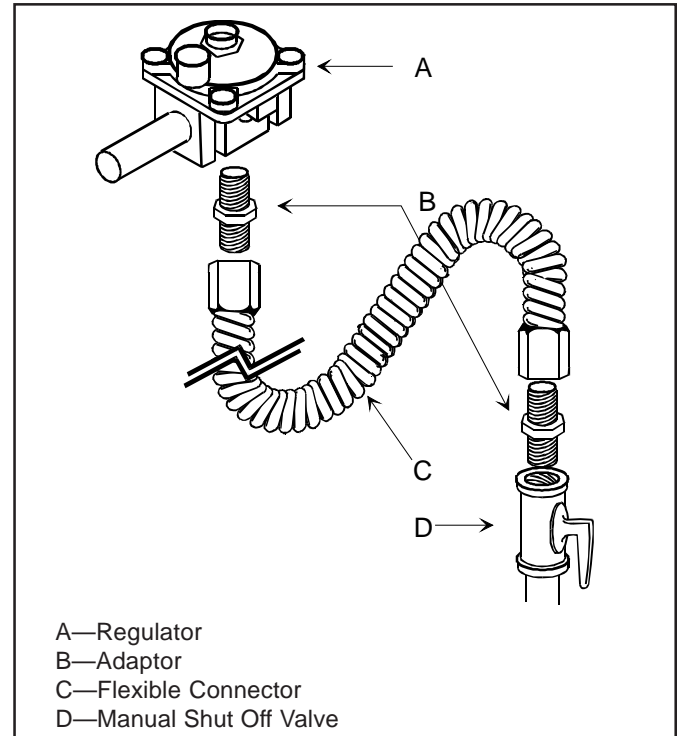
Installation Instructions Sealed Burner

Verifying anti-tip bracket position

1. After range is in place, open broiler door and remove broiler rack, pan, and grid.
2. Remove screws in front of broiler area on side of range that antitip bracket is installed.
3. Remove panel and look towards back of oven and check anti-tip bracket has engaged leveling leg.
4. Reinstall panel after checking anti-tip bracket.



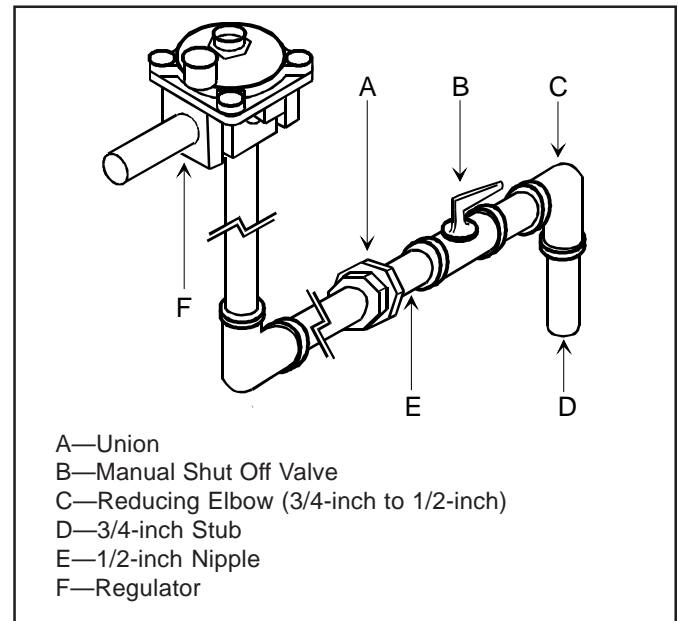
- Do not use an old connector.
- Do not reuse a connector after moving appliance.



Gas Connection

Connect gas supply to regulator using hard pipe or flexible connector (Check local codes). Pressure regulator supplied with this appliance has a 1/2 inch NPT female connection. If gas union is used, remove storage drawer, slide range into place, and connect union.

- A manual shutoff, not supplied with range, must be installed in an accessible location outside of range.
- Use joint compound that is resistant to action of propane gas on all male pipe threads.
- Use supplied pressure regulator only.
- Do not overtighten gas fitting when attaching to pressure regulator. Overtightening may crack regulator.
- Support pressure regulator with wrench when installing gas fitting.



WARNING

To avoid property damage or personal injury, only use a new flexible connector that is AGA/CGA design certified.

- Refer to National Fuel Gas Code or local codes for supply pipe size requirements, to assure sufficient gas is supplied to the unit.

Installation Instructions Sealed Burner

Testing for Gas Leaks

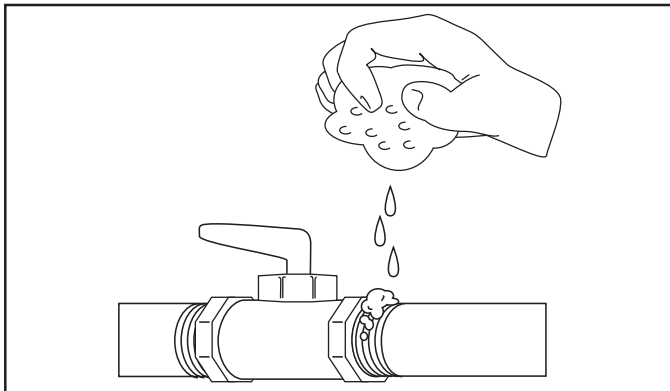
After final gas connection is made, turn on manual gas valve and test all connections in gas supply piping and range for gas leaks.



WARNING

To avoid property damage or serious personal injury, never use a lighted match to test for gas leaks.

1. Place soap suds on connection.
 - Bubbles appear if leak is present.
2. If bubbles appear, shut off gas supply valve.
3. Tighten joint if leak is at factory fitting.
 - If leak is not at factory fitting, unscrew, apply more joint compound, and tighten to correct leak.
4. Retest connection for leak after tightening.
 - Retest any connections that were disturbed.



Seal Openings

Openings in wall behind the range or on floor under range must be sealed before sliding range into position.

Place Range

Plug in range. Slide range into place. Carefully level range using legs provided. Range must be level to cook and bake uniformly.

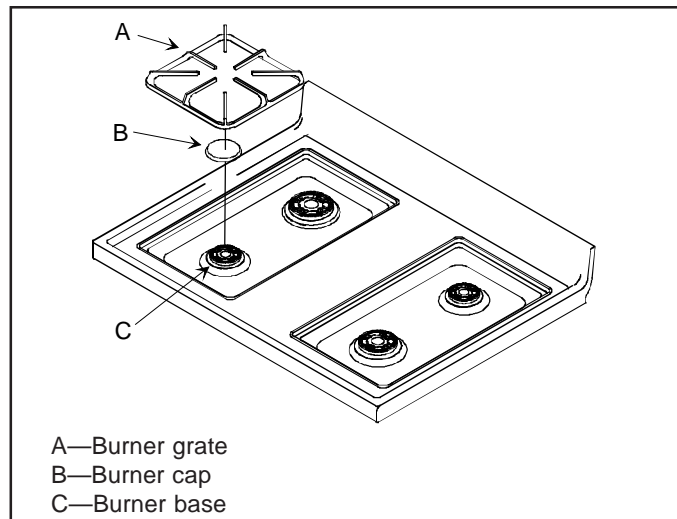
- Place a level on top oven rack or on top of range when leveling.
- Leveling legs must be extended out $\frac{1}{4}$ inch to engage anti-tip bracket.

Removal and Replacement of Range

1. Unplug range cord.
2. Turn off gas valve and disconnect gas supply.
3. Remove range and place aside.
4. Remove anti-tip bracket and reinstall anti-tip bracket into new location using instructions provided with bracket.
5. To reinstall range, follow instructions in *Installation* section of this manual.
 - Do not reuse a flexible connector after moving appliance.

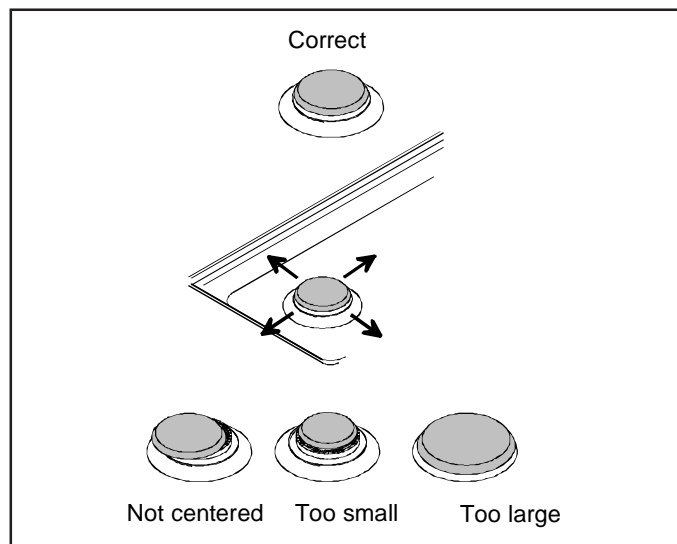
Place Grates and Burner Caps

Place burner cap on burner base and grate on rangetop.



Pegs in the burner base fit into recess in underside of burner cap. To make sure cap is properly aligned and leveled, move burner cap around on burner base. Burner cap must be correctly seated on burner base for proper operation of burner.

Make sure proper cap size is on each burner base. Burner does not burn properly if wrong size burner cap is placed on burner base.



Installation Instructions Sealed Burner

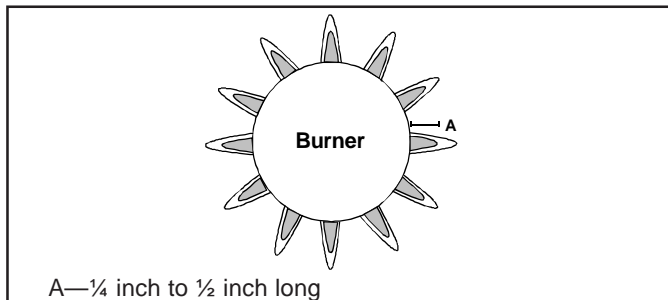
Test and Adjust Surface Burner Flame

WARNING

To avoid electric shock that can cause personal injury or death, disconnect main electrical supply to range before servicing.

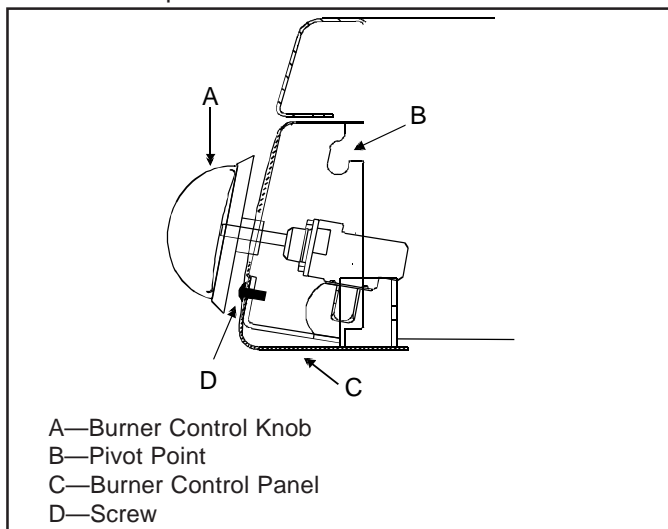
Turn on burner. See *Operating Surface Burners* section for burner operating instructions. Surface burner should ignite within 4 seconds. Properly adjusted surface burner flames are clean and blue with a distinct inner cone approximately $\frac{1}{4}$ inch to $\frac{1}{2}$ inch long. Some yellow flame is normal when burning LP/Propane.

- If burner flame is blowing or noisy, reduce airflow to burner.
- If burner flame does not hold its shape, increase airflow to burner.

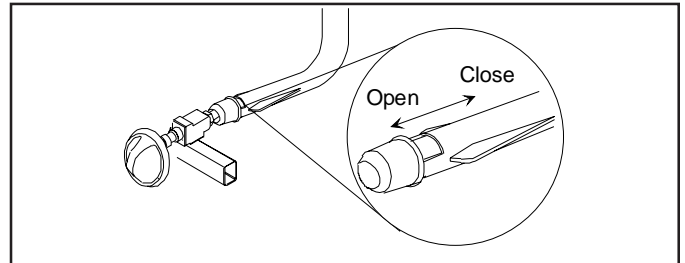


Adjusting Air Shutter

1. Remove 4 burner control knobs from range.
 - Exposes 2 screws on burner control panel.
2. Remove 2 screws from burner control panel.
 - Panel drops slightly after screws are removed.
3. Grasp bottom of burner control panel, gently lift and pull out panel until clear of burner valve stems.
 - After burner control panel clears valve stems, continue to roll panel until free from range. Set aside. See *Pivot Point* in figure.
 - Gas valve and orifice hood are visible after burner control panel is removed.



4. Slide air shutter open or closed depending on appearance of burner flame.
 - If flame is yellow and does not hold its shape, open air shutter.
 - If flame is blowing or noisy, close air shutter.
5. Reassemble burner panel.



Test and Adjust Oven Burner Flame

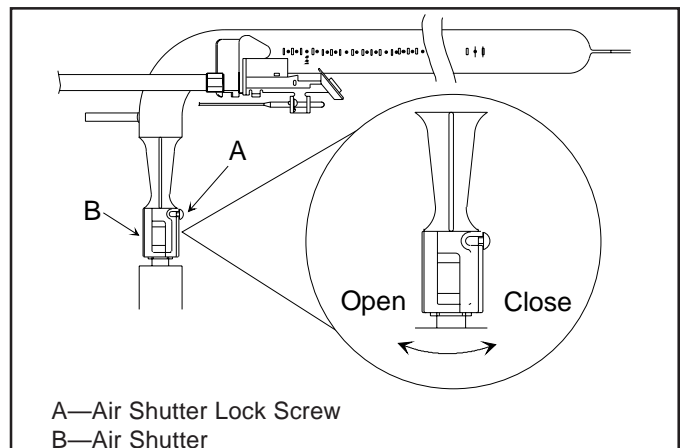
Turn on oven burner. See “Baking” section for oven burner operating instructions. Properly adjusted oven burner flames are blue with a distinct deep blue inner cone approximately $\frac{1}{2}$ inch long. When using natural gas, flame should not have any yellow flame when burning. Some yellow flame when burning LP/propane gas is normal.

Flame should not be visible in the oven cavity when burning and should not extend into the oven cavity beyond the removable oven bottom.

- If burner flame is blowing or noisy, reduce airflow to burner.
- If burner flame is yellow and does not hold its shape, increase airflow to burner.

Adjust Oven Burner Flame

1. Check that oven temperature knob is in OFF position.
2. Open broiler door and remove broiler pan, grid, and rack.
3. Through rectangular hole in rear of broiler cavity, loosen air shutter lock screw and open or close air shutter.
 - Tighten air shutter lock screw after adjusting.



4. Repeat test if necessary.
5. Replace broiler pan, grid, and rack.

General Information

Operating Surface Burners



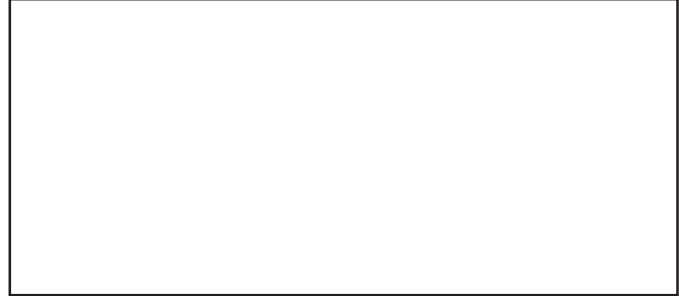
WARNING

To avoid risk of serious personal injury, property damage, or fire, do not leave burners unattended while in operation. Grease and spillovers may ignite causing a fire.

1. Push in and turn control knob counterclockwise to *LITE* position.
 - Burner should ignite within 4 seconds. If burner does not ignite within 4 seconds turn control knob to *OFF* position and follow directions in "Cleaning Surface Burners" and "Before Calling for Service" section. Try burner again. If burner still does not ignite in 4 seconds, contact an authorized servicer.

Adjusting Burner Flame Size

- While turning the burner control knob, watch the burner flame.
- Flame size should match the size of the pan. Do not allow the flame to extend up the sides of the pan. Flames that extend up the sides of the pan can ignite clothing, make handle hot, or burn.



Operating Surface Burner during a Power Failure

Although the system that lights the burners is electric, surface burners can be ignited during a power failure.

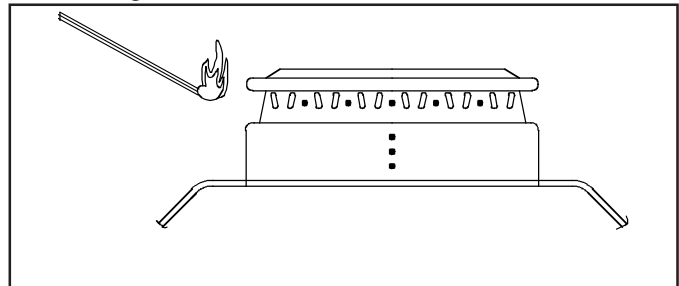


CAUTION

To avoid risk of property damage, never attempt to light bake/broil burners during a power failure.

2. After gas ignites, turn control knob to desired setting.
 - Each control knob can be set to any required cooking temperature. Burner settings do not have distinct clicks.
 - Use *HI* to bring food to boiling temperatures. When food is at boiling temperature, setting should be reduced.
 - After lighting burner do not operate burner for long periods of time without cookware on the grate. The finish on the grate can chip without cookware to absorb the heat.
3. Turn control knob to *OFF* position when finished cooking.

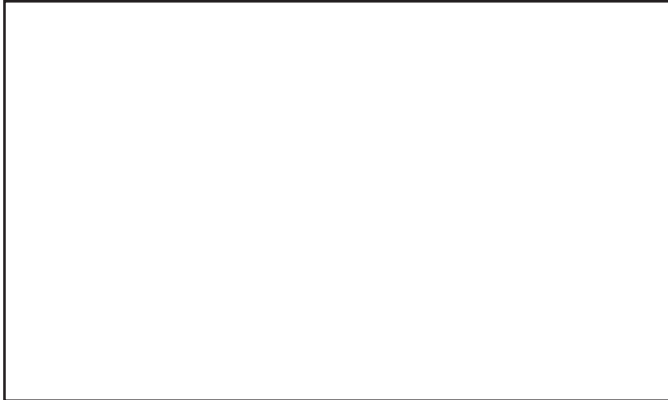
1. Hold match at base of desired burner.
2. Push in and turn control knob counterclockwise to *LITE* position.
3. After gas ignites, remove match from burner and turn burner control knob to desired setting.
4. Turn control knob to *OFF* position when finished cooking.



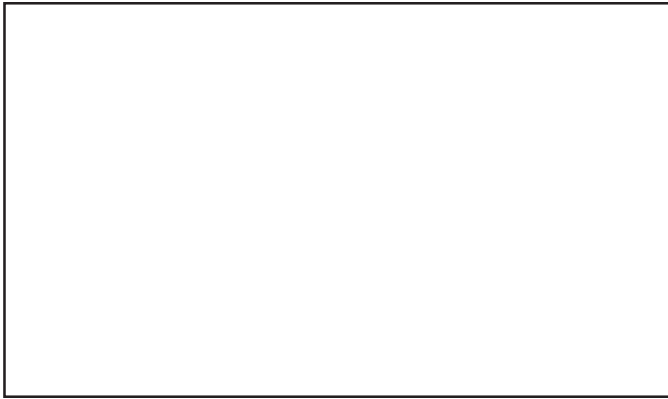
General Information

Cooking Utensils

- Use proper pan size. Do not use a pan that has a smaller bottom than surface burner. Do not use utensils that overhang grate by more than 1 inch.



- Use care when using glazed cooking utensils. Some glass, earthenware, or other glazed utensils break due to sudden temperature changes.
- Select utensils without broken or loose handles.
- Handles should not be heavy enough to tilt pan.
- Do not use stove top grills on your range. Stove top grills cause incomplete combustion and can create levels of carbon monoxide above allowable standards.
- Do not use a wok with a ring stand. Use flat bottom wok only.



Utensil Material Characteristic		
Type	Temperature Response	Uses
Aluminum	Heats and cools quickly	Frying, braising, roasting
Cast Iron	Heats and cools slowly	Low heat cooking, frying
Copper Tin Lined	Heats and cools quickly	Gourmet cooking, wine sauces, egg dishes
Enamelware	Depends on base metal	Low heat cooking
Ceramic (Glass)	Heats and cools slowly	Low heat cooking
Stainless Steel	Heats and cools at moderate rate	Soups, sauces, vegetables, general cooking

To avoid pan wobbling, use a pan with a flat bottom. Determine if pan has a flat bottom.

1. Rotate a ruler along bottom of pan. If pan is not flat, gaps between bottom of pan and edge of ruler occur.
2. A small groove or mark on a pan does not effect cooking times. However, if a pan has a gap, formed rings, or an uneven bottom, it does not cook efficiently and in some cases may not boil liquid.



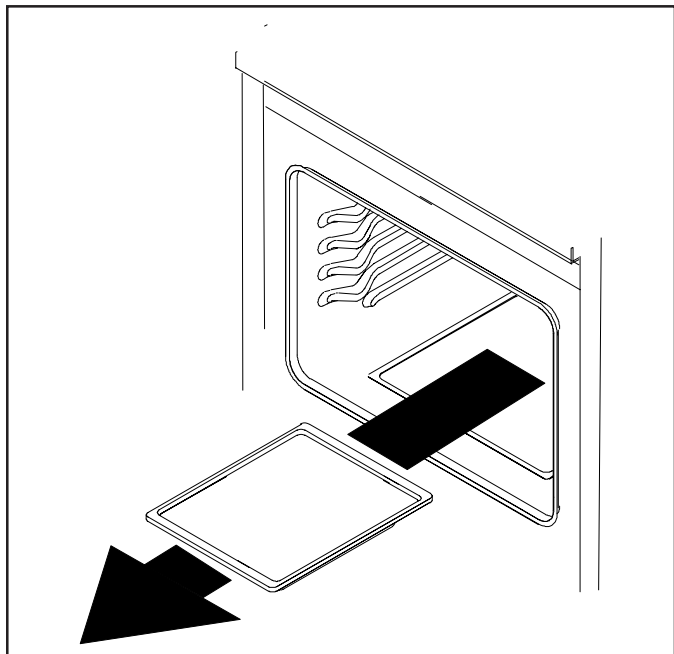
General Information

Prepare to Bake

Remove Items Stored in Oven

Remove any pans and other cooking utensils stored in oven. Items left in oven can cause damage to the oven or item in oven.

Never store the broiler pan or place utensils directly on the oven bottom. If the broiler pan or utensils are left on the oven bottom while heating, the oven bottom can chip or be damaged.



Oven Rack Placement

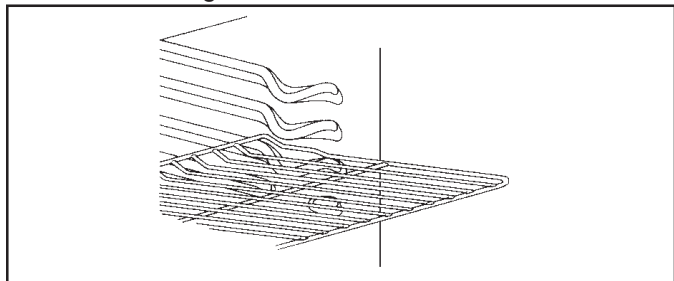
Position oven rack before turning oven on.



WARNING

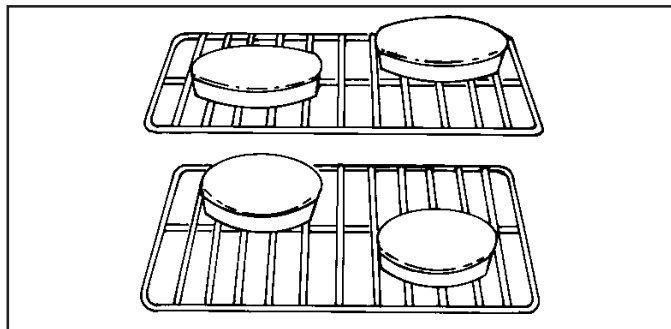
To avoid damaging oven liner or creating fire, do not line oven bottom or oven racks with foil.

1. Pull rack forward to stop position.
2. Raise front edge of rack and pull until rack is out of the oven.
3. Place rack in desired rack position.
 - Curved edge of rack must be toward rear of oven.



Pan Placement

- Keep pans and baking sheets 2 inches from oven walls.
- Stagger pans placed on different racks so one is not directly over the other.



Baking

1. To preheat oven, turn oven temperature knob to desired temperature.
 - Preheat oven for approximately 15-20 minutes.
2. Place food in oven.
3. After cooking time elapses, remove food and turn oven temperature knob to *OFF* position.



Check for Bake Burner Flame

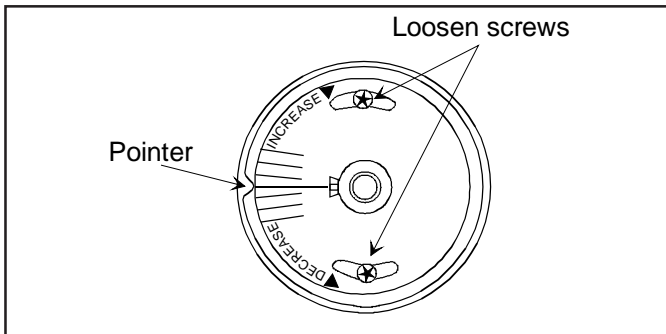
Allow no more than 40–60 seconds before burner ignites and heat is felt. To check for heat, open oven door to first stop and place hand over oven door. If heat is not felt, turn control knob to *OFF* position. If burner repeatedly fails to ignite, contact an authorized servicer.

General Information

Adjusting Factory Set Baking Temperature

Oven temperature is set at the factory. When first using the oven, follow recipe times and temperatures. If oven is too hot or too cool, temperature can be adjusted. Before adjusting oven baking temperature, test a recipe by using a temperature set higher or lower than the recommended temperature. The baking results should help you to decide how much adjustment is needed.

1. Pull oven thermostat knob straight out from control panel.
2. Turn knob over and loosen screws using Phillips screwdriver.
 - Do not remove screws.
3. While holding knob front, turn outer part of knob until pointer points to next line.
 - Turn outer knob clockwise to decrease or counterclockwise to increase temperature.
 - Each line adjusts temperature approximately 10°F.
 - Only move knob one line at a time.
4. Tighten screws with pointer in new position and replace knob on control panel.
 - Use oven with known recipe before moving pointer again.



Prepare for Broiling

WARNING

To avoid risk of fire, do not line the broiler grid with foil.

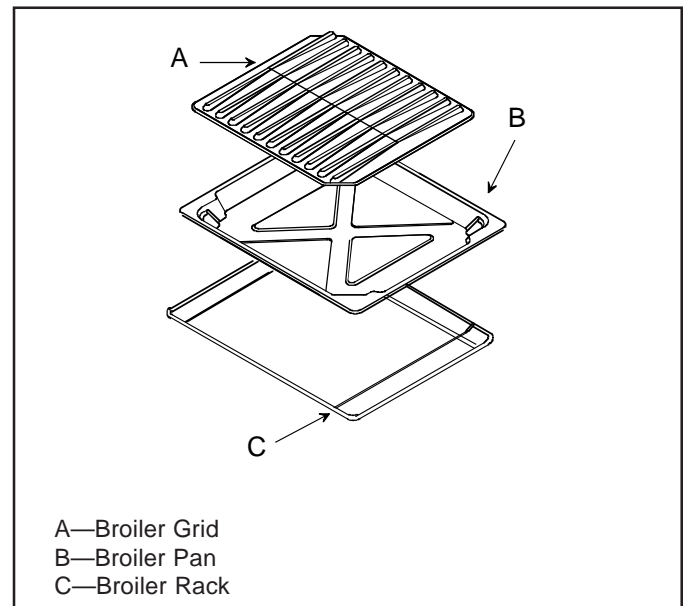
- Foil may trap grease on top of grid close to burner causing a fire.
- Never leave oven unattended while broiling. Overcooking may result in a fire.

Broiling Tips

- Remove excess fat from meat before broiling. Cut edges of meat to prevent curling.
- Place food on a cold ungreased broiling pan. If pan is hot, food sticks.
- All food except fish should be turned at least one time. Begin broiling with skin side down.
- Season meat after it has browned.
- Broiling does not require preheating.
- If food is not brown enough, cook on a higher rack position. If food is too brown, cook on a lower rack position.

Broiling

1. Open broiler door, slide out broiler rack, center food on broiling grid, and slide broiler rack into oven.
2. Close broiler door.
3. Turn oven temperature knob to *BROIL*.
4. After broiling, open broiler door, slide out broiler rack, remove food from broiling grid, slide broiler rack into oven, and close broiler door.
5. Turn oven temperature knob to *OFF*.



Check Broiler Flame

Allow no more than 40–60 seconds before burner ignites and flame is seen. If burner does not ignite turn temperature knob to *OFF* position. If burner repeatedly fails to ignite within 40–60 seconds contact an authorized servicer.

General Care and Cleaning

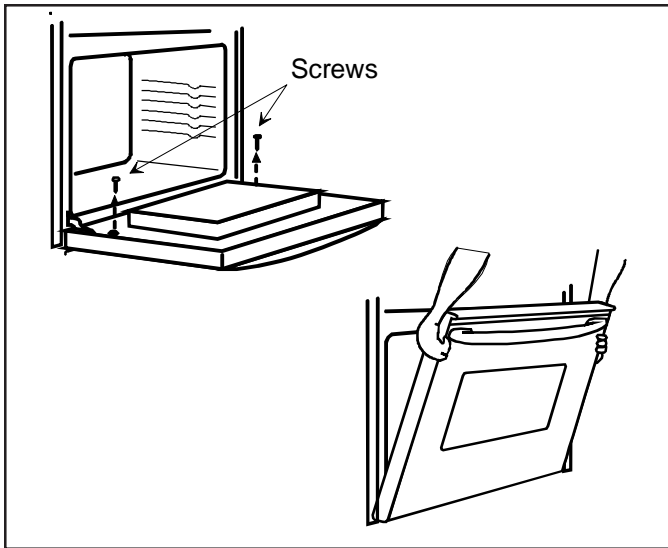
Removing Oven Door

CAUTION

To avoid personal injury or property damage, handle oven door with care.

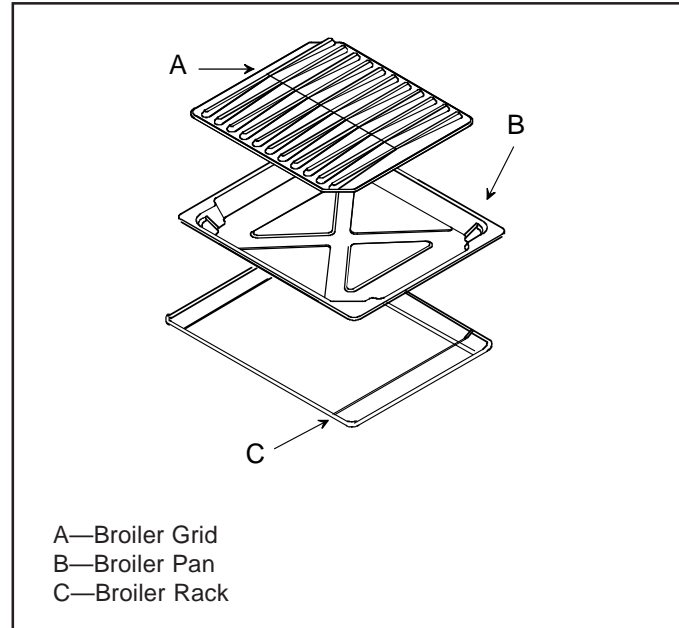
- Door is heavy and can be damaged if dropped.
- Avoid placing hands in hinge area when door is removed. Hinge can snap closed and pinch hands.
- Do not scratch, chip glass or twist door. Glass may break suddenly.
- Replace door glass if damaged.
- Do not lift door by handle.

1. Open door fully.
2. Remove screws.
 - Oven doors are attached with a screw on each side of oven door.
3. Close door to first stop, grasp door firmly on each side, and lift upward until door is off hinges.
 - Do not lift door by handle. Glass or handle can break.
 - Only push hinges closed once oven door is removed if necessary. Use both hands when closing hinge. Hinge snaps closed.
4. Reverse procedure to reinstall oven door.
 - Hinges must be in first stop position to reinstall door.



Remove Grid, Pan, and Rack

Remove and clean broiler grid, pan, and rack after use.

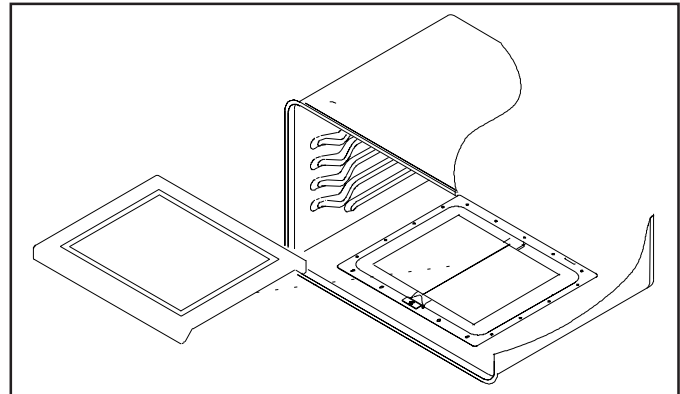


Removing Oven Bottom

CAUTION

To avoid risk of cuts, wear protective gloves when removing oven bottom. Sharp edges around oven bottom can cut.

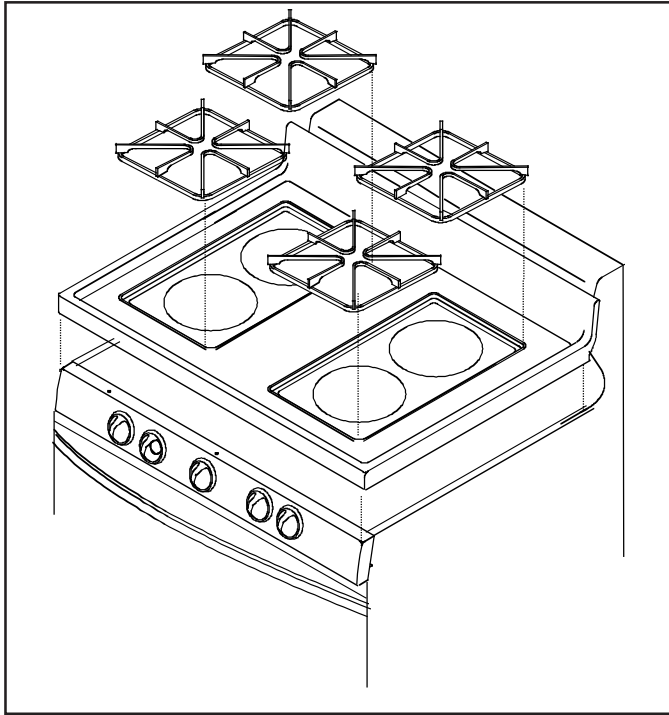
1. Pull oven bottom forward and lift out.
2. Wipe out burner area around burner with cloth and warm soapy water.
3. Dry area thoroughly.
4. Replace oven bottom. Oven bottom has tabs in rear that fit into oven floor slots.



Open Burner Care and Cleaning

Removing Rangetop and Grates

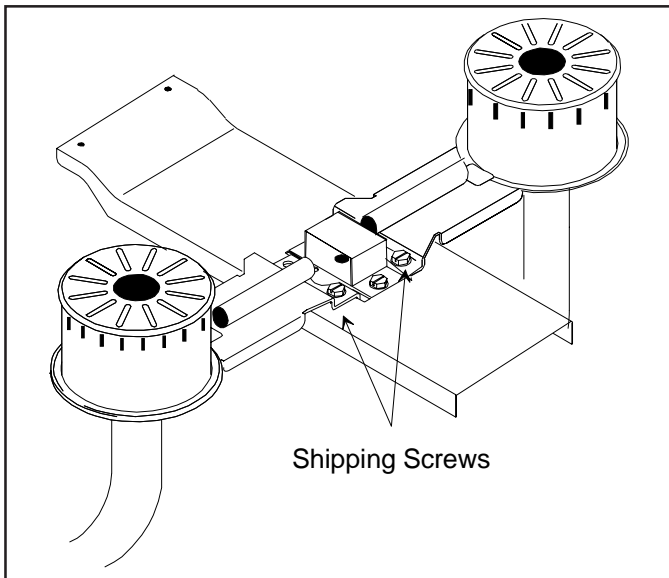
Remove rangetop and burner grates for cleaning under rangetop. Lift up Rangetop to remove. A peg on each side of rangetop snaps in side of range.



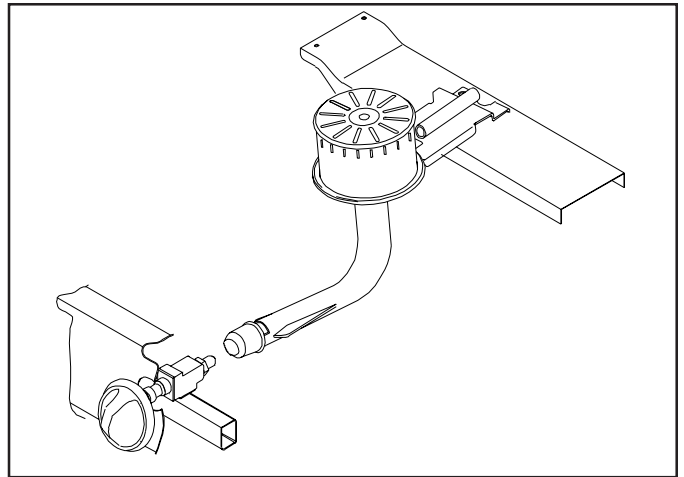
Removing Surface Burners

Clean surface burners frequently to ensure proper burner ignition. Cleaning is especially important after large spills. The surface burners can be removed for easy cleaning.

1. Remove shipping screws if they have not been removed during installation.

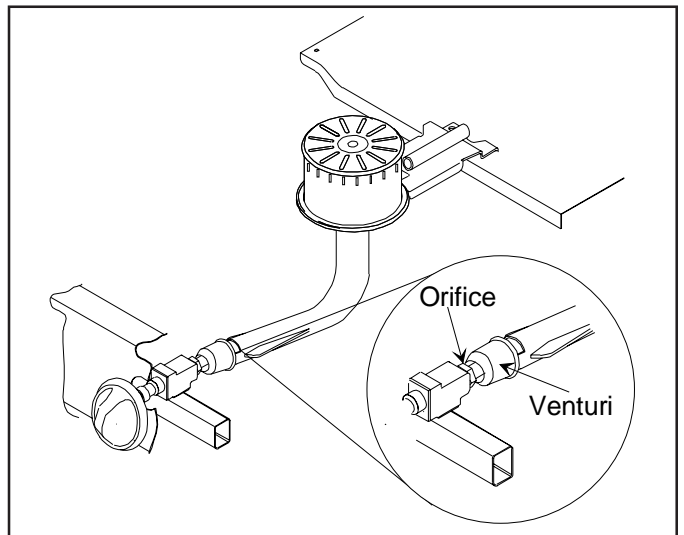


2. Tilt burner and lift out of range.



3. Reverse procedure to reinstall.

- Orifice must be in venturi as illustrated below.
- Shipping screws should be left off after range is installed.



Open Burner Care and Cleaning

Cleaning Surface Burners

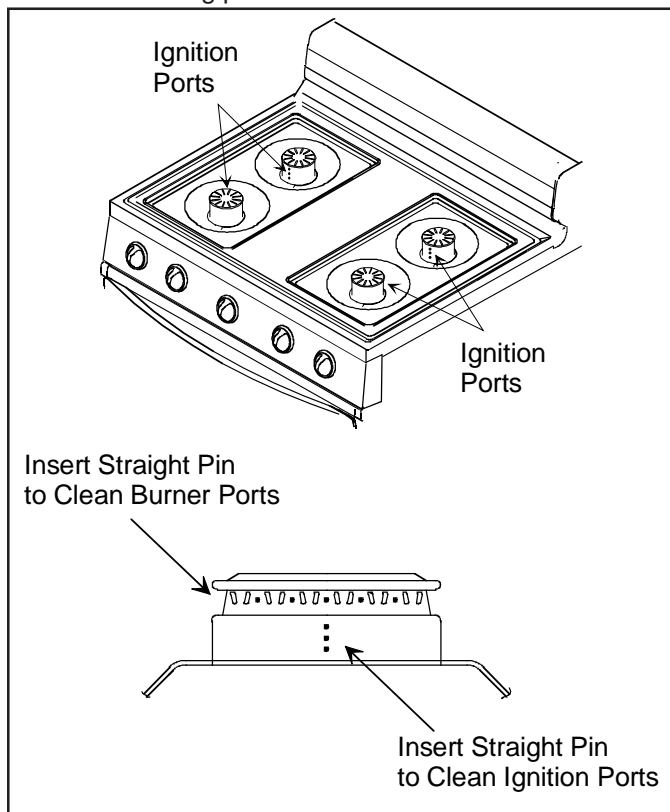
Clean surface burners frequently (every 6 months) to ensure proper burner ignition. Cleaning is especially important after large spills.

1. Wipe burners with cloth and mild detergent diluted in warm water.
2. Insert straight pin into burner and ignition ports or use toothbrush to clean away burnt on food.
 - Front surface burner ignition ports are located on back of front burners and can not be seen from front of range.
 - Do not use tooth picks or steel wool to clean burner ports. Tooth picks and steel wool can break off and clog ports.

Soaking Surface Burners

To remove burnt on food, soak surface burners in warm, soapy water. Rinse after soaking and clean ports with toothbrush or straight pin. Before replacing surface burners, shake until all water is out of burner, and then dry thoroughly. Check flame after reinstalling for correct size and shape.

Water left in burners after cleaning can cause slow ignition and poor flame shape. If necessary, place burners in oven and set oven temperature knob to "WM". After 20 minutes, burners should be dry. Using potholders, remove the burners from the oven.



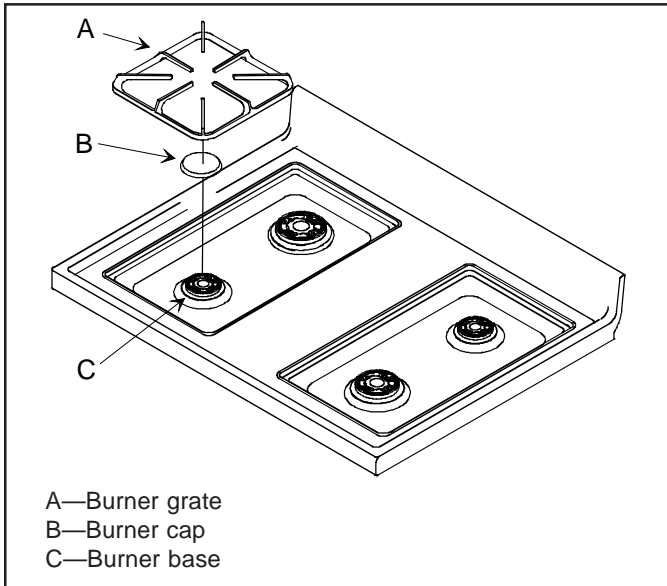
3. Wipe away any new soil on burner and dry thoroughly.

Open Burner Care and Cleaning

Part	Materials to Use	General Directions
Under rangetop	Soap and water	Lift rangetop off of range for easy cleaning. Frequent cleaning with soap and water, and non-abrasive pad prolongs time between deep cleanings. Be sure to dry thoroughly.
Surface burners	Soap and water	Cool before cleaning. Frequent cleaning with soap and water, and non-abrasive pad prolongs time between deep cleanings. For heavy soil burner can be removed and soaked in warm soapy water. See "Removing Surface Burners" and "Cleaning Surface Burners" sections. Be sure to dry completely before replacing.
Oven burner		Do not clean. Any soil will burn off while cooking.
Burner grates	Soap and water	Cool before cleaning. Frequent cleaning with soap and water, and non-abrasive pad prolongs time between deep cleanings. Be sure to dry thoroughly.
Hard to clean burner grates	½ Cup ammonia	Place burner grates in plastic bag with ½ cup ammonia. Do not pour ammonia into bag. Ammonia must remain in cup. To avoid rust, do not soak grates in ammonia. Close bag tightly and leave grates overnight. Before bag is opened turn face away to avoid breathing or eye contact with fumes. Remove grates from bag and rinse. Clean according to instructions above.
Broiler pan and grid	Soap and a non-abrasive plastic scouring pad	Drain fat, cool pan and grid slightly. (Do not let soiled pan and grid stand in oven to cool.) Sprinkle with soap. Fill the pan with warm water. Let pan and grid stand for a few minutes. Wash or scour if necessary. Rinse and dry. The broiler pan and grid may also be cleaned in the dishwasher.
Control knobs	Mild soap and water	Pull off knobs. Wash gently but do not soak. Dry and return controls to oven, making sure to match flat area on the knob to the flat area on shaft.
Oven door	Soap and water	Clean the inside and outside of the door with warm soapy water. <u>Silicon Oven Door Gasket</u> Some ovens have a gray silicon gasket that can be cleaned with soap and water. Do not allow harsh cleaners to come in contact with silicon gasket. <u>Braided Oven Door Gasket</u> Do not clean the braided oven door gasket. Gasket should not be moved while cleaning. Avoid getting any cleaning materials on gasket.
Outside finish and backguard	Soap and water	Wash all surfaces with cloth dampened in soapy water. Rinse and polish with a dry cloth. If knobs are removed, do not allow water to run down inside surface while cleaning.
Oven and broiler interior surfaces	Soap and water	Cool before cleaning. Frequent wiping with mild soap and water prolongs time between thorough cleanings. Be sure to rinse thoroughly. For baked on soil, use a cream cleaner or non-scratch powder. Never use commercial oven cleaner, strong abrasives, or steel wool. Do not line with foil.
Oven and broiler racks	Soap and water	Clean with warm soapy water. For heavy soil, clean by sprinkling baking soda and vinegar on rack. Wipe with non-abrasive pad. Rinse thoroughly <u>Hard to Clean Racks</u> Place racks in plastic bag with ½ cup ammonia. Do not pour ammonia into bag. Ammonia must remain in cup. To avoid rust, do not soak racks in ammonia. Close bag tightly and overnight. Before bag is opened turn face away to avoid breathing or eye contact with fumes. Remove racks from bag and rinse. Clean according to instructions above.

Sealed Burner Care and Cleaning

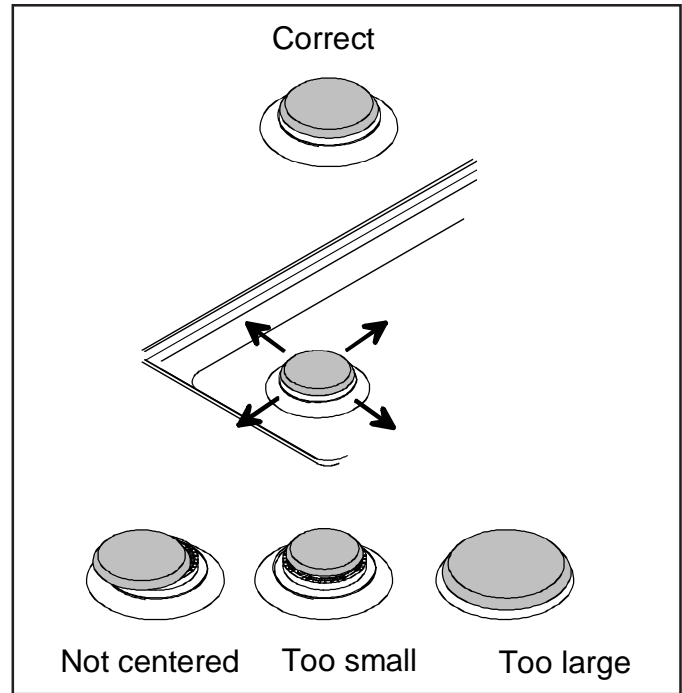
Place Grates and Burner Caps



To verify burner caps are properly aligned and leveled, move burner cap around on burner base. Pegs on the burner base fit into a recess area on the underside of the burner cap. Burner cap must be correctly placed on burner base for proper operation of burner.

Verify proper burner cap is located on each burner base. Burner does not burn properly if wrong size burner cap is placed on burner base.

Turn on burners to check for proper operation.



Sealed Burner Care and Cleaning

Part	Materials to Use	General Directions
Burner caps and grates	Soap and water	Cool before cleaning. Frequent cleaning with soap and water, and non-abrasive pad prolongs time between deep cleanings. Be sure to dry thoroughly.
Hard to clean burner caps and grates	½ Cup ammonia	Place burner caps and grates in plastic bag with ½ cup ammonia. Do not pour ammonia into bag. Ammonia must remain in cup. To avoid rust, do not soak grates in ammonia. Close bag tightly and leave grate and caps overnight. Before bag is opened turn face away to avoid breathing or eye contact with fumes. Remove burner caps and grates from bag and rinse. Clean according to instructions above.
Burner base	Soap and a non-abrasive plastic scouring pad, cloth, toothbrush or straight pin	Cool before cleaning. Clean burner base with warm soapy water and a clean cloth. If ports in burner base are clogged, clean with toothbrush or straight pin. Do not use toothpick. After cleaning replace burner caps and turn on burners to check for proper operation. See <i>Operating Surface Burners</i> section for burner operating instructions.
Broiler Pan and Grid	Soap and a non-abrasive plastic scouring pad	Drain fat, cool pan and grid slightly. (Do not let soiled pan and grid stand in oven to cool.) Sprinkle with soap. Fill the pan with warm water. Let pan and grid stand for a few minutes. Wash or scour if necessary. Rinse and dry. The broiler pan and grid may also be cleaned in the dishwasher.
Control knobs	Mild soap and water	Pull off knobs. Wash gently but do not soak. Dry and return controls to oven, making sure to match flat area on the knob to the flat area on shaft.
Inside oven door	Soap and water	Clean the outside of the door and the window area with warm soapy water. Do not clean the oven door gasket. Gasket should not be moved while cleaning. Avoid getting any cleaning materials on gasket.
Outside finish and backguard	Soap and water	Wash all glass with cloth dampened in soapy water. Rinse and polish with a dry cloth. If knobs are removed, do not allow water to run down inside surface while cleaning.
Oven and broiler interior surfaces	Soap and water	Cool before cleaning. Frequent wiping with mild soap and water prolongs time between thorough cleanings. Be sure to rinse thoroughly. For baked on soil, use a cream cleaner or non-scratch powder. Never use commercial oven cleaner, strong abrasives, or steel wool. Do not line with foil.
Oven and broiler racks	Soap and water	Clean with warm soapy water. For heavy soil, clean by sprinkling baking soda and vinegar on rack. Wipe with non-abrasive pad. Rinse thoroughly <u>Hard to Clean Racks</u> Place racks in plastic bag with ½ cup ammonia. Do not pour ammonia into bag. Ammonia must remain in cup. To avoid rust, do not soak racks in ammonia. Close bag tightly and overnight. Before bag is opened turn face away to avoid breathing or eye contact with fumes. Remove racks from bag and rinse. Clean according to instructions above.

Testing Procedures



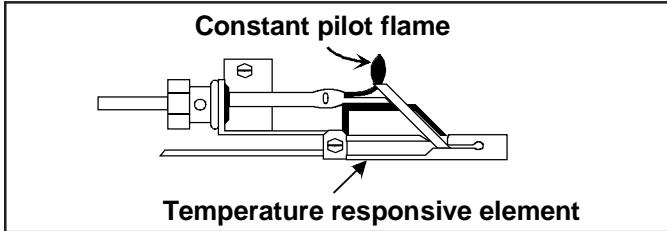
WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Oven with Constant Burning Pilot

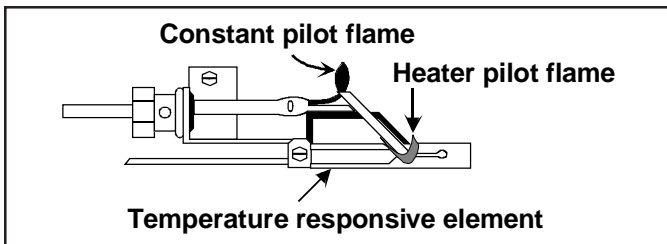
Operation

With oven thermostat in OFF position, only the constant burning pilot is lit as shown in the illustration below.

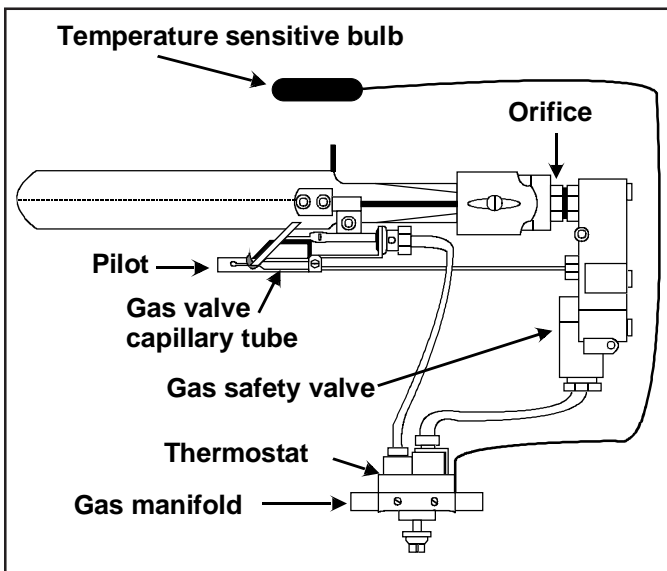


When the oven thermostat is turned to a desired temperature, more gas flows to the oven pilot.

This extends the oven pilot flame, commonly referred to as heater pilot. When extended, the pilot flame heats the temperature responsive element attached to the gas safety valve.



Turning the oven thermostat to a desired temperature also increases the main gas flow to the gas safety valve.



When the temperature responsive element reaches approximately 800°F, the internal liquid pressure causes the gas safety valve to open. Once the valve is opened, gas flows through the valve to the oven burner orifice and to the oven burner where it is ignited by the oven pilot.

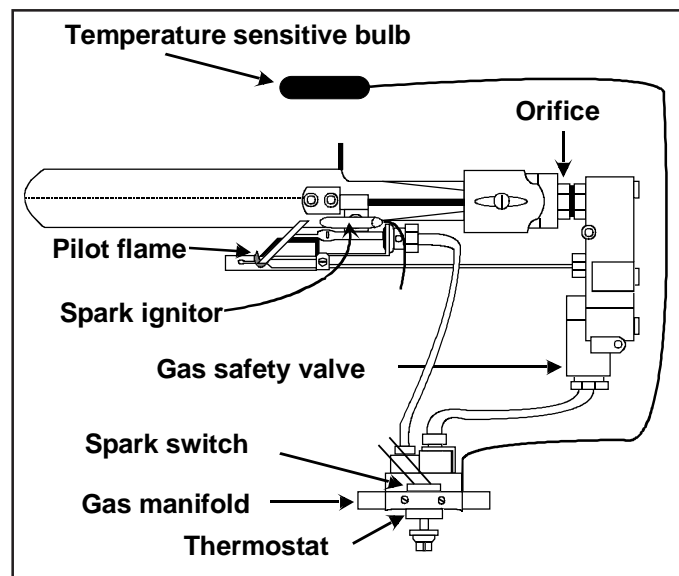
The temperature sensitive bulb positioned in the oven cavity and terminated in the internal thermostat bellows senses heat from the oven burner flame. As the oven temperature rises to the set temperature, the oven thermostat turns off the heater pilot, which allows the gas safety valve to close against incoming gas pressure. As the temperature sensitive bulb cools, the thermostat turns the heater pilot on, which allows gas to be provided to the oven burner. This on-off cycling continues until the thermostat is turned off, except at the broiling setting.

Oven with Pilot Spark Ignitor

Turning the oven thermostat to a desired temperature initiates a series of events leading to lighting the oven burner. When the thermostat is set to a desired temperature the gas supply to the oven pilot is turned on, the main supply to the gas safety valve is turned on and the spark switch is closed on top of the oven thermostat. Closing the spark switch energizes the spark module. The module produces a spark 4–6 times per second from the spark ignitor through the path of pilot gas to ground.

This spark ignites the gas at the pilot, referred to as the constant pilot flame and heater pilot flame as shown on the following diagram.

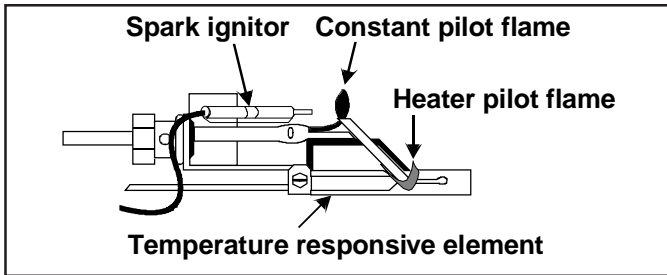
Oven with spark ignition operates identical to constant burning pilots, but the standing pilot is spark ignited.



Testing Procedures

WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.



The sparking stops automatically after igniting the pilot when the presence of flame at the end of the spark ignitor creates a current path between ignitor and grounded metal.

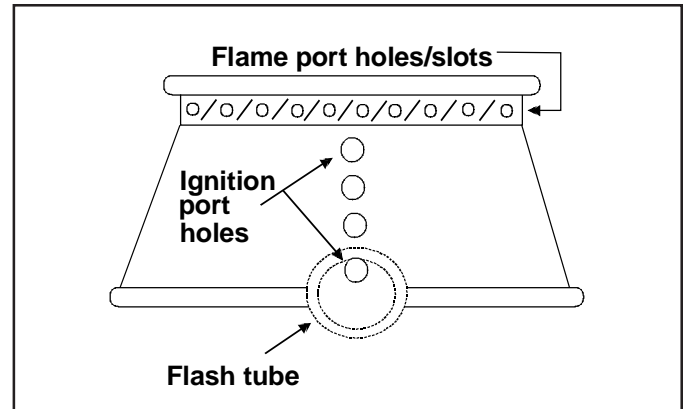
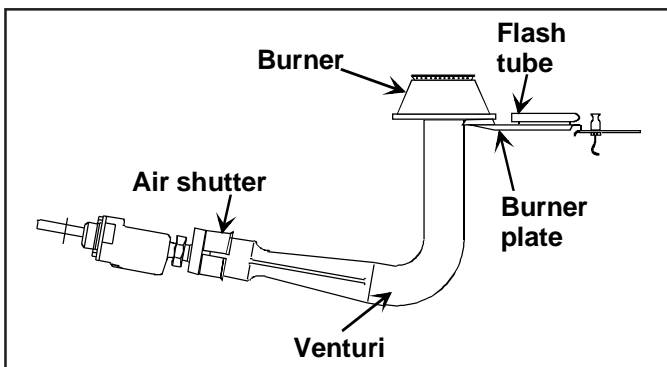
When the temperature responsive element reaches approximately 800° F, the internal liquid pressure causes the gas safety valve to open. When opened, the safety valve allows gas to flow through itself, the oven burner orifice and the oven burner where it is ignited by the oven pilot.

The temperature sensitive bulb positioned in the oven cavity and terminated in the internal thermostat bellows senses heat from the oven burner flame. As oven temperature rises to the set temperature, the oven thermostat turns off the heater pilot, which allows the gas safety valve to close against incoming gas pressure. As the temperature sensitive bulb cools, the thermostat turns on the heater pilot which allows more gas to the oven burner. This on-off cycling continues until the thermostat is turned off.

Important Note: The spark module will begin sparking if the constant burning pilot is extinguished while the thermostat is on. This will reignite the pilot.

Top Burners with Constant Burning Pilots

When a top burner valve is turned on, gas flows through the gas valve to the burner venturi. The gas exits through ignition port holes in the burner and out through burner flame port holes in the burner head. The gas exiting through the ignition port holes is lighted by the pilot. Flames travel up the outside of the burner and ignite gas at top of burner.



Top Burners with Spark Ignitor

Open Burners

Turning a top burner knob to *LITE* closes the top burner switch, completing a 120 VAC current path to the spark module. The spark module generates a high voltage/low amperage DC spark which arcs to ground. The spark ignites gas flowing through the flash tube which ignites gas coming out of the top of the burner. Sparking continues until the top burner knob is turned off *LITE*.

A top burner can be lighted during a power outage by holding a lighted match close to the burner top and turning top burner knob to *HI*.

Sealed Top Burners

Cast sealed top burners feature a cast burner cap and cast burner base. The burner base is secured to the top burner venturi.

Turning a top burner knob to *LITE* closes the top burner switch, completing a 120 VAC current path to the spark module.

The spark module generates a high voltage/low amperage DC spark which runs to ground. The spark ignites gas flowing from the top burner. Sparking continues until the top burner knob is turned off *LITE*.

A top burner can be lighted during a power outage by holding a lighted match close to the burner top and turning top burner knob to *HI*.

All surface valves feature an universal orifice and an adjustable air shutter.

Testing Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Oven System–Pilot Ignition

In the “OFF” position gas is always supplied to the constant pilot. When the thermostat knob is turned on to any temperature setting from 140°F to 550°F, gas flow to the pilot unit is increased. The heater pilot portion of the pilot flame heats the flame responsive element of the safety valve. When the flame responsive element has been heated for 30 to 60 seconds, the safety valve will open and allow gas to flow to the oven burner, where it will be lighted by the pilot.

When the set oven temperature is reached, the valve within the thermostat responding to temperature changes sensed by the oven temperature bulb will close, shutting off the gas supply to the heater pilot.

The flame responsive element will cool and the safety valve will close, shutting off the gas to the oven burner. The oven will cool until the oven bulb temperature drops enough to reopen the valve within the thermostat and bring the heater pilot flame back on, repeating the cycle. This cycle will continue until the oven control knob is turned to the “OFF” position. At all temperature settings, when the oven burner is on, it will be at a full rate and will not modulate.

When the thermostat control knob is turned to the “BROIL” position, the heater pilot remains on at all times, keeping the oven burner on and assuring smokeless broiling. After the higher broiling temperature is reached, the heater pilot will shut off, turning off the burner. The burner will then cycle on and off to maintain the proper broiling temperature.

Oven Pilot

This is a single tube, dual pilot. The constant or standing pilot should be a small stable flame. When heat is applied the valve within the thermostat increases gas flow to the pilot unit. This increase rate heats the flame responsive element of the safety device.

Safety Valve

The safety valve is controlled by its mercury filled flame responsive element. When this element is heated by the heater pilot flame, the mercury vaporizes and opens the valve within the control, allowing gas to flow to the oven burner.

A properly located and functioning pilot burner is a must for good operation of the system. Remember, this is a dual rate pilot. The standby must burn constantly since it ignites the oven burner and also serves as the base for the heater pilot. The standby flame must not be too small or too large. If either happens, the control system cannot function.

Oven Thermostat

This is a hydraulic control which responds to expansion and contraction of a liquid in the oven bulb. This operates a valve within the thermostat which opens to increase the gas supply to the pilot unit when heat is required and closes to shut off this increased rate to the pilot when the oven reaches the set temperature. In addition to controlling the heater pilot gas, the thermostat also provides shutoff of main burner gas. The gas supply to the oven burner is routed through the shutoff valve portion of the thermostat to insure that no gas can flow to the oven burner when the oven control knob is in the “OFF” position.

Spark Module 4 + 1 and 2 + 1

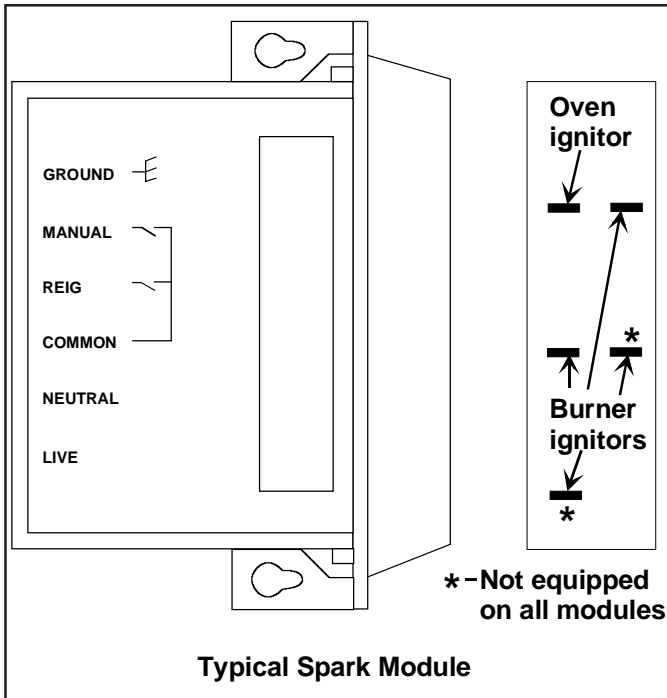
When properly operating, the spark module repeatedly produces a spark at the ignitor accompanied by a sharp snapping sound.

1. Turn off gas and power supply to unit.
2. Check wiring diagram to verify all terminals and wire connections are correct and tight with no cuts in the wiring. Verify proper polarity and ground.
3. Verify spark ignitor gap is approximately $\frac{1}{16}$ " (width of two dimes) between tip and pilot.
4. Prepare to measure voltage on spark module from terminal Live to Neutral.
 - Turn power supply back on.
 - If no voltage is present on the meter, this will indicate the electrical circuit is interrupted before the spark module.
 - Verify wiring is correct and in good condition.
5. Prepare to measure voltage on spark module from terminal Neutral to Manual.
 - Turn power supply back on.
 - Turn top burner to *LITE* position.
 - If no voltage is present on the meter, this will indicate no voltage is present at the burner switches. Check switches.
 - If voltage is present, replace spark module.

Testing Procedures

WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.



6. If erratic spark is a problem, remove control panel, darken the room and observe the operation. Broken insulation on wire's may produce arcing to ground not visible in the daylight.

Thermostat Spark Switch and Spark Switch Valve Test

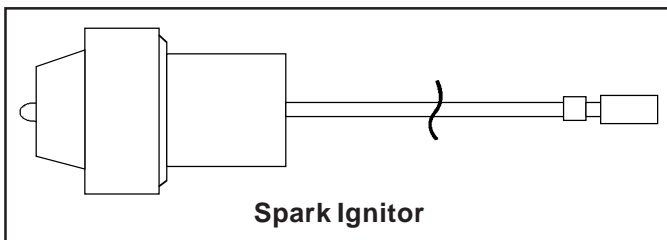
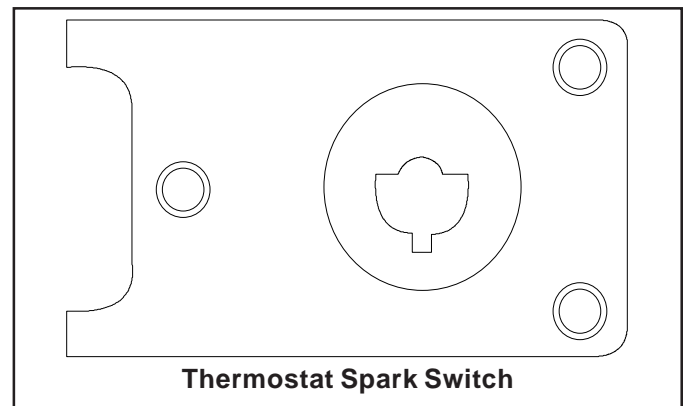
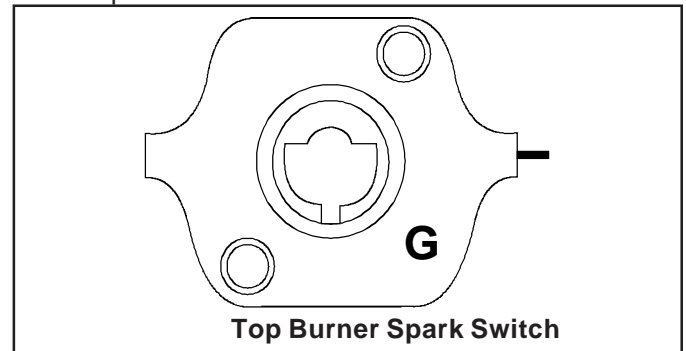
Each spark switch is connected in parallel with spark ignition circuit. One terminal on each switch is connected to 120 VAC, "COMMON" while the other terminal connects to the "MANUAL" on the spark module. Terminal "N" of the module connects to the common or neutral side of the AC line. The spark switch is located on the stem of the top burner valve.

1. Turn off gas and power supply to unit.
2. Check wiring diagram to verify all terminals and wire-connections are correct and tight.
3. Attach meter leads to switch terminals.
4. Turn switch to *LITE* position. Meter should indicate zero ohms or closed contacts. Infinite ohms or open contacts should be indicated in all switch positions except *LITE*.

Top Burner Spark Ignitors

Spark ignition units have an electrode for each burner (2 on an open burner, 4 on a sealed burner). When any of the burner valves are turned to the LITE position, the spark switch on the valve connects supplying voltage to the spark module. This activates the module that produces the spark at the ignitor electrode to light the burner.

1. Turn off gas and power supply to unit.
2. Check wiring diagram to verify all terminals and wire-connections are correct and tight.
3. Disconnect high voltage spark ignitor leads from terminals on the spark module.
4. Attach one meter lead to a good ground and the other lead connected to ignitor terminal wire. If continuity is indicated, ignitor or wire is shorted to ground. If no continuity is indicated, proceed to next step.
5. Attach one lead to ignitor terminal wire and the other lead to the tip of ignitor. If no continuity is indicated, ignitor or wire is open. If continuity is indicated ignitor is good.



Testing Procedures



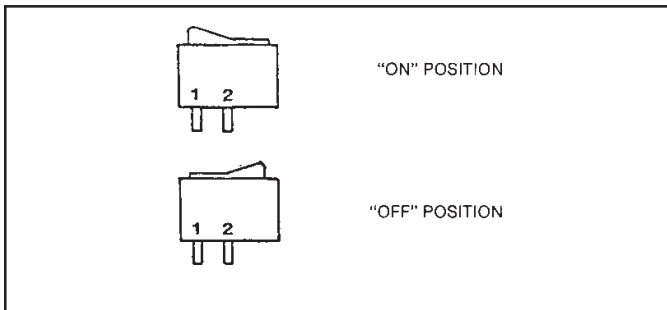
WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Oven Light Switch

The oven light switch is a single pole, single throw rocker type switch mounted in the control panel. Follow the procedures below to test the switch.

1. **Turn off power to the range.**
2. Disconnect the switch wire leads.
3. Attach an ohmmeter, set to the R x 1 scale, to the switch terminals 1 and 2. When the switch is set to the ON position, continuity should be indicated and open contacts should be indicated when the switch is set to the OFF position.



Troubleshooting Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Pilot Ignition Models

Problem	Possible Cause	Correction
Top burner will not light.	<ul style="list-style-type: none"> • Pilot flame is not lit. • Pilot flame is too small. • Air shutter needs adjustment. • Top burner orifice blocked. • Burner venturi, cap, ignition ports or flash tube clogged or out of adjustment. • Low gas pressure. • Incorrect conversion to LP gas. 	<ul style="list-style-type: none"> • Verify and relight pilot if necessary. • Adjust pilot for correct flame. • Adjust air shutter. • Check orifice for blockage, do not enlarge or distort opening. • Clean burner and verify proper alignment. • Verify correct gas pressure. • Verify correct conversion procedures.
Oven will not light.	<ul style="list-style-type: none"> • Pilot flame is not lit. • Pilot flame is too small. • Air shutter needs adjustment. • Burner ignition ports or orifice clogged. • Low gas pressure. • Incorrect conversion to LP gas. • No heater pilot. • Heater pilot not heating sensor. • Failed sensor. • Failed regulator. 	<ul style="list-style-type: none"> • Verify and relight pilot if necessary. • Adjust pilot for correct flame. • Adjust air shutter . • Check orifice and burner for blockage, clean if necessary. • Verify correct gas pressure. • Verify correct conversion procedures. • Check for blockage at pilot orifice and tubing. Verify gas pressure. If all OK, replace thermostat. • Check for blockage at pilot orifice and tubing. Verify proper pilot setting on thermostat, proper location of the sensor, gas pressure. Pilot flame should envelope the sensor. If above procedures check OK, but the flame is not large enough, replace thermostat. • If above procedures are OK, replace safety valve. • Verify gas pressure.
Frequent pilot flame outages.	<ul style="list-style-type: none"> • Pilot flame not adjusted correctly. • Pilot orifice dirty. • Strong drafts in the room. • Low gas pressure. • Pilot filter or harness blocked (top burner). • Failed thermostat (oven burner). 	<ul style="list-style-type: none"> • Adjust pilot correctly. • Clean orifice, do not enlarge or distort pilot opening. • Check for opened windows or doors. Verify no holes in floor or wall behind range. • Check for blockage and replace if necessary. • If the first four bullets check OK, check the pilot filter on the thermostat. If OK, replace thermostat.

Troubleshooting Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Pilot Ignition Models

Problem	Possible Cause	Correction
Oven does not maintain constant temperature.	<ul style="list-style-type: none"> • Thermostat sensor bulb not in proper location. • Oven sensor coated with foreign material. • Range is not properly converted for LP gas. • Oven bottom not positioned correctly. • Oven bottom covered with aluminum foil. • Utensils too large for oven, no air circulation. • Thermostat out of calibration. • High gas pressure. • Incorrect selector cartridge setting. • Flame responsive sensor being heated by oven burner. • Failed safety valve. 	<ul style="list-style-type: none"> • Reposition sensor bulb. • Carefully clean sensor with scouring pad. Place bulb in proper location. • Verify conversion procedures. • Verify correct placement of oven bottom. • Remove and explain to customer. • Customer education. • Check oven temperature. Replace thermostat if necessary. • Verify correct gas pressure. • Verify selector cartridge is set on proper setting for gas being used. • Verify proper location of sensor and pilot assembly. • Replace safety valve.
Sooting from burner flame.	<ul style="list-style-type: none"> • Too little primary air. • Burner head bent. • If using LP gas, range may not be properly converted. 	<ul style="list-style-type: none"> • Open air shutter on burner. • Level burner head. • Verify correct conversion procedures. Some yellow tipping normal on LP.
Flame blows away from burner.	<ul style="list-style-type: none"> • Too much air. • Gas pressure too high. • Draft around cooktop area. 	<ul style="list-style-type: none"> • Slightly close air shutter to burner. • Verify correct gas pressure. • Eliminate source of draft.
Flames flash back into mixer head.	<ul style="list-style-type: none"> • Too much air. 	<ul style="list-style-type: none"> • Close air shutter slightly.
Floating flame.	<ul style="list-style-type: none"> • Blocked burner. • Not enough air. 	<ul style="list-style-type: none"> • Check for possible blockage in burner. • Open air shutter.
Gas smell.	<ul style="list-style-type: none"> • Leak in pipe joints. 	<ul style="list-style-type: none"> • Verify gas connections and tighten if necessary.

Troubleshooting Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Non-Sealed Top Burners Spark Ignition

Problem	Possible Cause	Correction
Burner will not light. "SPARK" at top burner ignitors.	<ul style="list-style-type: none"> • Burner venturi, caps or ignition ports clogged or dirty. • Air shutter out of adjustment. • Burner flame not correctly adjusted for LP gas. • Poor ground on ignitor grounding bracket or gap between ignitor and bracket dimple is too large. • Low gas pressure. 	<ul style="list-style-type: none"> • Clean burner venturi, caps, and ignitor ports. Clean ports with a pin, NOT toothpicks. • Adjust air shutter. • Verify correct conversion procedures. • Tighten bracket and verify correct gap. • Verify correct gas pressure.
Burner will not light. No "SPARK" at top burner ignitors. Burner knob pushed in and held in "LITE" position.	<ul style="list-style-type: none"> • No 120 VAC to unit. • Micro switch contacts not closing. • Failed wiring or poor connection. • Failed spark module. • Ceramic ignitor dirty, spark gap out of adjustment. • Cracked or broken ignitor extension lead. 	<ul style="list-style-type: none"> • Verify electricity at wall outlet. • Verify correct wiring and connection are tight. • Verify correct wiring and connection are tight. • Verify operation of spark module. Replace if failed. • Clean ceramic ignitor and verify gap. • Replace ignitor.
Intermittent or occasional spark after unit is turned off.	<ul style="list-style-type: none"> • Reversed polarity. When polarity is correct, no voltage is present at neutral to ground and no voltage to spark module with switch in "OFF" position. 	<ul style="list-style-type: none"> • With all switches in the "OFF" position, verify voltage at "N" terminal of the spark module to ground. If voltage is present, polarity is reversed.
Unit continues to spark after it is turned off.	<ul style="list-style-type: none"> • Shorted valve switch. • Switch has been pulled up and off of fixed position on valve so that it is not turned to "OFF" position with valve stem. 	<ul style="list-style-type: none"> • Replace switch. • Carefully reposition switch on valve stem and rotate valve from "OFF" to "HIGH" several times to verify switch is not broken.
No spark or only random spark at one ignitor.	<ul style="list-style-type: none"> • Cracked ignitor or a pinched ignitor lead wire. • Poor connection of ground or lack of continuity to ground of ignitor. • Cracked or broken ignitor extension lead. 	<ul style="list-style-type: none"> • Replace ignitor lead or electrode. • Tighten ground connection and correct any breaks in ground path from ignitor to unit ground. • Replace ignitor.
Sooting from burner flame.	<ul style="list-style-type: none"> • Too little primary air. • Burner head bent. • If using LP gas, range may not be properly converted. 	<ul style="list-style-type: none"> • Open air shutter on burner. • Level burner head. • Verify correct conversion procedures. Some yellow tipping is normal on LP.
Flame blows away from burner.	<ul style="list-style-type: none"> • Too much air. • Gas pressure too high. • Draft around cooktop area. 	<ul style="list-style-type: none"> • Slightly close air shutter to burner. • Verify correct gas pressure. • Eliminate source of draft.
Flames flash back into mixer head.	<ul style="list-style-type: none"> • Too much air. 	<ul style="list-style-type: none"> • Close air shutter slightly.
Floating flame.	<ul style="list-style-type: none"> • Blocked burner. • Not enough air. 	<ul style="list-style-type: none"> • Check for possible blockage in burner. • Open air shutter.
Gas smell in the kitchen.	<ul style="list-style-type: none"> • Leak in pipe joints. 	<ul style="list-style-type: none"> • Verify gas connections and tighten if necessary.

Troubleshooting Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Sealed Top Burners Spark Ignition

Problem	Possible Cause	Correction
Burner will not light. "SPARK" at top burner ignitors.	<ul style="list-style-type: none"> • Burner venturi, caps or ignition ports clogged. • Poor ground on burner cap. • Weak spark module. • Low gas pressure. 	<ul style="list-style-type: none"> • Clean burner venturi, caps, and ignitor ports. • Clean burner cap. • Replace spark module. • Verify correct gas pressure.
Burner will not light. No "SPARK" at top burner ignitors. Burner knob pushed in and held in "LITE" position.	<ul style="list-style-type: none"> • No 120 VAC to unit. • Micro switch contacts not closing. • Failed wiring or poor connection at burner cap electrode and electrode socket. • Failed spark module. • Electrode dirty, burner cap dirty. • Cracked or broken electrode, electrode wire or electrode socket. 	<ul style="list-style-type: none"> • Verify electricity at wall outlet. • Verify correct wiring and connection are tight. • Verify correct wiring and connection are tight. • Verify operation of spark module. Replace if failed. • Clean electrode and burner cap. • Replace electrode wire or burner cap.
No spark or only random spark at one ignitor.	<ul style="list-style-type: none"> • Cracked ignitor or a pinched ignitor lead wire. • Poor connection of ground or lack of continuity to ground of ignitor. • Cracked or broken ignitor extension lead. 	<ul style="list-style-type: none"> • Replace ignitor lead or electrode. • Tighten ground connection and correct any breaks in ground path from ignitor to unit ground. • Replace ignitor.
Intermittent or occasional spark after unit is turned off.	<ul style="list-style-type: none"> • Crossed polarity. When polarity is correct, no voltage is present at neutral to ground and no voltage to spark module with switch in "OFF" position. 	<ul style="list-style-type: none"> • With all switches in the "OFF" position, verify voltage at "N" terminal of the spark module to ground. If voltage is present, polarity is reversed.
Unit continues to spark after it is turned off.	<ul style="list-style-type: none"> • Shorted valve switch. • Switch has been pulled up and off of fixed position on valve so that it is not turned to "OFF" position with valve stem. 	<ul style="list-style-type: none"> • Replace switch. • Carefully reposition switch on valve stem and rotate valve from "OFF" to "HIGH" several times to verify switch is not broken.
Sooting from burner flame.	<ul style="list-style-type: none"> • Too little primary air. • Burner head bent. • If using LP gas, range may not be properly converted. 	<ul style="list-style-type: none"> • Open air shutter. • Level burner head. • Verify correct conversion procedures. Some yellow tipping is normal on LP.

Troubleshooting Procedures



WARNING

To avoid risk of electrical shock, personal injury or death, disconnect power and gas supply before servicing, unless testing requires it.

Bake and Broil Burners

Problem	Possible Cause	Correction
Sooting from burner flame.	<ul style="list-style-type: none"> • Too little primary air. • Burner head bent. • If using LP gas, range may not be properly converted. 	<ul style="list-style-type: none"> • Open air shutter on burner. • Level burner head. • Verify correct conversion procedures.
Flame blows away from burner.	<ul style="list-style-type: none"> • Too much air. • Gas pressure too high. • Draft around cooktop area. 	<ul style="list-style-type: none"> • Slightly close air shutter to burner. • Verify correct gas pressure. • Eliminate source of draft.
Flames flash back into mixer head.	<ul style="list-style-type: none"> • Too much air. 	<ul style="list-style-type: none"> • Close air shutter slightly.
Floating flame.	<ul style="list-style-type: none"> • Blocked flue or burner. • Not enough air. 	<ul style="list-style-type: none"> • Check for possible blockage in burner. • Open air shutter.
Gas smell.	<ul style="list-style-type: none"> • Leak in pipe joints. • Valve leak. • Regulator plug loose. 	<ul style="list-style-type: none"> • Verify gas connections and tighten if necessary. • Check valves and replace if necessary. • Check and tighten regulator plug.
Gas valve opens but bake and broiler burners do not ignite. Delayed ignition.	<ul style="list-style-type: none"> • Bake/Broil ignitor positioned too far from burner. • Range is not properly converted for LP gas. • Low gas pressure. • Misalignment of orifice and burner. • Partial blockage of orifice, burner or feed tube. 	<ul style="list-style-type: none"> • Reposition Bake/Broil ignitor closer to the burner. • Verify correct conversion procedures. • Verify correct gas pressure. • Check alignment of burner and orifice and align correctly. • Check for blockage or burr in orifice.
Oven light does not operate.	<ul style="list-style-type: none"> • Failed oven lamp. • Failed light switch. • Failed wiring. • Failed light socket. 	<ul style="list-style-type: none"> • Check lamp and replace if necessary. • Check switch contacts. • Check for broken wires and loose or dirty connections. • Check light socket for continuity.

Disassembly Procedures



WARNING

- To avoid risk of electrical shock, personal injury, or death; disconnect electrical and gas supply before servicing.
- To avoid risk of death; always test unit for gas leaks after repairs are completed.

Moving and Replacing Range

1. Turn off electrical power and gas to the range.
2. Pull the unit forward, out of the opening.
3. Unplug the power cord leading from unit and disconnect the gas line.
4. Replace the range using the installation instructions and anti-tip bracket(s).

Open Burner Maintop

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove burner grates from maintop.
4. Raise maintop and support maintop with support rods (one on each side).
5. Replace and reassemble in reverse order.

Sealed Burner Maintop

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove screws securing surface burners to maintop.
4. Raise and remove maintop assembly.
5. Replace and reassemble in reverse order.

Control Panel

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove surface knobs.
4. Remove screws securing control panel to unit.
5. Open the oven door.
6. Pull outward on the bottom of control panel, then slide upward to release control panel.
7. Replace and reassemble in reverse order.

Surface Valve and Spark Switch

1. Remove control panel, see "Control Panel" procedure.
2. Disconnect wires and remove spark switch by pulling straight off valve stem.
3. Remove screw on the bottom of manifold securing surface valve.
4. Replace and reassemble in reverse order.

Backguard

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit. Pull range away from the wall.
3. Remove screws securing backguard left and right end caps to unit.
4. Raise backguard off unit and lay on padded surface to prevent scratches.

5. Remove screws securing backguard assembly together.
6. Replace and reassemble in reverse order.

Open Burner

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove grates and caps.
4. Lift maintop to gain access to top burners and set aside.
5. Remove shipping screws from burner if not removed during installation.
6. Lift burner up and tilt slightly to disconnect venturi from surface valve.
7. Replace and reassemble in reverse order.

Sealed Burner

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove grates, and caps.
4. Remove screws securing top burner to maintop.
5. Lift burner up and disconnect spark ignitor wire.
6. Replace and reassemble in reverse order.

Oven Burner Ignitor

1. Turn off electrical power and gas to the range.
2. Slide unit away from the wall to gain access to power cord, gas lines, and spark module, located in the rear of the range.
3. Disconnect gas and power from unit.
4. Remove oven door, racks, and oven bottom.
5. Remove nut securing flame spreader to oven burner.
6. Disconnect wire terminal plug connected to spark module.
7. Remove screw securing ignitor to oven burner assembly.
8. Remove oven ignitor, by sliding ignitor towards front of the oven, feeding wires through opening.
9. Replace and reassemble in reverse order.

Oven Burner

1. See "Oven Burner Ignitor" procedure, (steps 1-5).
2. Remove screws securing ignitor assembly to oven burner.
3. Carefully lift burner from the rear, releasing from safety valve. This will allow oven burner to be released in front from the bracket.
4. Replace and reassemble in reverse order.

Disassembly Procedures



WARNING

- To avoid risk of electrical shock, personal injury, or death; disconnect electrical and gas supply before servicing.
- To avoid risk of death; always test unit for gas leaks after repairs are completed.

Safety Valve

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. See "Oven Burner Ignitor" procedures, (steps 1-5).
4. Disconnect gas line to safety valve.
5. Remove screws securing safety valve mounting from support bracket.
6. Slide safety valve forward to release metal tabs from support bracket.
7. Replace and reassemble in reverse order.

Top Burner Venturi

1. Turn off electrical power and gas to the range.
2. Remove maintop assembly, see maintop procedures.
3. Slide venturi to the side out of bracket, then slide back to release venturi from top burner orifice.
4. Replace and reassemble in reverse order.

Pressure Regulator

1. Turn off electrical power and gas to the range.
2. Slide unit away from the wall to gain access to power cord, gas line, and rear panel.
3. Disconnect power from unit and gas line from regulator.
4. Disconnect regulator from manifold.
5. Replace and reassemble in reverse order.

Manifold

1. Disconnect regulator from manifold, see "Pressure Regulator" procedure.
2. Remove maintop, see maintop procedures.
3. Remove control panel, see "Control Panel" procedures.
4. Remove surface valves and oven thermostat from manifold.
5. Remove manifold from unit.
6. Replace and reassemble in reverse order.

Oven Thermostat

1. Remove control panel, see "Control Panel" procedure, (steps 1-5).
2. Remove maintop, see maintop procedures.
3. Remove gas supply line and pilot tubing to oven thermostat.
4. Remove screws securing oven thermostat to manifold.
5. Open the oven door and release capillary clip from oven cavity.

6. Carefully withdraw capillary tube from oven cavity.
7. Remove oven thermostat from unit.
8. Replace and reassemble in reverse order.

Oven Light Bulb/Oven Light Socket

1. Disconnect electrical power to range.
2. Using a glove, unscrew (counterclockwise) oven light bulb.

Proceed with the following steps for oven light socket removal.

3. Locate tabs on each side of the light socket and squeeze inward while pulling outward on the socket.
4. Disconnect wires from light socket and remove.
5. Reverse procedure to reinstall light socket.

Oven Liner Removal

NOTE: Require's removal of range from cabinet.

1. Turn off electrical power and gas to the range.
2. Slide unit away from the wall to gain access to power cord, gas lines, and rear panel.
3. Disconnect power from unit and gas line.
4. Remove oven door, racks, and oven bottom.
5. Remove thermostat capillary tube and clip.
6. Remove chip cover and screws securing oven vent.
7. Disconnect wiring, and withdraw capillary tube.
8. Remove oven light cover, bulb, and socket.
9. Release oven tank brackets at rear. Maneuver tank from frame.
10. Reverse procedure to assemble.

NOTE: When reinstalling new liner, use flat sheet metal strips 4 inches wide by 28 inches long to prevent insulation from bunching up, as new liner is installed.

Oven Door

1. Open oven door to gain access to screws securing door to hinges, (one each side).
2. Remove screws securing door to hinges.
2. Close oven door to first stop position (1/3 open) then grasp both sides and lift up off the hinges.



CAUTION

To avoid personal injury or property damage, do not lift oven door by the handle, brakage may occur.

Disassembly Procedures



WARNING

- To avoid risk of electrical shock, personal injury, or death; disconnect electrical and gas supply before servicing.
- To avoid risk of death; always test unit for gas leaks after repairs are completed.

Door Disassembly (solid door)

1. Remove oven door from range and place on a protected surface.
2. Remove screws securing door panel to door backer.
3. Remove screws securing door handle and spacers to door handle.
4. Carefully remove door gasket from the door, see "Door Gasket (solid door)" procedures (steps 2–3).
5. Replace and reassemble in reverse order.

Door Gasket (solid door)

1. Open oven door completely.
2. Grasp bottom corner of the gasket and push downward releasing metal tab from the oven door.
3. Grasp the top corner of the gasket pulling upward at an angle releasing metal tab from the oven door.
4. Replace and reassemble in reverse order.

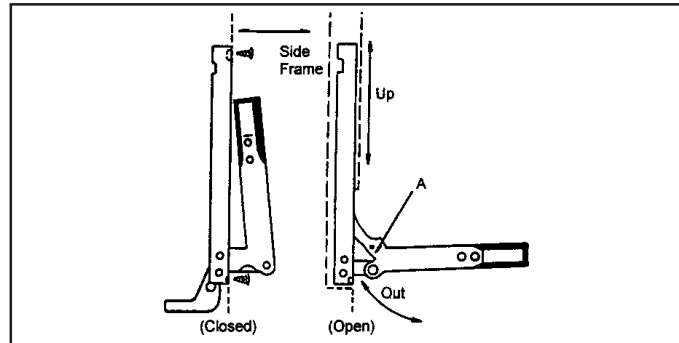
Door Disassembly (frameless)

1. Open oven door and remove screws securing door to hinges (if so equipped).
2. Open oven door to first stop position (1/3 open) then grasp both sides and lift off the hinges. Place on a protected surface.
3. Remove screws on right and left sides of oven door.
4. Remove screws from the bottom of oven door. Detach right and left end caps and glass support angles.
5. Remove side screws securing top door trim to oven backer. Separate glass outer door, trim and handle from door assembly.
6. Detach door handle by removing door handle screws.
7. Detach heat shield from oven door backer, by removing hex screws.
8. Access remainder of door assembly by removing hex screws from oven door backer.
9. Reverse procedure to reassemble.

Oven Door Hinge

1. Turn off electrical power to range.
2. Remove oven door assembly from the range, remove screws securing oven door to hinges if so equipped.
3. Carefully open the hinge fully, and insert a wooden dowel or screwdriver bit into opening marked A on the following diagram.
4. Remove the top and bottom screws securing hinge assembly to the front frame.

5. Slide the hinge assembly up and move top of hinge towards rear of the range. Withdraw hinge assembly through the frame opening.
6. Reverse procedure to reinstall oven door hinge assembly.



Side Panel Removal

NOTE: Replace left or right side panel one at a time. Do not attempt to remove both side panels as lack of support may cause subsequent damage/twist to backguard.

1. Turn off power to unit.
2. Disconnect electrical power and gas line from range.
3. Remove oven door assembly.
4. Remove storage drawer assembly.
5. Remove maintop.
6. Remove lower rear galvanized cover from appliance.
7. Support side of range four to six inches off floor. Remove four screws from bottom flange of side panel.
8. Remove main top support rod on side being repaired, if applicable.
9. Remove screws securing side panel to rear insulation retainer.
10. Remove screws securing backguard support to side panel.
11. Remove screws securing drip baffle to side panel.
12. Remove screws securing side panel to front frame flange.
13. Move rear of side panel away from range then move side panel forward to clear flange.
14. Reverse procedure to reinstall side panel.

Power Cord

1. Turn off electrical power and gas to the range.
2. Disconnect gas line and power cord from unit.
3. Disconnect power cord plug located behind back panel.
5. Remove screw securing cord to unit.
6. Replace and reassemble in reverse order.

Appendix A

Operation

Clock and Timer



Pads

HOUR—Use when setting hours for timer and clock.

MINUTE—Use when setting minutes for timer and clock.

CLOCK—Use to set time of day.

TIMER—Use to set timer.

Setting Electronic Clock

1. Press CLOCK pad.
2. Press MINUTE pad until correct minutes display.
3. Press HOUR pad until correct time displays.
 - Clock saves time of day after time is entered.

Setting Electronic Timer

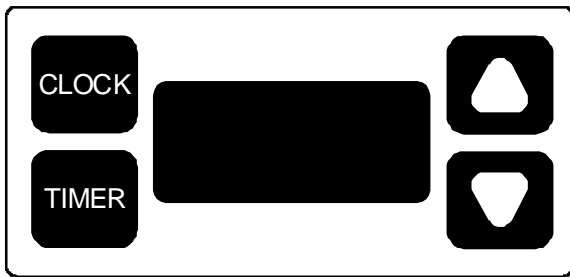
Electronic timer does not control bake or broil.

1. Press *TIMER* pad.
 - 59 minutes displays.
 - Set timer up to 1 hour 59 minutes.
2. Press MINUTE or HOUR pad to set time.
 - If desired time is less than 1 hour, press MINUTE pad until desired time displays.
 - If desired time is more than 1 hour, press HOUR pad and then press MINUTE pad until desired time displays.
 - Timer begins counting down automatically after time is entered.
3. After time elapses, press CLOCK pad to cancel signal and return to time of day.

Appendix B

Operation


Clock and Timer




Pads

CLOCK—Use to set time of day.

TIMER—Use to set timer.

 —Use to increase time.

 —Use to decrease time.

Setting Electronic Clock

1. Press *CLOCK* pad.
2. Press up or down arrow pad until correct minute's display.
3. Press *CLOCK* pad to set time of day.

Setting Electronic Timer

Electronic timer does not control bake or broil. Timer can be set up to 12 hours. Time displays and counts down in hours and minutes when more than 59 minutes are entered. For example, 1:30 equals one hour and thirty minutes, or 90 minutes total.

1. Press *TIMER* pad.
 - 0:00 minutes displays.Press up or down arrow pad to set time.
 - Press up arrow pad once to advance 1 minute at a time, or press and hold up arrow pad to advance in increments of 10 minutes. Press down arrow pad to reduce time in 1 and 10 minute increments.
2. Colon in display flashes and the timer begins counting down automatically after time is entered.
3. Reminder Beep – When the timer count down reaches 1 minute, the timer beeps once to remind you that 1 minute of time remains.
4. After time elapses, timer beeps 3 times, and then once every 10 seconds until *TIMER* pad is pressed.
 - Display returns to time of day after *TIMER* pad is pressed.

Canceling Electronic Timer

Press *TIMER* pad to cancel timer.