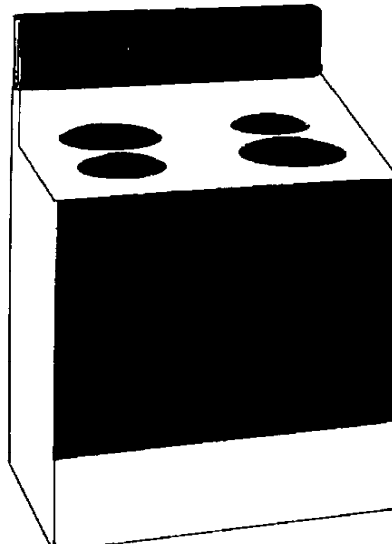


Base manual covers general information
on Freestanding/Slide-In Gas Ranges.
Refer to individual Technical Sheets
for information on specific models.

Service

Freestanding/Slide-In 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

RS2310002
Revision 1
February 1998

Table of Contents

Important Information	4	Level Range	20
Introduction		Placing Burner Caps	20
General Information	5	Adjusting Surface Burner Flame	21
Model Identification and Ordering		Adjusting Surface Burner Low Flame Size	21
Replacement Parts	5	Adjusting Oven Burner Flame	21
Amana Cooking Products Nomenclature	5	Broiler Flame	21
Safety Information		AXF100 Backguard Kit Installation	
Safety Practices for Servicer	7	Instructions Contents	22
Servicing	7	Installation Instructions for Freestanding Ranges	
Receiving Oven	7	Packing Material	23
Using the Oven	8	Range Location	23
Self-Cleaning Oven	8	Cabinet Opening	23
Baking, Broiling, and Roasting	8	Minimum Clearances to Combustible Surfaces	23
Connecting Range to Gas	8	Special Counter Top Conditions	24
Electrical Requirements	9	Anti-tip Bracket Installation	24
Extension Cord	9	L-shaped Anti-tip Brackets	24
Grounding	9	Rectangular Anti-tip Bracket	24
Product Safety Devices	10	Electrical Connection Requirements	25
Installation Instructions for Slide-In Ranges		Electrical Connection Clearance	25
Packing Material	11	Gas Connection Requirements	25
Range Location	11	Gas Supply Location	25
Minimum Clearances to Combustible Surface	11	Gas Supply Pressure	25
Standard Cabinet and Counter Top Height and		Pressure Regulator Location	26
Depth	11	Pressure Regulator Conversion	26
Counter Top Opening	12	Converting Surface Burners for Use with	
Counter Top Front Edge	12	LP/Propane	27
Irregular Cabinet and Counter Top Heights	12	Converting Oven Burner for Use with LP/Propane	28
Special Counter Top Conditions	13	Converting Broiler Burner for Use with	
Anti-tip Bracket Installation	13	LP/Propane	28
L-shaped Anti-tip Brackets	13	Converting Type 1 Pressure Regulator for	
Rectangular Anti-tip Bracket	13	Use with Natural Gas	28
Electrical Connection Requirements	14	Converting Type 2 Pressure Regulator for	
Electrical Connection Clearance	14	Use with Natural Gas	28
Gas Connection Requirements	14	Converting Surface Burners for Use with	
Gas Supply Location	14	Natural Gas	28
Gas Supply Pressure	14	Converting Oven Burner for Use with Natural Gas	29
Pressure Regulator Location	15	Converting Broiler Burner for Use with	
Pressure Regulator Conversion	15	Natural Gas	29
Gas Connection	16	Gas Connection	29
Testing for Gas Leaks	17	Testing for Gas Leaks	29
Converting Surface Burners for Use with		Seal Openings	30
LP/Propane	17	Place Range	30
Converting Oven Burner for Use with LP/Propane	18	Removal and Replacement of Range	30
Converting Broiler Burner for Use with		Adjusting Surface Burner Flame	30
LP/Propane	18	Adjusting Air Shutter	30
Converting Type 1 Pressure Regulator for Use		Adjusting Surface Burner Low Flame Size	31
with Natural Gas	18	Broiler Flame	31
Converting Type 2 Pressure Regulator for Use		Adjusting Oven Burner Flame	31
with Natural Gas	18	Broiler Flame	31
Converting Surface Burners for Use with		Placing Burner Caps	31
Natural Gas	18	Level Range	32
Converting Oven Burner for Use with Natural Gas	19	Removal and Replacement of Range	32
Converting Broiler Burner for Use with Natural		General Information	
Gas	19	Cooking Utensils	33
Gas Supply Pressure	19	Oven Rack Placement	33
Gas Connection	19	Pan Placement	33
Testing for Gas Leaks	20	Broiling Rack Placement	33
Removal and Replacement of Range	20	Removing Oven Door	33
Seal Openings	20	Replacing Oven Light	34

Table of Contents

Replacing Backguard Panel Light	34	Power Cord	43
Removing Storage Drawer	34	Top Burner Venturi	43
Replacing Burner Caps	34	Manual/Automatic Oven Door Latch Assembly	43
Replacing Drip Pans	34	Door Plunger Light Switch	44
Care and Cleaning Cleaning	35	Oven Light Bulb/Oven Light Socket	44
Operating Instructions		Oven Liner Removal	44
Operating Surface Burners	36	Frameless Door Disassembly	44
Operating Surface Burner during a Power		Oven Door Hinge	45
Failure	36	Side Panel removal	45
Oven Light	36	Storage Drawer and Storage Drawer	
Panel Light	36	Panel Removal	45
Testing Procedures		Storage Drawer Track Removal	45
Fluorescent Light Ballast	37	Appendix	
Fluorescent Light Starter	37	Clean Timer with Mylar Overlay—315568	
Fluorescent Light	37	Electronic Oven Control Pads and Lights	A-1
Oven Light Switch	37	Setting Electronic Clock	A-1
Oven Door Switch	37	Setting Electronic Timer	A-1
Oven High Limit/Fan Switch	37	Baking	A-2
Oven Thermostat	38	Broiling	A-2
Oven Temperature Sensor	38	Broiling Tips	A-2
Cooling Fan Motor	38	Self-Cleaning	A-2
Clean Circuit Manual Latch Switch	38	Interrupt Self-Clean Cycle	A-2
Auto Latch Motor	39	Service Information	A-3
Bake and Broil Igniters	39	Test Procedure	A-3
Gas Valve	40	Clock Display Not Operating	A-3
Spark Module 4 + 0	40	Clean Operation of Clock	A-3
Top Burner Spark Igniters	40	Electric Slew ERC3—315569	
Spark Switch Test	40	Electronic Oven Control	B-1
Disassembly Procedures		Special Oven Control Functions	B-1
Moving and Replacing Range	41	Quick Reference Instructions	B-2
Maintop Removal—Slide-In	41	Baking	B-2
Control Panel Disassembly—Slide-In	41	Timed Baking	B-3
ERC—Slide-In	41	Delayed Baking	B-3
Oven Light Switch—Slide-In	41	Broiling	B-4
Top Surface Valve and Spark Switch—Slide-In	41	Self-Cleaning	B-4
Spark Module—Slide-In	41	Delayed Self-Cleaning	B-4
ERC Cooling Fan—Slide-In	41	Interrupt Self-Clean Cycle	B-5
Oven High Limit/Thermal Fan Switch—Slide-In	41	Child Lock Out	B-5
Maintop Removal—Freestanding	41	Adjusting Oven Temperature	B-5
Front Control Panel—Freestanding	41	Service Tones and Codes	B-5
Top Surface Valve and Spark		Service Information	B-6
Switch—Freestanding	42	Testing Procedures	B-6
Glass backguard—Freestanding	42	ERC Warnings and Failure Codes	B-7
Metal Backguard—Freestanding	42	Temperature Sensor	B-7
Fluorescent Light Bulb—Freestanding	42	Eaton KRC with Mylar Overlay	C-1
Fluorescent Light Socket—Freestanding	42	Electronic Oven Control Pads and Lights	C-2
Fluorescent Light Starter/Starter		Setting Electronic Clock	C-2
Base—Freestanding	42	Setting Electronic Timer	C-2
Ballast_Freestanding	42	Automatic Oven Shutoff	C-3
Oven Door Removal	42	Quick Reference Instructions	C-3
Oven Sensor	42	Baking	C-4
Top Burner	42	Adjusting Factory Set Bakeing Temperature	C-4
Oven Burner Ignitor	43	Broiling	C-4
Oven Burner	43	Self-Cleaning	C-5
Broil Burner	43	Service Tones	C-5
Lower Burner Box	43	Service Information	C-6
Gas Valve	43	KRC Warnings and Failure Codes	C-6
Pressure Regulator	43	Temperature Sensor	C-7
Shut-Off Valve	43	Test Procedure	C-7

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

CAUTION

Amana will not be responsible for any injury or property damage from improper service procedures. If performing

To locate an authorized servicer, consult your telephone book or dealer from whom you purchased this product.

CONSUMER AFFAIRS DEPT.

1 (800) 843-0304

CALL

If outside the United States contact:

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 consumers 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.

Self-Cleaning Oven

- Do not clean door gasket. Door gasket is essential for a good seal. Be careful not to rub, damage or move it.
- Do not use oven cleaners. No commercial oven cleaner or oven liner protective coating of any kind should be used in or around any part of the oven.
- Remove the broiler pan, oven racks, and other cookware before self-cleaning oven.

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.

Electrical Requirements

Safety Information

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

Extension Cord

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

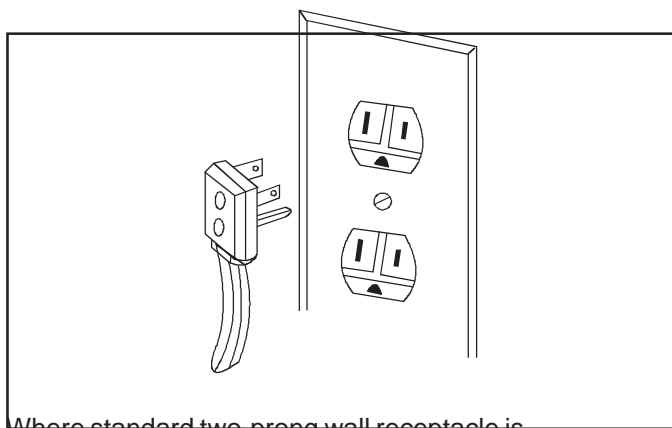
Extension cords will adversely affect the performance of glow bar ignitor and spark system.

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.



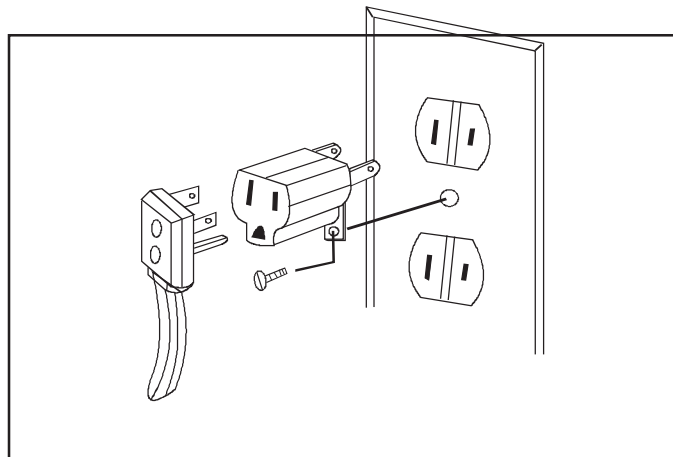
Where standard two-prong wall receptacle is encountered, it is consumers responsibility and obligation to have it replaced with a properly grounded three-prong wall receptacle.

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.

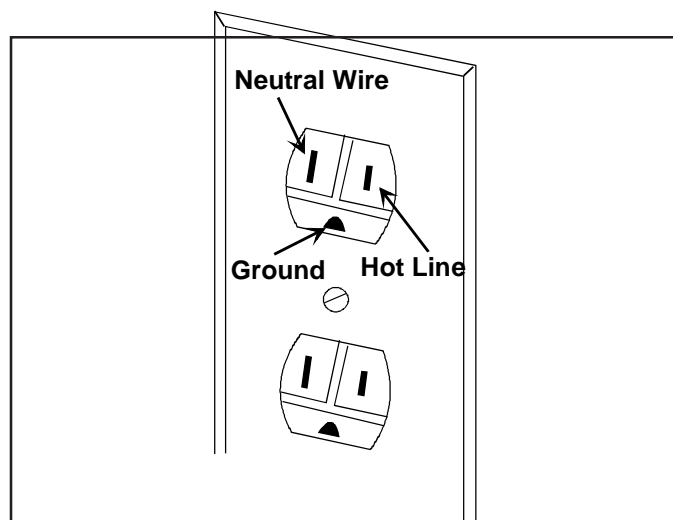
Larger slot on adapter must be aligned with larger slot in the wall receptacle to provide proper polarity.



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 for Slide-In Ranges

Packing Material

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

Range Location



WARNING

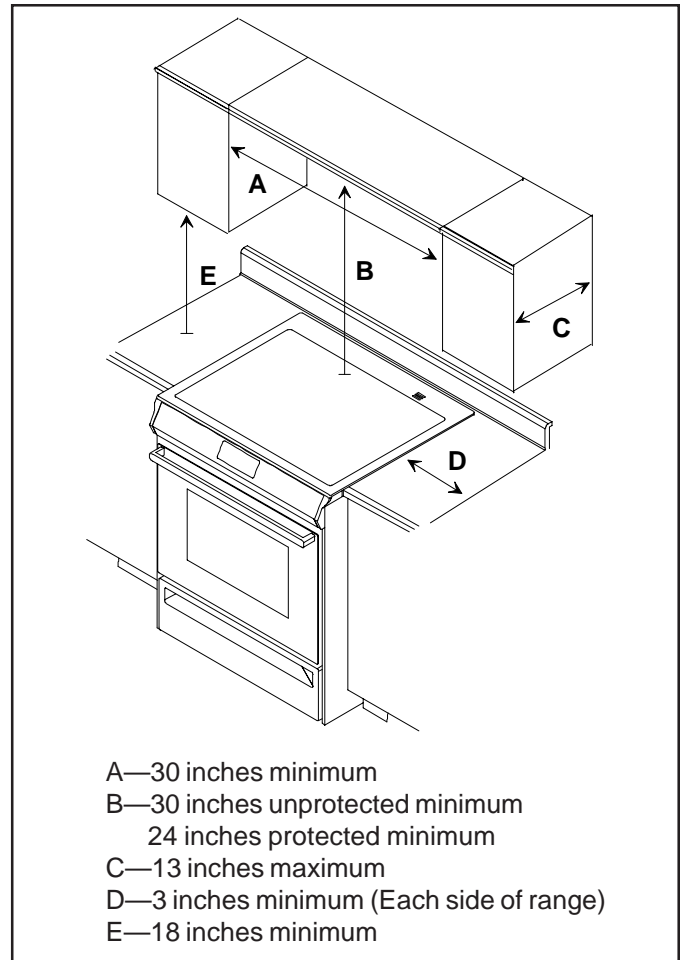
To avoid risk of burns or fire by reaching over heated surface units, cabinet storage space located above range should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5 inches beyond the bottom of the cabinets.

Choose a location based on following factors.

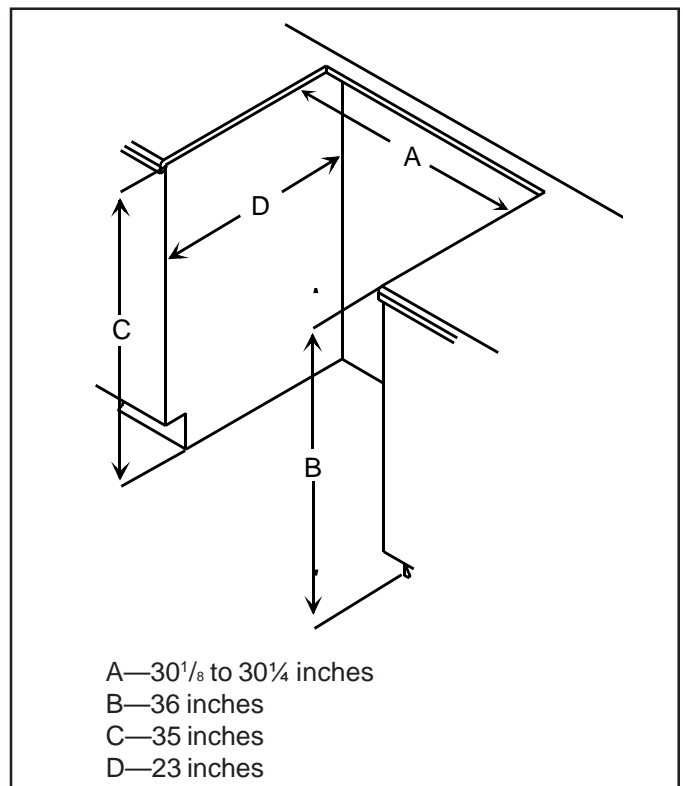
- Drafts caused by home heating and air conditioning and open doors or windows can disrupt ventilation air pattern. Range should not be installed near windows or doors.
- Make sure there is adequate space for proper installation.
- Carefully read all instructions before beginning installation.
- Any openings in wall behind range and in floor below range must be sealed.
- Installation of appliances designed for manufactured (mobile) home installation must conform with Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 [Formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD (Part 280)] or, when such standard is not applicable, Standard for Manufactured Home Installations, ANSI A225.1 and Manufactured Home Installations, Sites, and Communities ANSI/NFPA 501A, or with local codes.

Minimum Clearances to Combustible Surfaces

- Minimum clearance to a vertical right or left side wall extending above cooking surface is 3 inches.
- Minimum clearance to counter top/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 $\frac{1}{4}$ 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. See illustration for typical installation.
- Minimum clearance to rear wall is 0 inches.



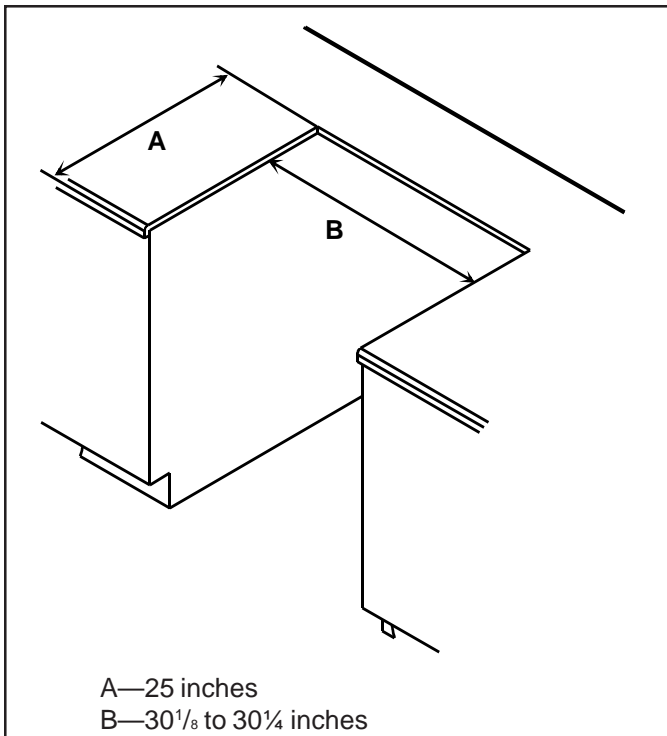
Standard Cabinet and Counter Top Height and Depth



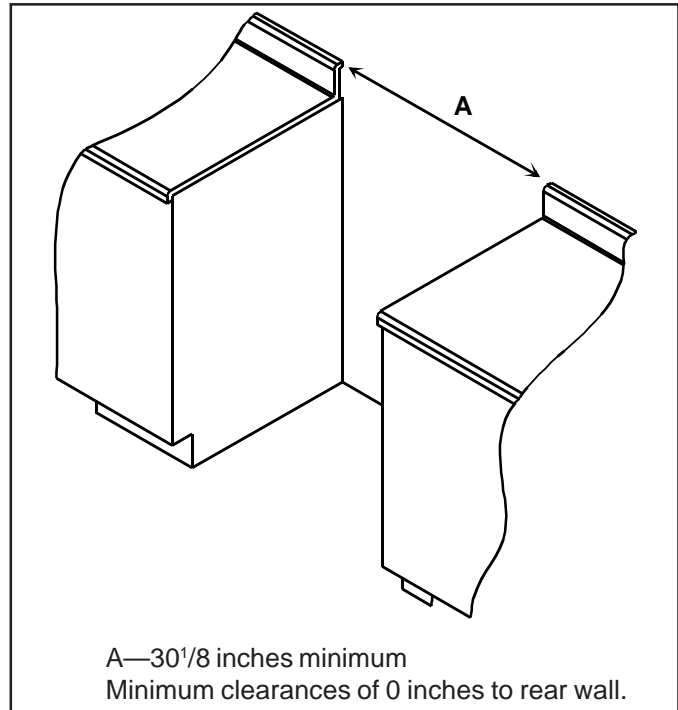
Installation Instructions for Slide-In Ranges

Counter Top Opening

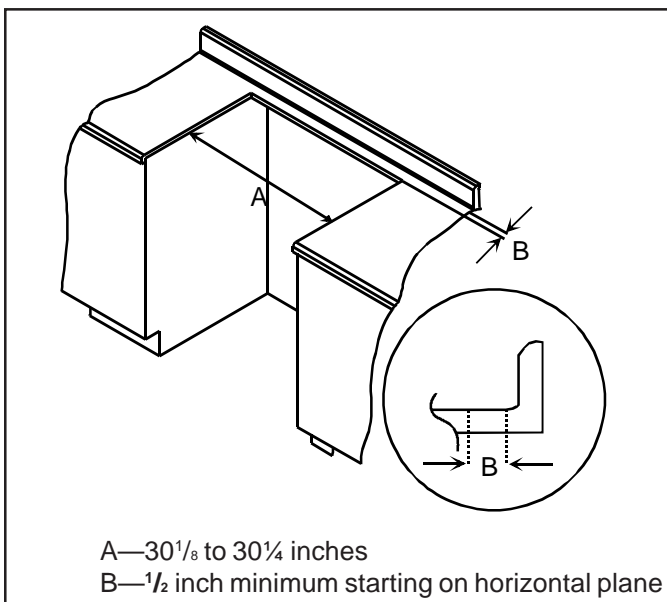
Island Installation



Counter Top without Backsplash

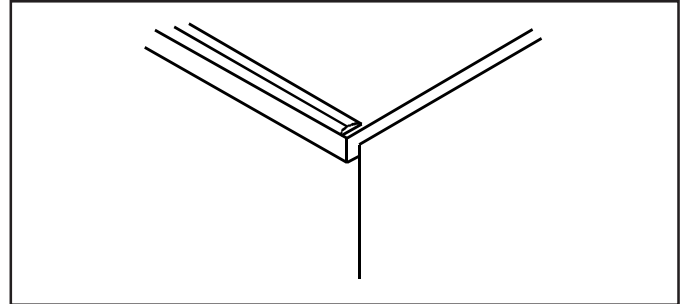


Counter Top with Backsplash



Counter Top Front Edge

Counter top front edge may require cutting to fit 31 inch range top. Allow for $\frac{1}{2}$ inch overlap on each side.



Irregular Cabinet and Counter Top Heights

Counter tops such as ceramic tile tops can cause cabinet and counter top to be higher than 36 inches. Follow instructions below when counter top is higher than 36 inches.

1. Raise leveling legs to maximum level.
2. Measure from floor to range top. If measurement is less than height of counter top 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 and slide range into place.
 - See "Anti-tip Bracket Installation" section.

Installation Instructions for Slide-In Ranges

Special Counter Top Conditions

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

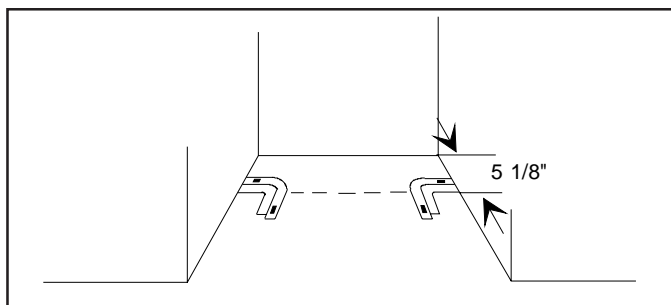
1. Raise leveling legs to maximum level.
2. Measure from floor to side trim. If measurement is less than height of counter top floor must be shimmed.
3. Shim floor using a piece of plywood same size as range opening. Secure plywood to floor. Plywood must be as secure as original flooring.
4. Install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

Anti-tip Bracket Installation

To reduce risk of range tipping, secure range with a properly installed anti-tip bracket(s). Use either rectangular or L-shaped anti-tip bracket(s) packed with range. Follow appropriate instructions.

L-shaped Anti-tip Brackets

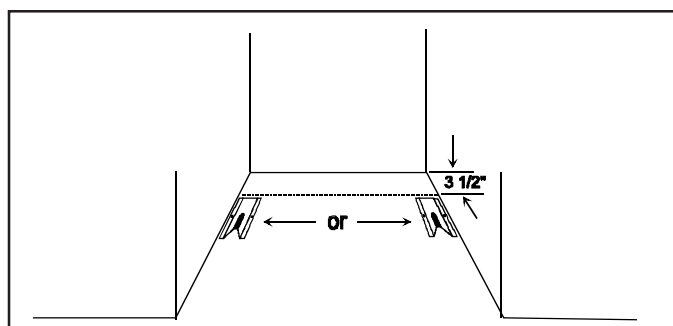
1. Measure $5\frac{1}{8}$ inches from back wall on right and left side of cabinet cutout. Mark measurements on floor and draw a straight line connecting marks.
2. Position anti-tip brackets with inside edge over line drawn on floor and end of bracket against cabinet.
 - If range is not installed beside 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 brackets with inside edge over line drawn $5\frac{1}{8}$ inches from back wall and end of bracket over line drawn along side of range on floor.
 - Anti-tip bracket must be installed on both right and left side.



3. Mark hole locations in each anti-tip bracket.
4. Drill 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 brackets to floor using screws supplied.
6. Slide range into position.
7. Remove range storage drawer and confirm anti-tip brackets is engaged with range leveling leg.

Rectangular 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. Slide range into position.
7. Remove range storage drawer and confirm anti-tip bracket is engaged with range leveling leg.

Installation Instructions for Slide-In Ranges

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.

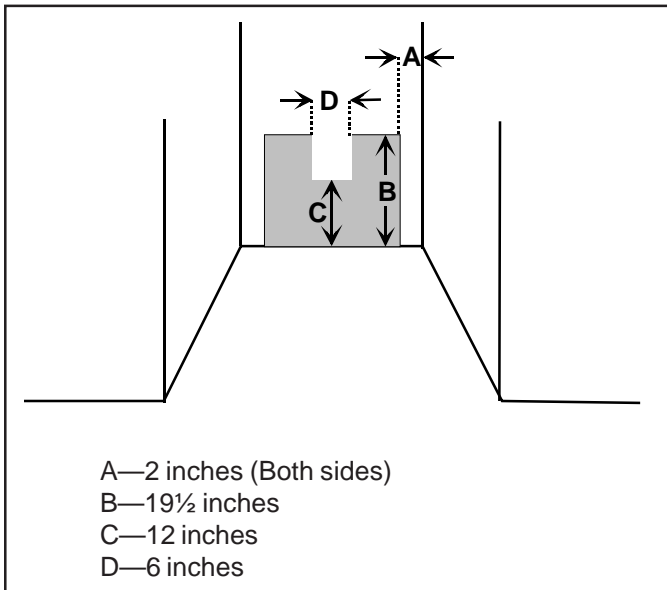
Range must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70-Latest Edition. In Canada, electrical connections are to be made in accordance with CSA C22.1 Canadian Electrical Code.

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, remove grounding plug, or use extension cord.

Electrical Connection Clearance

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

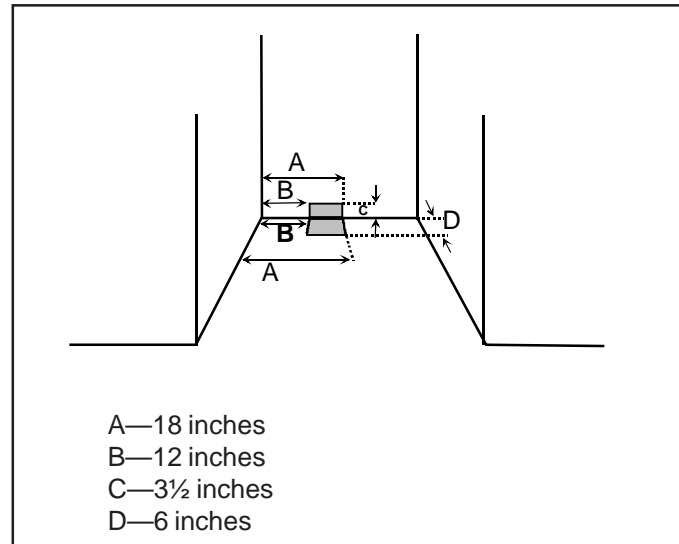


Gas Connection Requirements

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. In Canada installation must conform with local codes or the current Natural Gas Installation Code CAN/CGA-B149.1.

Gas Supply Location

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



Gas Supply Pressure

WARNING

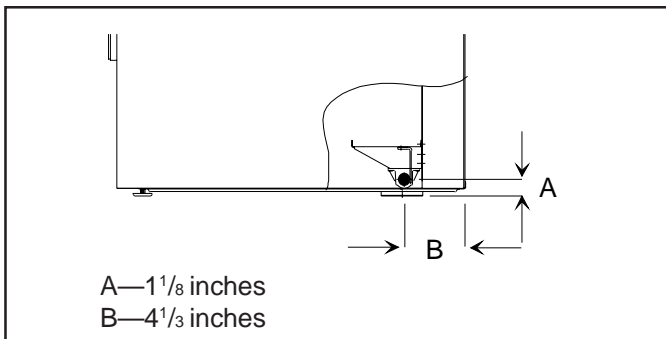
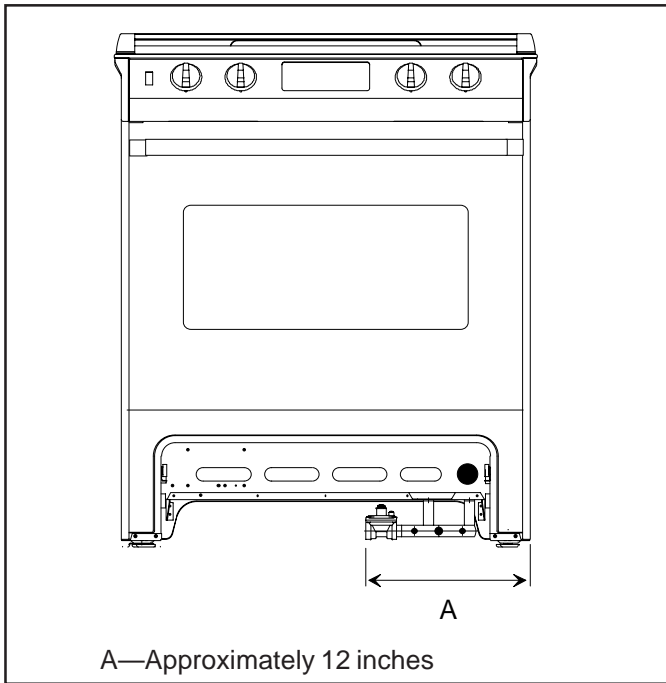
To avoid property damage, maximum gas supply pressure must not exceed 14" WCP.

- 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.

Installation Instructions for Slide-In Ranges

Pressure Regulator Location

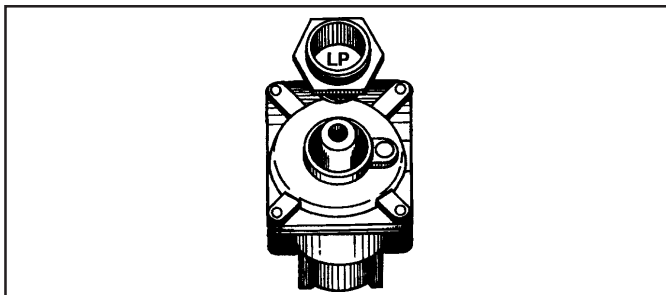
Remove rear access cover to expose pressure regulator.



Pressure Regulator Conversion

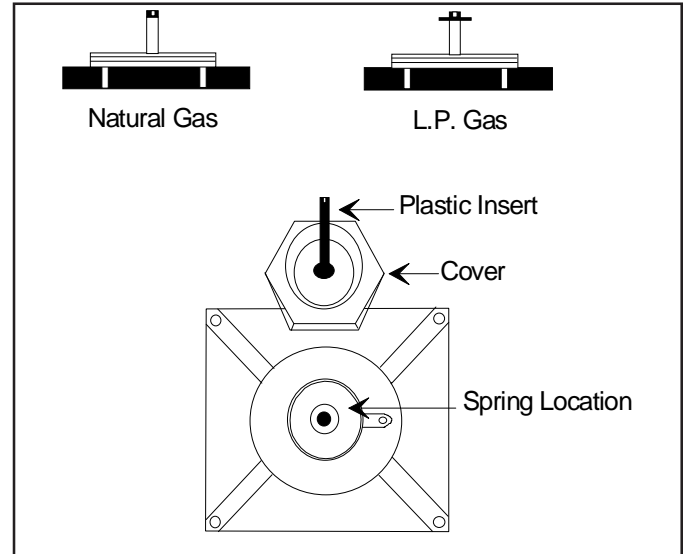
Several varieties of gas pressure regulators may equip gas cooking products. All gas pressure regulators perform the same function. In most instances, universal pressure regulators are used in gas cooking products. Universal regulator can be modified to use either Natural gas or liquefied petroleum (LP) gas supplies.

Universal pressure regulator, must be modified when connecting gas cooking product to an LP gas supply. How each type of universal pressure regulator is converted to LP use is illustrated in the following examples.



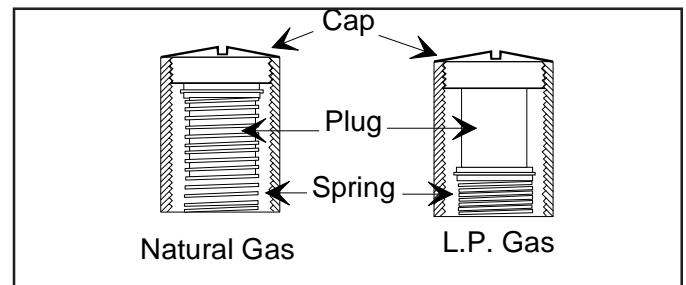
Example One

1. Remove pressure regulator cap with a 7/8 inch wrench.
2. Remove plastic insert from cap. Insert fits tightly in cap.
3. Reverse plastic insert. Push firmly into hole in cap.
4. Verify insert fits tightly in hole. Do not disturb spring in regulator body.
5. Replace cap in regulator body.



Example Two

1. Remove cap with screwdriver.
2. Remove insert.
3. Reverse insert and replace. "LPG10" is visible. Do not disturb spring in regulator body.
4. Replace cap.

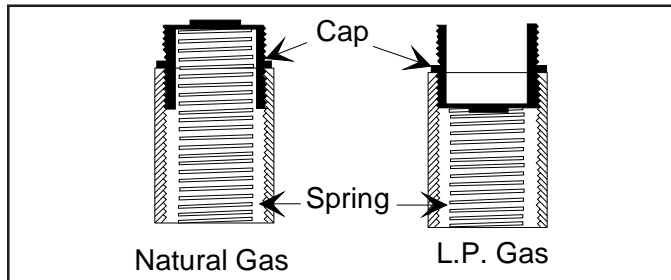


Installation Instructions for Slide-In Ranges

Example Three

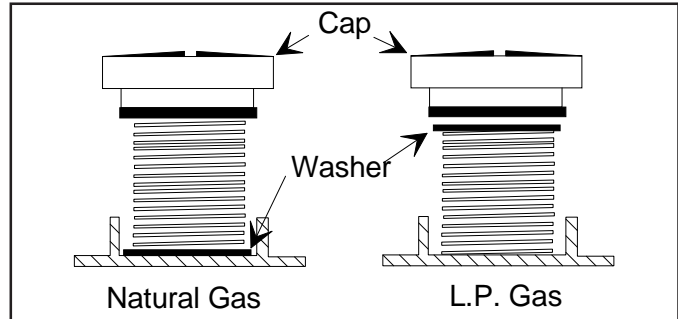
1. Remove cap marked "Nat."
2. Reverse cap. "LP" now appears on cap.
3. Reinsert cap. Do not disturb spring beneath the cap. Verify fiber washer is correctly between cap and the regulator body.

NOTE: Some models may not have washers. If washer is not supplied, none is needed.



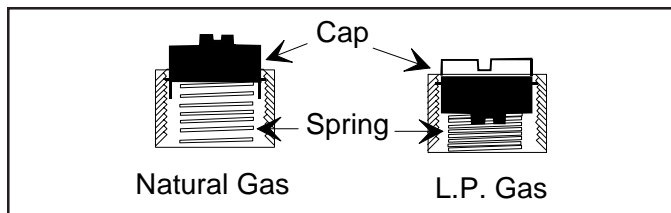
Example Six

1. Remove cap with screwdriver slot.
2. Remove spring and washer. Washer will be at bottom of spring as illustrated below.
3. Reverse to bring washer to the top.
4. Reinstall spring and washer.
5. Tighten cap.



Example Four

1. Remove cap with screwdriver slot.
2. Reverse and replace cap. Verify "LPG10" is visible. Do not disturb spring beneath cap.



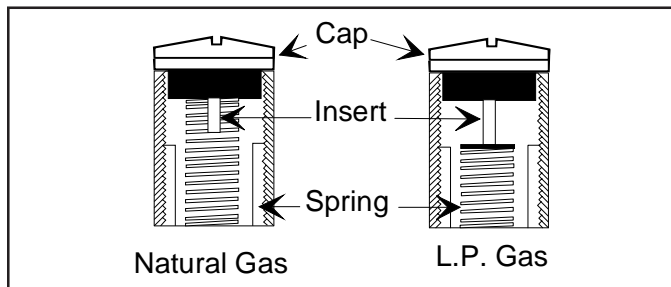
Gas Connection

Connect gas supply to regulator using hard pipe or a flexible connector. 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. See illustration.

- 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.

Example Five

1. Remove cap with screwdriver slot.
2. Remove black insert marked "NAT." from cap. Insert fits tightly in cap.
3. Reverse insert.
4. Replace in hole. Verify "LP" is visible. Verify that insert is pressed firmly into shoulder. Do not disturb spring in regulator body.
5. Replace cap in regulator body and tighten.

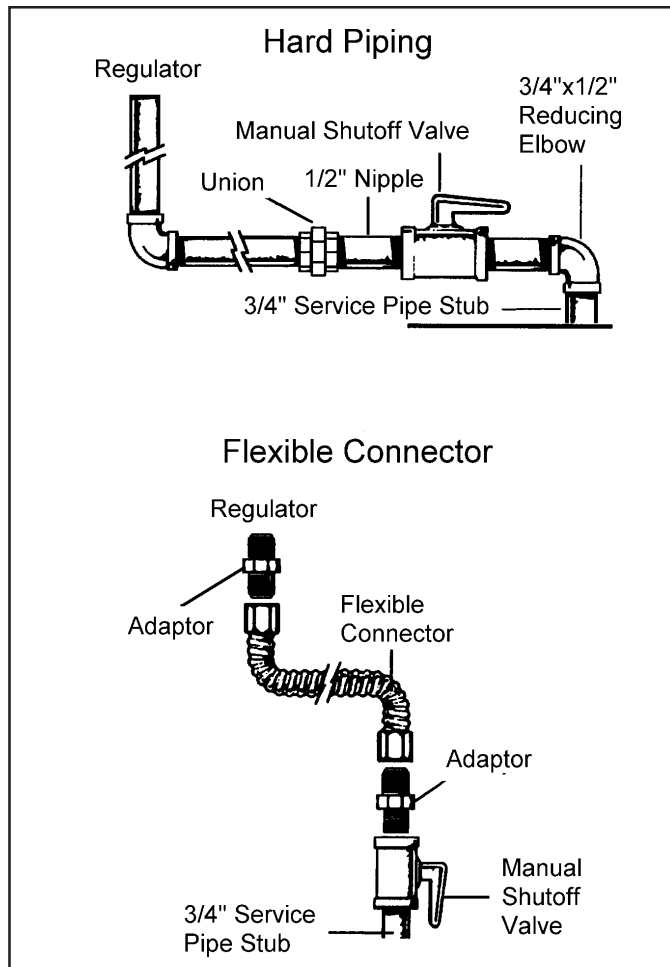


WARNING

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.

Installation Instructions for Slide-In Ranges



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.



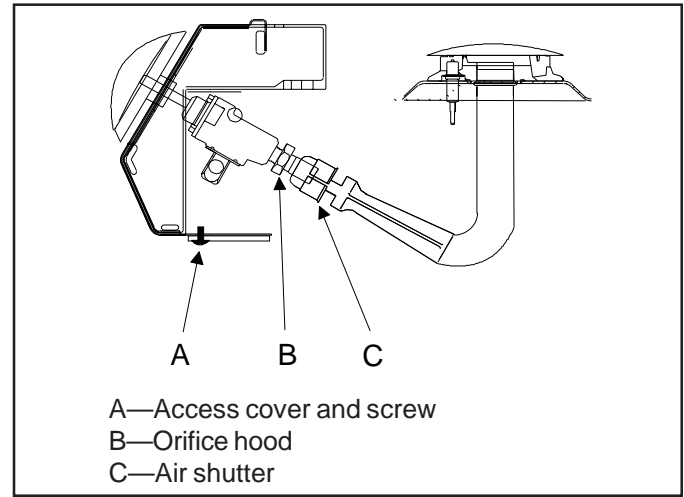
WARNING

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.

Converting Surface Burners for Use with LP/Propane

1. Remove access covers located under burner control panel.
 - Each cover is attach with a screw.
2. While facing range front, turn orifice hoods counterclockwise 1½ to 2 turns or until snug.
 - Use ½ inch open end or 90° offset open end wrench.
 - Do not over tighten orifice hoods. If orifice hoods are over tightened, gas supply can be cut off or orifice hoods can strip.

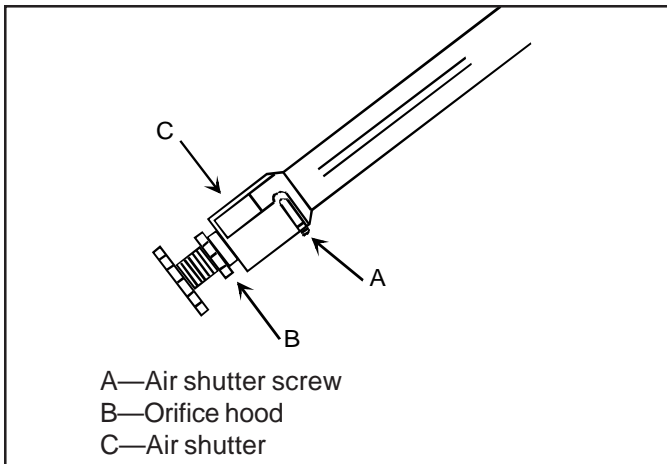


3. Adjust air shutter using small screw driver.
 - Slide air shutter until shutter is fully open. See "Adjusting Surface Burner Flame".
4. Replace access cover and screw.

Installation Instructions for Slide-In Ranges

Converting Oven Burner for Use with LP/Propane

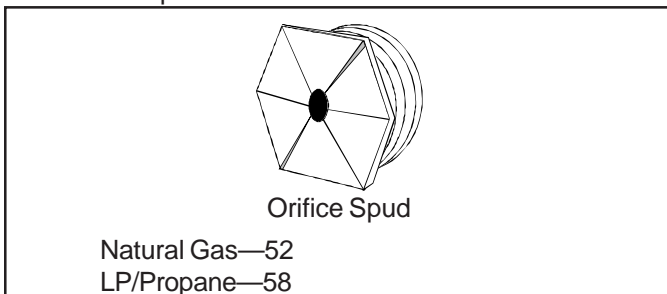
1. Remove storage drawer.
 - See “Removing Storage Drawer” section.
2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.



3. Turn orifice hood clockwise until snug.
 - Do not over tighten orifice hood. Orifice hood can strip.
 - Support tubing/fitting with wrench while turning hood.
4. Replace cover plate and storage drawer.

Converting Broiler Burner for Use with LP/Propane

1. Locate orifice spud attached adjacent to pressure regulator and remove for later use.
 - Orifice spud used for LP/propane gas is silver and is stamped “58”.



2. Open oven door and locate broiler burner on oven ceiling.
 - Remove oven door to make conversion easier. See “Removing Oven Door” section.
3. Remove screws securing front of burner to oven ceiling and remove broiler.
 - Be careful not to damage ignitor while removing broiler.

4. Unscrew natural gas burner spud stamped “52” with $\frac{5}{16}$ inch socket wrench and replace with LP/propane burner spud stamped “58”.
 - Attach unused burner spud near regulator for future use.
5. Reinstall broiler and, if necessary, oven door.

Converting Type 1 Pressure Regulator for Use with Natural Gas

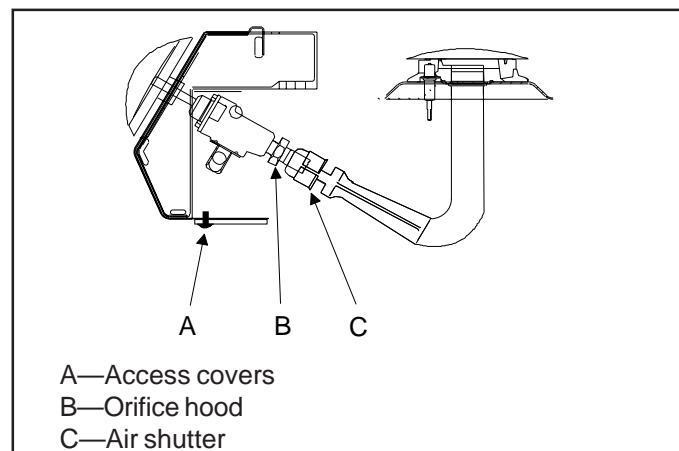
1. Remove pressure regulator cap using a $\frac{7}{8}$ inch wrench.
2. Remove plastic insert from pressure regulator cap.
 - Plastic insert fits tightly in cap.
3. Reverse plastic insert and carefully push plastic insert firmly into hole in pressure regulator cap.
 - Insert must show “NAT” or be blank.
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 using a $\frac{7}{8}$ inch 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. Remove access covers located under burner control panel.
 - Each cover is attached with a screw.
2. While facing range front, turn orifice hoods clockwise $1\frac{1}{2}$ to 2 turns.
 - Use $\frac{1}{2}$ inch open end or 90° offset open end wrench.
 - Do not over tighten orifice hoods. If orifice hoods are over tightened, gas supply can be cutoff or orifice hoods can strip.



Installation Instructions for Slide-In Ranges

3. Adjust air shutter using small screw driver.
 - Slide air shutter until shutter is approximately $\frac{1}{8}$ inch open.
4. Replace access cover and screw.

Converting Oven Burner for Use with Natural Gas

1. Remove storage drawer.
 - See "Removing Storage Drawer" section.
2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.
3. Turn orifice hood counterclockwise 2 full turns, support tubing/fitting with wrench while turning.
4. Replace cover plate and storage drawer.

Converting Broiler Burner for Use with Natural Gas

1. Locate orifice spud attached adjacent to pressure regulator and remove for later use.
 - Orifice spud used for natural gas is brass and is stamped "52".
2. Open oven door and locate broiler burner on oven ceiling.
 - Remove oven door to make conversion easier. See "Removing Oven Door" section.
3. Remove screws securing front of burner to oven ceiling and remove broiler.
 - Be careful not to damage ignitor as you remove broiler.
4. Unscrew LP/Liquid Propane burner spud stamped "58" with $\frac{5}{16}$ inch socket wrench and replace with natural gas burner spud stamped "52".
5. Reinstall broiler and, if necessary, oven door.

Gas Supply Pressure

WARNING

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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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.

Gas Connection

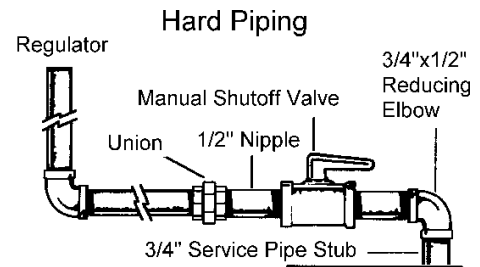
Connect gas supply to regulator using hard pipe or a flexible connector. Pressure regulator supplied with this appliance has a $\frac{1}{2}$ inch NPT female connection.

- 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

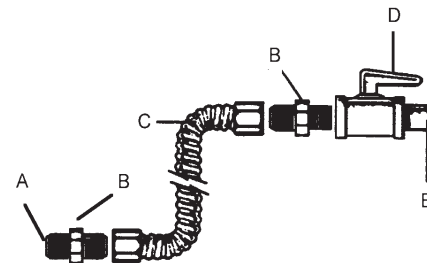
To avoid property damage or personal injury, only use a new flexible connector that is AGA/CGA design certified.

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



- A—To regulator
- B—Union
- C—Nipple
- D—Manual shutoff valve
- E— $\frac{3}{4}$ inch to $\frac{1}{2}$ inch reducing elbow
- F— $\frac{3}{4}$ inch service pipe stub

Flexible Connector



- A—To regulator
- B—Adaptor
- C—Flexible connector
- D—Manual shutoff
- E— $\frac{3}{4}$ inch service pipe stub

Installation Instructions for Slide-In Ranges

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.

Removal and Replacement of Range

1. Disconnect power to range.
2. Slide range forward.
3. Unplug range cord and place range aside.
4. Remove anti-tip bracket.
5. Install anti-tip bracket into new location using instructions provided with bracket or see "Anti-tip Bracket Installation" section.
6. To reinstall range, follow instructions in "Installation" section.

Seal Openings

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

Level Range

Carefully level range using legs provided. Range must be level to cook and bake uniformly.



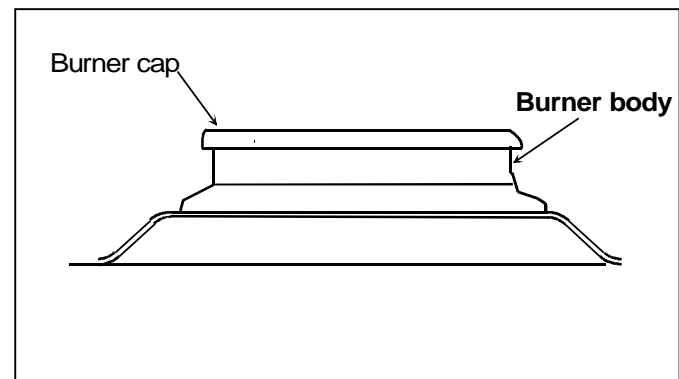
CAUTION

To avoid damaging oven door, do not lift or move range by oven door handle. Glass can break.

- Place a level on top oven rack or on top of range when leveling.
 - Leveling legs must be extended a minimum of $\frac{1}{4}$ inch to engage anti-tip bracket.
1. Extend leveling legs so when range is moved into position range top clears counter top.
 2. Slide range to where it will be installed.
 - Position range so rear leveling legs do not engage anti-tip bracket.
 3. Turn leveling legs to level range.
 - Turn legs clockwise to decrease range height or counter clockwise to increase range height.
 - Adjust rear leveling leg that engages anti-tip bracket first. Leveling leg can not be adjusted while in bracket. After adjusting leg that engages anti-tip bracket, slide range until leg engages bracket, and adjust other legs.
 4. Replace storage drawer.

Placing Burner Caps

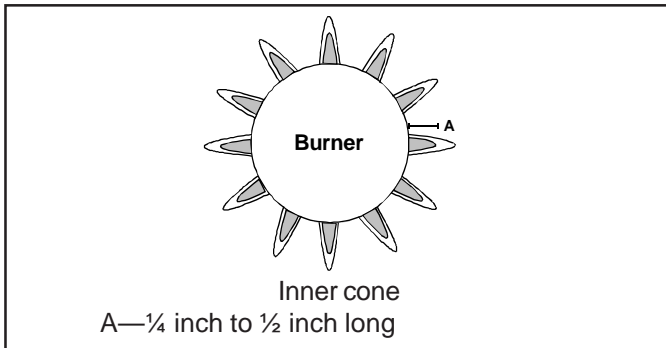
To replace burner caps after cleaning, make sure cap is properly aligned and leveled. Verify locating pegs in the burner body fit into recess in underside of burner cap. Burner cap must be correctly seated on burner body for proper operation of burner. Burner will not burn properly if wrong size burner cap is placed on wrong size burner body. Check for ignition after placement.



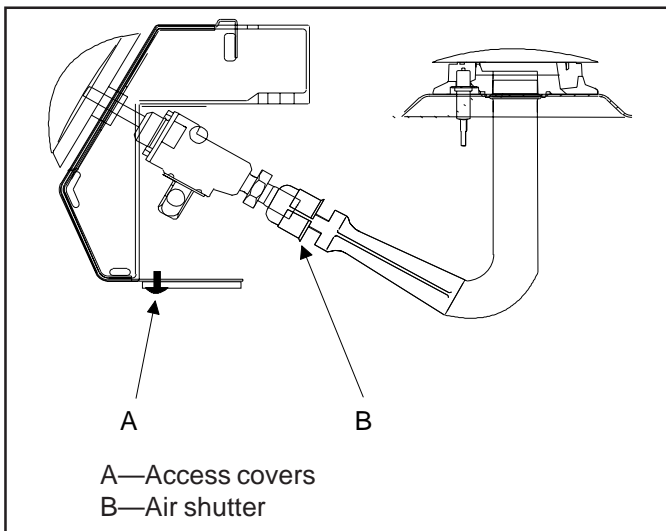
Installation Instructions for Slide-In Ranges

Adjusting Surface Burner Flame

Ignite burner according to "Operating Surface Burners" section. Properly adjusted burner flames are clean and blue with a distinct inner cone approximately 1/2 inch long.



1. Ignite burner.
2. Remove access covers located under burner control panel.
 - Each cover is attached with a screw.



3. Adjust air shutter using small screwdriver. Use small screwdriver to slide air shutter.
 - If burner flame is blowing or noisy, reduce airflow to burner. Repeat until flame is properly adjusted if necessary.
 - If burner flame is yellow and does not hold its shape, increase airflow to burner. Repeat until flame is properly adjusted if necessary.

Adjusting Surface Burner Low Flame Size

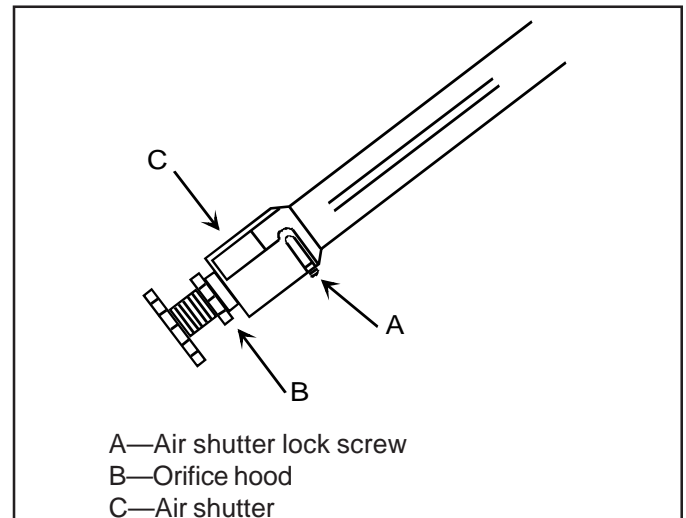
1. Push and turn burner control knob to "LITE" position.
 - Burner sparks until turned from "LITE".
2. Set burner control knob to low setting.
3. Remove burner control knob.
4. While holding valve stem stationary, turn screw in center of burner control stem until flame is adjusted.
 - Use small standard screwdriver.

5. Replace burner control knob.
6. Turn surface burner control on and off to test burner flame.
7. If flame is adjusted too low, flame may be easily extinguished. Burner can be extinguished by drafts, door opening or closing, heating and cooling vents, ceiling fans, etc.

Adjusting Oven Burner Flame

Properly adjusted oven burner flames are clean and blue with a distinct inner cone approximately 1/2 inch long.

- 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. Remove storage drawer.
 - See "Removing Storage Drawer" section.
 2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.



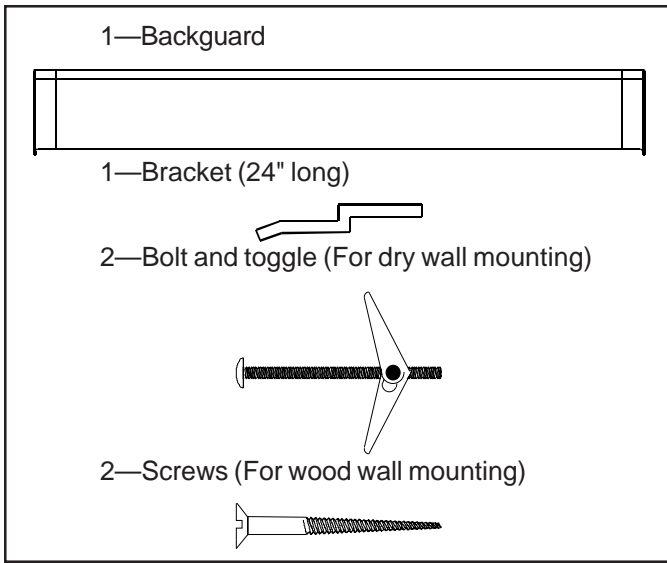
3. Loosen air shutter lock screw and open or close air shutter.
 - Tighten air shutter lock screw after adjusting.
4. Replace cover plate and storage drawer.

Broiler Flame

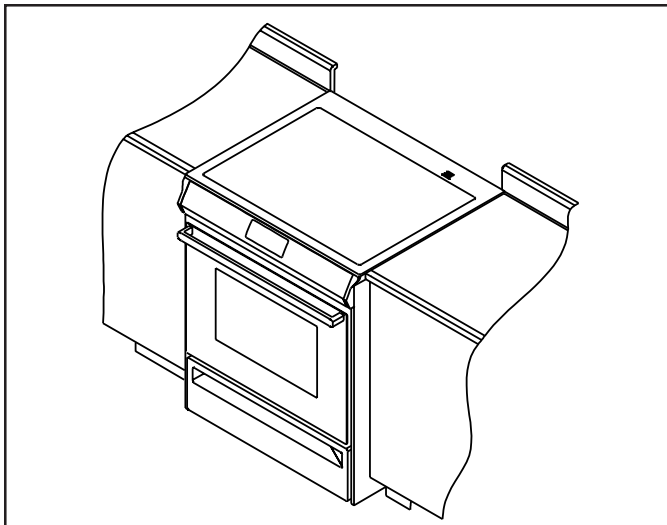
Broiler flame should appear hazy or fuzzy. Haze should be approximately 3/8 inch thick. Because broiler has a fixed orifice it can not be adjusted. Broiler does not have an air shutter.

Installation Instructions for Slide-In Ranges

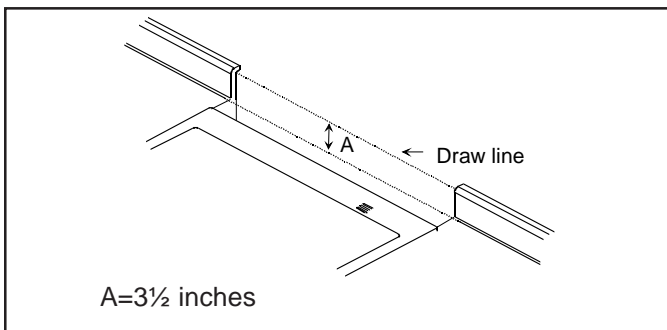
AXF100 Backguard Kit Installation Instructions Contents



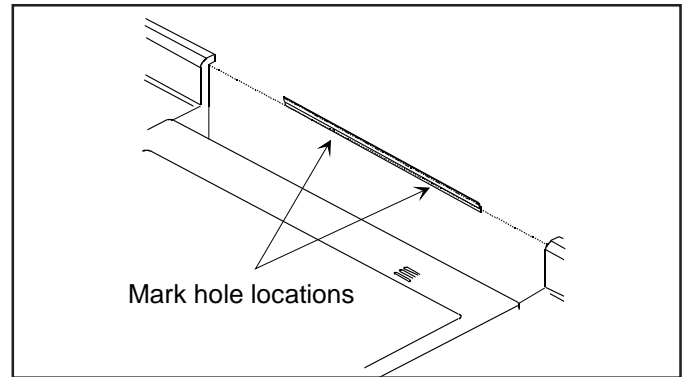
1. Install range according to Owner's Manual instructions.
 - Install Kit AXF100 where countertop backsplash has been removed.



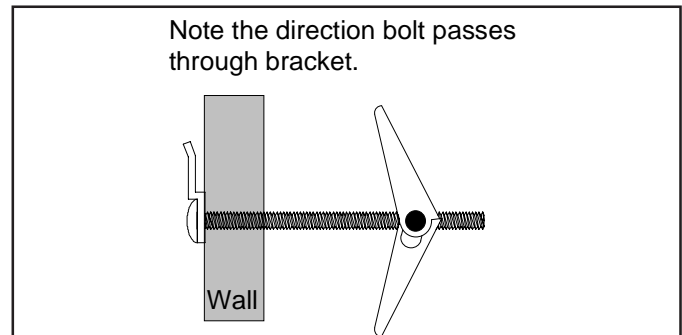
2. Measure 3½ inches above countertop and draw a line across cutout.



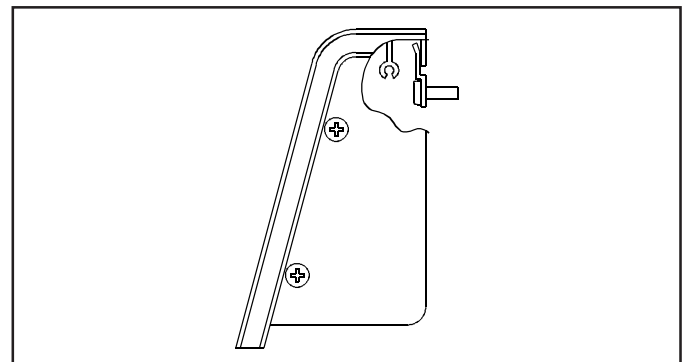
3. Place bracket against rear wall in center of cutout. Move bracket until line shows through screw holes. Mark screw hole locations on wall.



4. Drill holes at marked screw hole locations.
 - Use 3/8-inch drill bit for bolt and toggle.
 - Use 3/32-inch drill bit for wood screw.
5. Insert toggle bolts or wood screws through bracket as shown.
 - If using wood screws, go to next step.
 - Confirm bracket is facing correct direction on bolt before pushing into wall. If bracket is facing wrong direction, backguard will not fit on bracket.



6. Push toggle bolts into holes and tighten. If using wood screws, screw bracket to wall.
7. Place backguard onto bracket.



Installation Instructions for Freestanding Ranges

Packing Material

Remove protective packing materials 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.

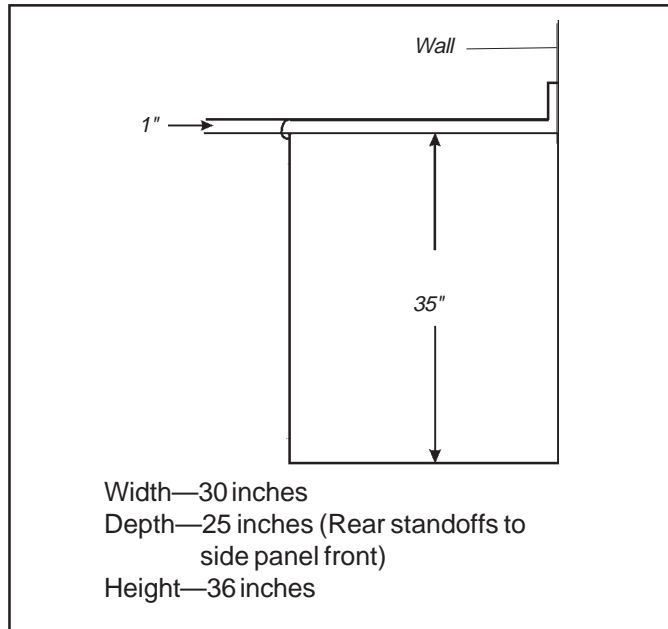
Cabinet Opening

WARNING

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

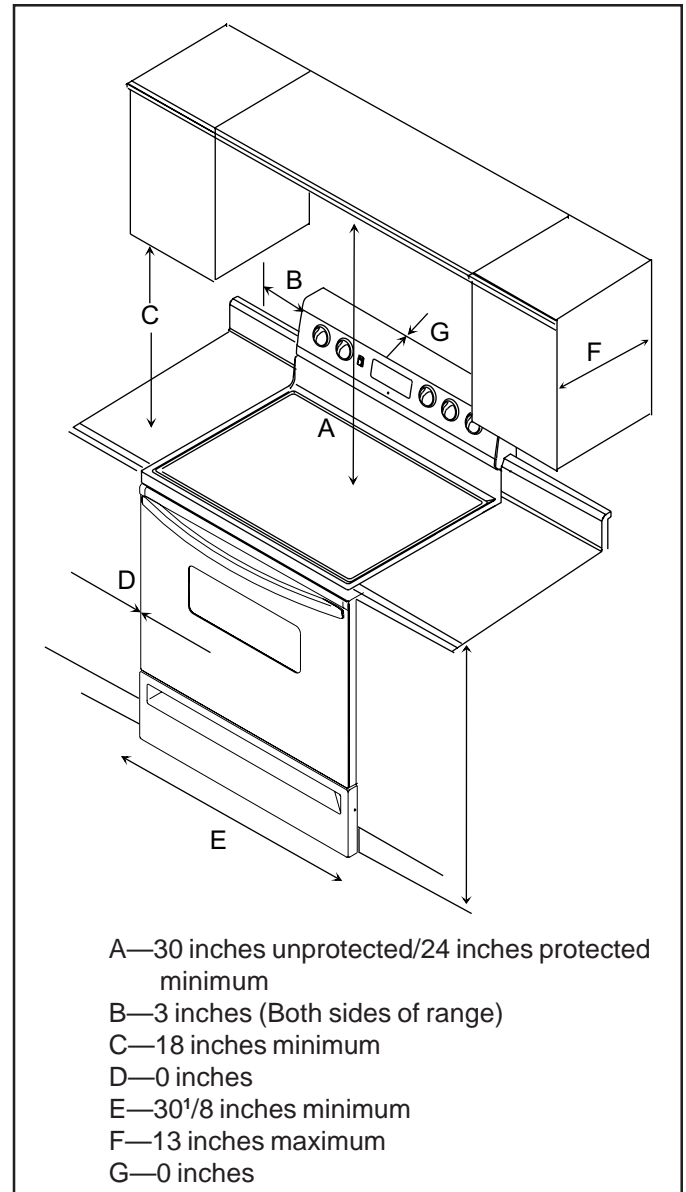
Range should extend approximately 2 inches from cabinet front to oven door handle. Use dimensions in illustration below and shown in "Special Counter top Conditions" section to prepare cabinet opening.

Standard Cabinet and Counter top Height



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 counter top/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 for Freestanding Ranges

Special Counter Top Conditions

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

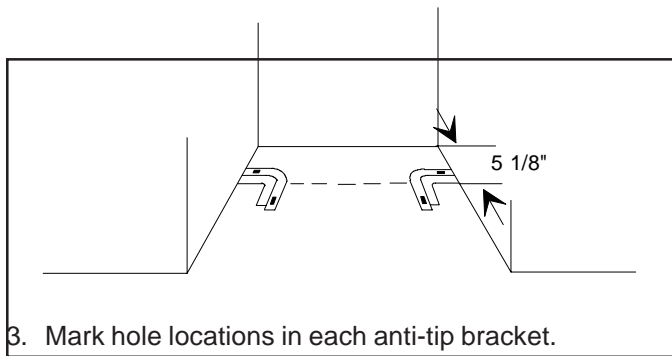
1. Raise leveling legs to maximum level.
2. Measure from floor to side trim. If measurement is less than height of countertop floor must be shimmed.
3. Shim floor using a piece of plywood same size as range opening. Secure plywood to floor. Plywood must be as secure as original flooring.
4. Install anti-tip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

Anti-tip Bracket Installation

To reduce risk of range tipping, secure range with a properly installed anti-tip bracket(s). Use either rectangular or L-shaped anti-tip bracket(s) packed with range. Follow appropriate instructions.

L-shaped Anti-tip Brackets

1. Measure $5\frac{1}{8}$ 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 brackets with inside edge over line drawn on floor and end 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 brackets with inside edge over line drawn $5\frac{1}{8}$ inches from back wall and end of bracket over line drawn along side of range on floor.
 - Anti-tip bracket must be installed on both right and left side.



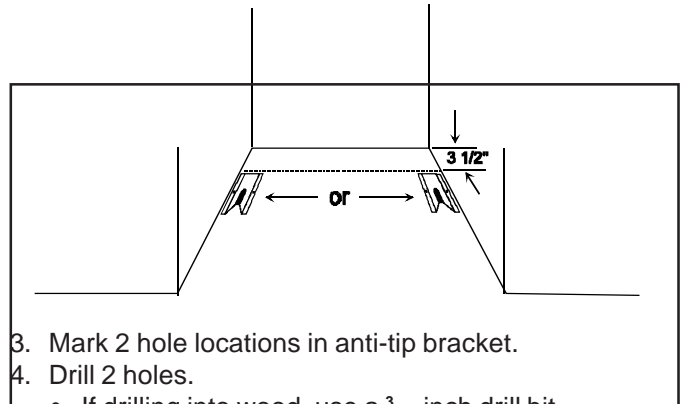
3. Mark hole locations in each anti-tip bracket.
4. Drill holes.
 - If drilling into wood, use a $\frac{3}{32}$ inch drill bit.
 - If drilling into concrete, use a $\frac{3}{16}$ inch masonry drill bit and insert plastic anchors.
5. Secure brackets to floor using screws supplied.
6. Slide range into position.
7. Remove range storage drawer and confirm anti-tip brackets is engaged with range leveling leg.

Rectangular 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. Slide range into position.
7. Remove range storage drawer and confirm anti-tip bracket is engaged with range leveling leg.

Electrical Connection Requirements

Installation Instructions for Freestanding Ranges

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.

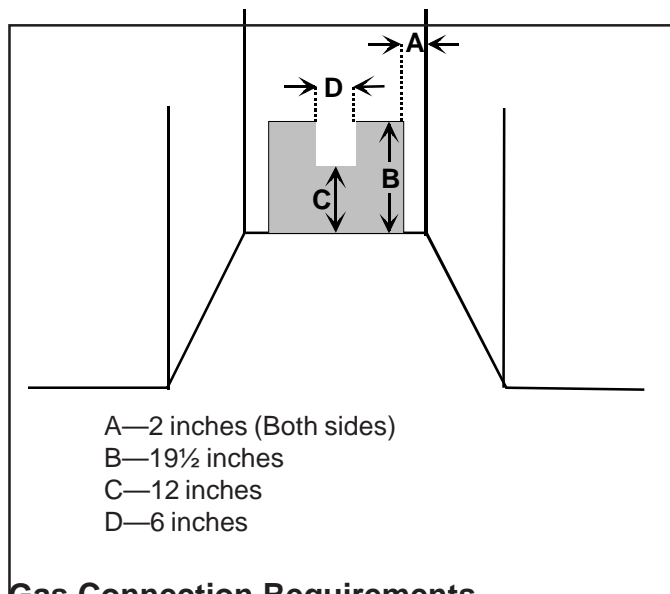
Range must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70-Latest Edition. In Canada, electrical connections are to be made in accordance with CSA C22.1 Canadian Electrical Code.

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, remove grounding plug, or use extension cord.

Electrical Connection Clearance

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

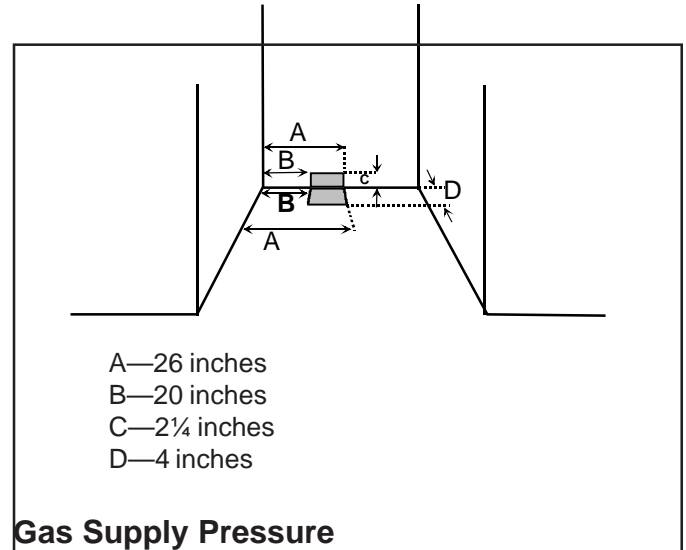


Gas Connection Requirements

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. In Canada installation must conform with local codes or the current Natural Gas Installation Code CAN/CGA-B149.1.

Gas Supply Location

Gas supply must be located in the illustration shown below. Gas connection must not interfere with the electrical connection.



Gas Supply Pressure

WARNING

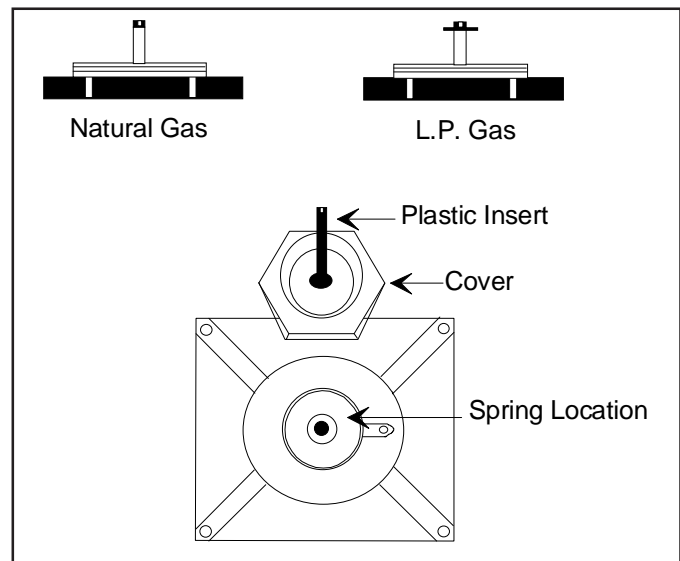
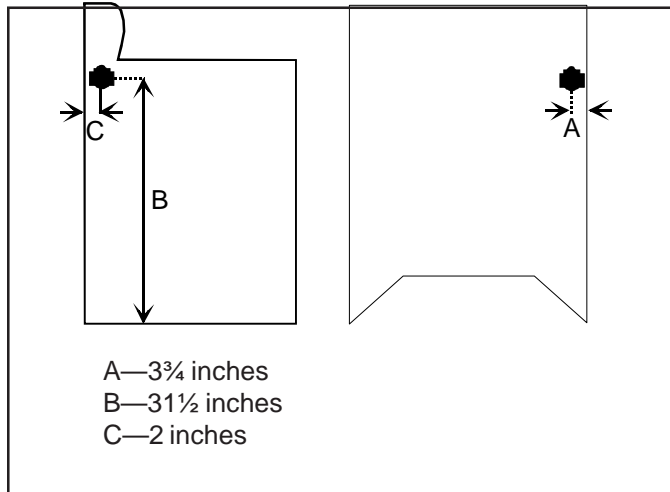
To avoid property damage, maximum gas supply pressure must not exceed 14" WCP.

- 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

Installation Instructions for Freestanding Ranges

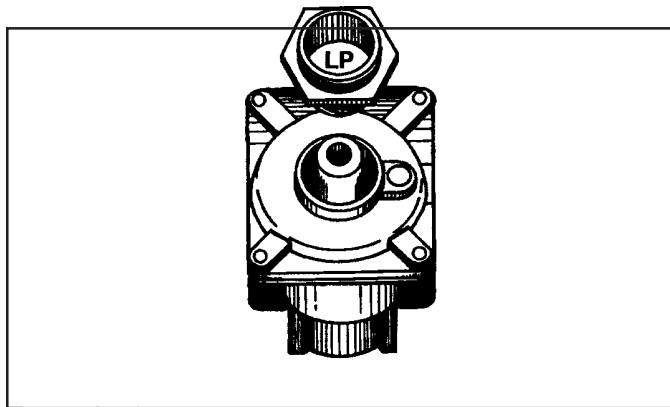
Remove rear cover to expose pressure regulator.



Pressure Regulator Conversion

Several varieties of gas pressure regulators may equip gas cooking products. All gas pressure regulators perform the same function. In most instances, universal pressure regulators are used in gas cooking products. Universal regulator can be modified to use either Natural gas or liquefied petroleum (LP) gas supplies.

Universal pressure regulator, must be modified when connecting gas cooking product to an LP gas supply. How each type of universal pressure regulator is converted to LP use is illustrated in the following examples.

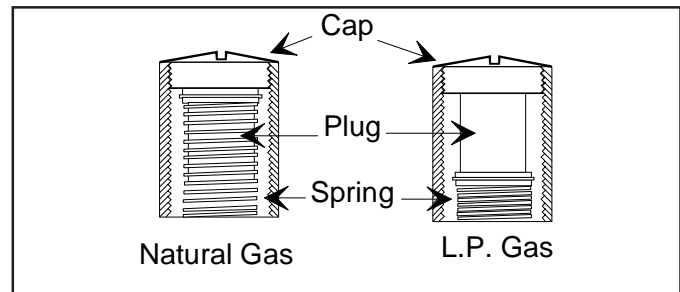


Example One

1. Remove pressure regulator cap with a 7/8-inch wrench.
2. Remove plastic insert from cap. Insert fits tightly in cap.
3. Reverse plastic insert. Push firmly into hole in cap.
4. Verify insert fits tightly in hole. Do not disturb spring in regulator body.
5. Replace cap in regulator body.

Example Two

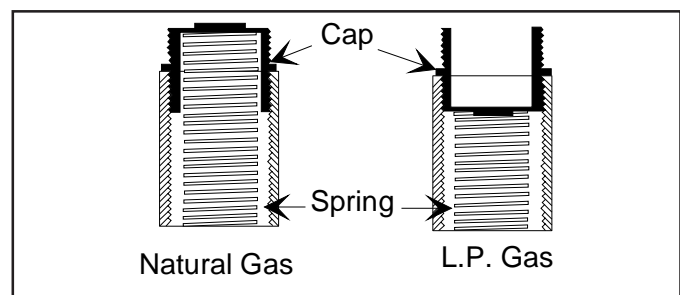
1. Remove cap with screwdriver.
2. Remove insert.
3. Reverse insert and replace. "LPG10" is visible. Do not disturb spring in regulator body.
4. Replace cap.



Example Three

1. Remove cap marked "Nat."
2. Reverse cap. "LP" now appears on cap.
3. Reinsert cap. Do not disturb spring beneath the cap. Verify fiber washer is correctly between cap and the regulator body.

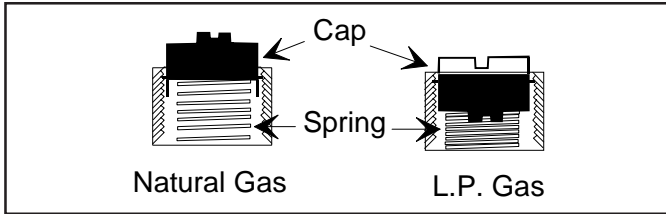
NOTE: Some models may not have washers. If washer is not supplied, none is needed.



Installation Instructions for Freestanding Ranges

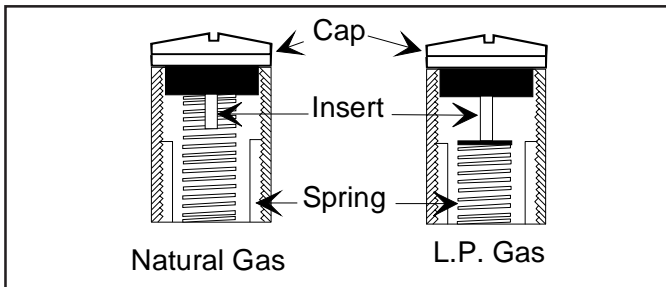
Example Four

1. Remove cap with screwdriver slot.
2. Reverse and replace cap. Verify "LPG10" is visible. Do not disturb spring beneath cap.



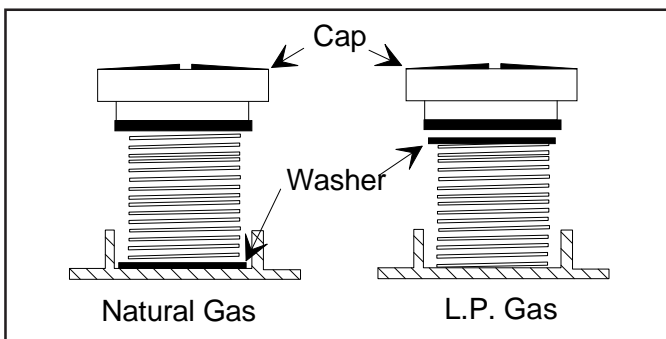
Example Five

1. Remove cap with screwdriver slot.
2. Remove black insert marked "NAT." from cap. Insert fits tightly in cap.
3. Reverse insert.
4. Replace in hole. Verify "LP" is visible. Verify that insert is pressed firmly into shoulder. Do not disturb spring in regulator body.
5. Replace cap in regulator body and tighten.



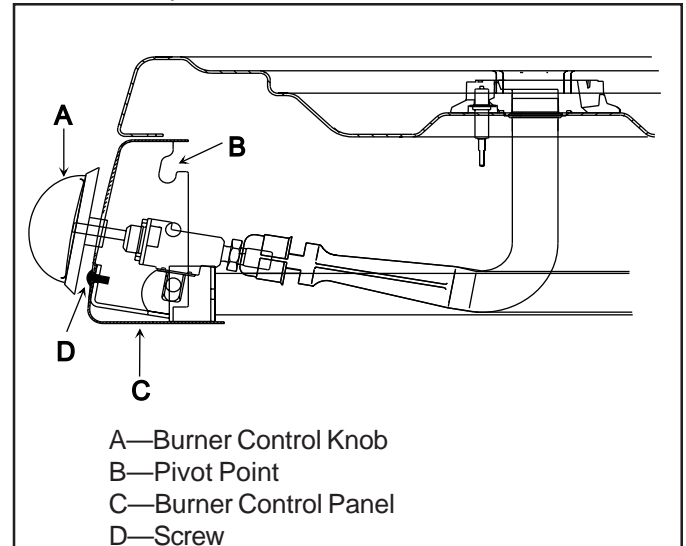
Example Six

1. Remove cap with screwdriver slot.
2. Remove spring and washer. Washer will be at bottom of spring as illustrated below.
3. Reverse to bring washer to the top.
4. Reinstall spring and washer.
5. Tighten cap.

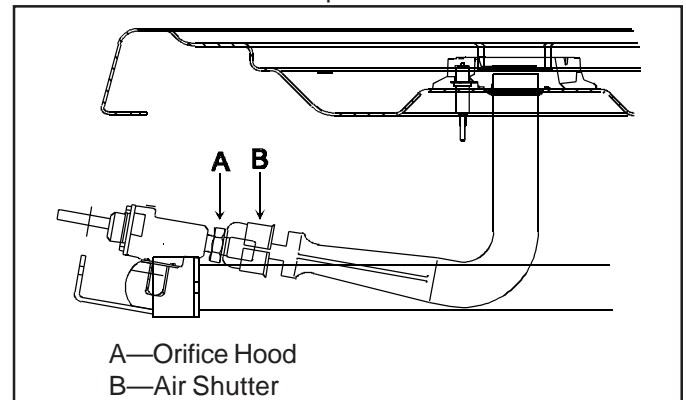


Converting Surface Burners for Use with LP\Propane

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 illustration.
 - Gas valve and orifice hood are visible after burner control panel is removed.



4. While facing range front, turn orifice hoods counterclockwise 1½ to 2 turns or until snug.
 - Use ½ inch open end or 90° offset open end wrench.
 - Do not over tighten orifice hoods. If orifice hoods are over tightened, gas supply can be cutoff or orifice hoods can strip.

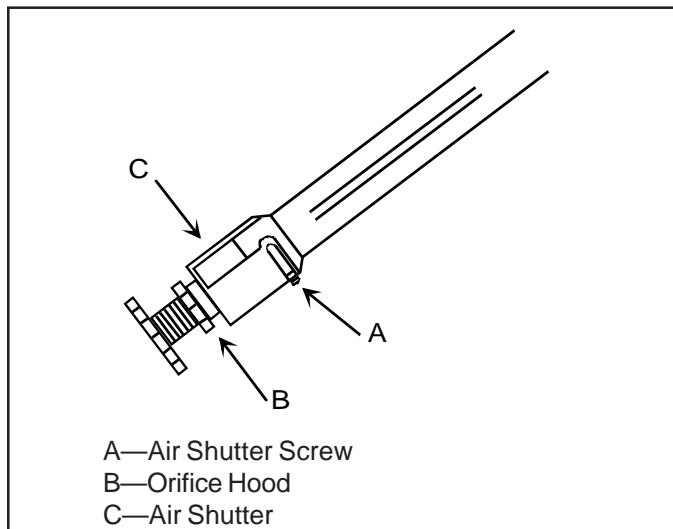


5. Reassemble Burner control panel after adjusting air shutter.
 - See "Adjusting Surface Burner Flame" section.

Installation Instructions for Freestanding Ranges

Converting Oven Burner for Use with LP\Propane

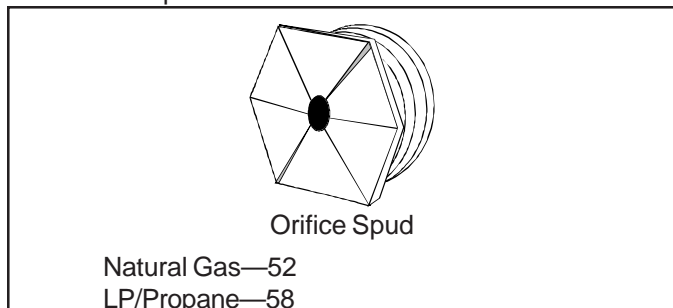
1. Remove storage drawer.
 - “Removing Storage Drawer” section.
2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.



3. Turn orifice hood clockwise until snug.
 - Do not over tighten orifice hoods. Orifice hoods can strip.
 - Support tubing/fitting with wrench while turning hood.
4. Replace cover plate and storage drawer.

Converting Broiler Burner for Use with LP\Propane

1. Locate orifice spud attached adjacent to pressure regulator and remove for later use.
 - Orifice spud used for LP/propane gas is silver and is stamped “58”.



2. Open oven door and locate broiler burner on oven ceiling.
 - Remove oven door to make conversion easier. See “Removing Oven Door” section.

3. Remove screws securing front of burner to oven ceiling and remove broiler.
 - Be careful not to damage ignitor while removing broiler.
4. Unscrew natural gas burner spud stamped “52” with $\frac{5}{16}$ inch socket wrench and replace with LP/propane burner spud stamped “58”.
 - Attach unused burner spud near regulator for future use.
5. Reinstall broiler and, if necessary, oven door.

Converting Type 1 Pressure Regulator for Use with Natural Gas

1. Remove pressure regulator cap using a $\frac{7}{8}$ inch 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 using a $\frac{7}{8}$ inch 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. Remove burner control knobs from range.
 - Exposes screws on burner control panel.
2. Remove 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 open end or 90° offset open end wrench.
5. Reassemble Burner control panel after adjusting air flow to surface burner flame.
 - See “Adjusting Surface Burner Flame” section.

Converting Oven Burner for Use with

Installation Instructions for Freestanding Ranges

Natural Gas

1. Remove storage drawer.
 - “Removing Storage Drawer” section.
2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.
3. Turn orifice hood counterclockwise 2 full turns.
 - Support tubing/fitting with wrench while turning hood.
4. Replace cover plate and storage drawer.

Converting Broiler Burner for Use with Natural Gas

1. Locate orifice spud attached adjacent to pressure regulator and remove for later use.
 - Orifice spud used for natural gas is silver and is stamped “52”.
2. Open oven door and locate broiler burner on oven ceiling.
 - Remove oven door to make conversion easier. See “Removing Oven Door” section.
3. Remove 2 screws securing front of burner to oven ceiling and remove broiler.
 - Be careful not to damage ignitor as you remove broiler.
4. Unscrew LP/propane burner spud stamped “58” with $\frac{5}{16}$ inch socket wrench and replace with natural gas burner spud stamped “52”.
5. Reinstall broiler and, if necessary, oven door.

Gas Connection

Connect gas supply to regulator using hard pipe or a flexible connector. Pressure regulator supplied with this appliance has a $\frac{1}{2}$ inch NPT female connection. If gas union is used, remove storage drawer, slide range into place, and connect union. See figure below.

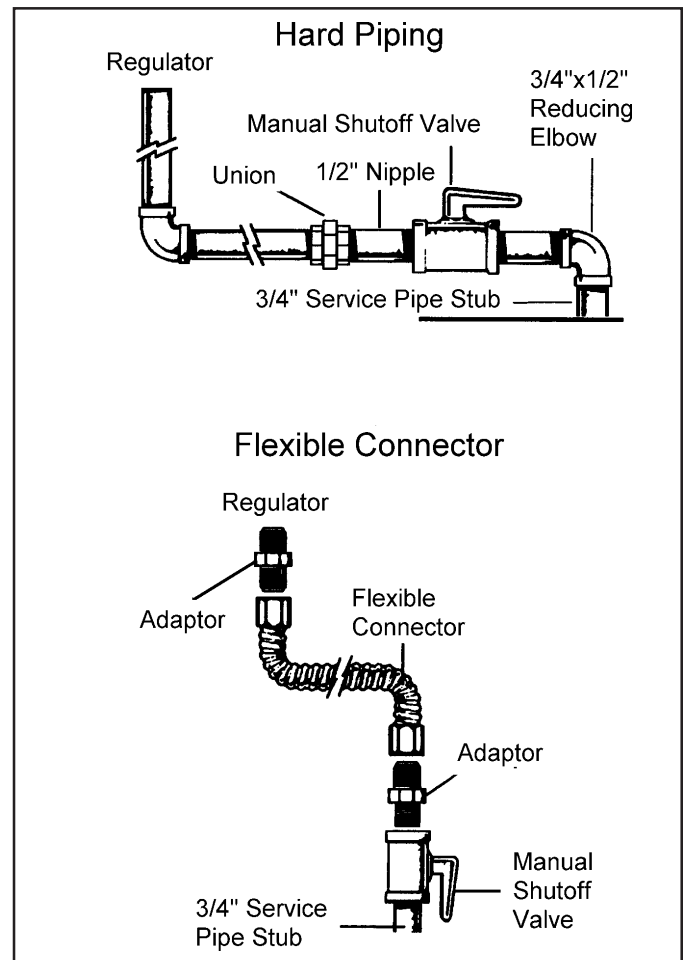
- A manual shutoff, not supplied with range, must be installed in an accessible location outside of range.
- Use joint compound that is resistant to action of propane gas on all male pipe threads.
- Use supplied pressure regulator only.
- Do not overtighten gas fitting when attaching to pressure regulator.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



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.

Installation Instructions for Freestanding Ranges

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 ¼ 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 this manual.
 - Do not reuse a flexible connector after moving appliance.

Adjusting Surface Burner Flame

Properly adjusted surface burner flames are clean and blue with a distinct inner cone approximately ¼ inch to ½ inch long. See “Operating Surface Burners” section for burner operating instructions.



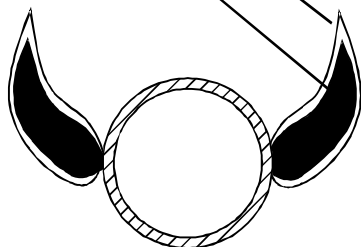
WARNING

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

- 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.

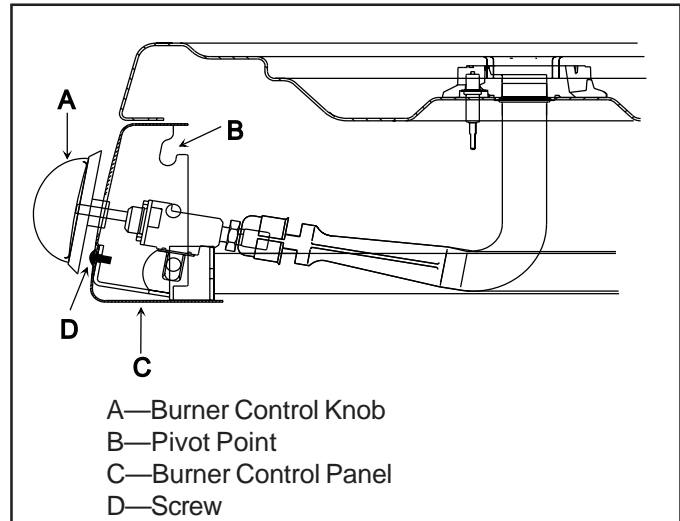
Outer Mantle - Dark Blue

Inner Cone - Blue-Green

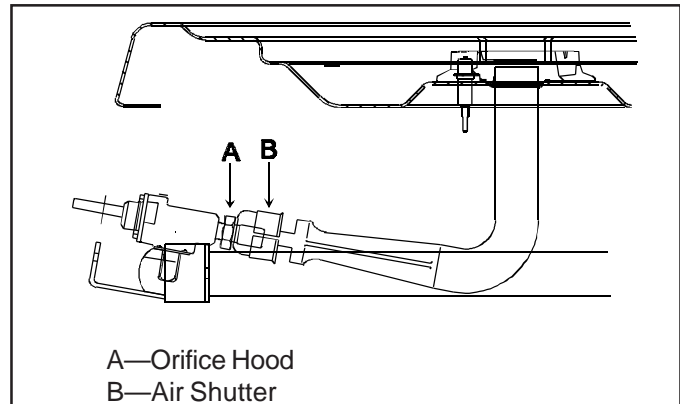


Adjusting Air Shutter

1. Remove burner control knobs from range.
 - Exposes screws on burner control panel.
2. Remove 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 illustration.
 - Gas valve and orifice hood are visible after burner control panel are 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 control panel.

Installation Instructions for Freestanding Ranges

Adjusting Surface Burner Low Flame Size

1. Push and turn burner control knob to "LITE" position.
 - Burner sparks until gas ignites.
2. Set burner control knob to low setting.
3. Remove burner control knob.
4. While holding valve stem stationary, turn screw in center of burner control stem until flame is adjusted.
 - Use small standard screwdriver.
5. Replace burner control knob.
6. Turn surface burner control on and off to test burner flame.

Broiler Flame

Broiler flame should appear hazy or fuzzy. Haze should be approximately $\frac{3}{8}$ inch thick. Because broiler has a fixed orifice it can not be adjusted. Broiler does not have an air shutter.

Adjusting Oven Burner Flame

Properly adjusted oven burner flames are clean and blue with a distinct inner cone approximately $\frac{1}{2}$ inch long.

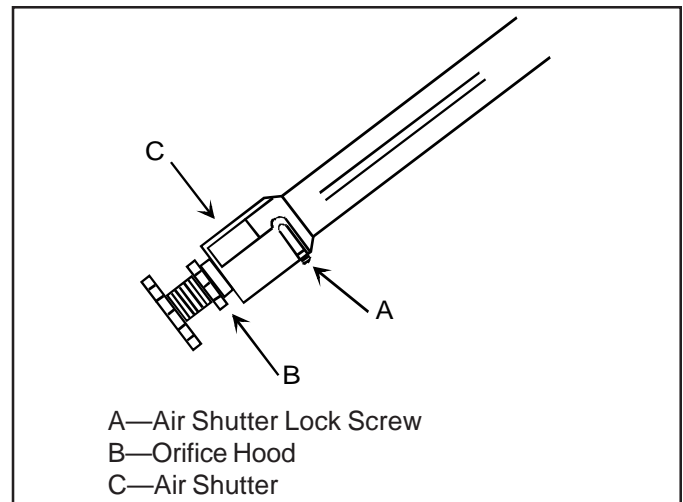
- If burner flame is blowing or noisy, reduce airflow to burner.
- If burner flame is yellow and does not hold its shape, increase airflow to burner.



WARNING

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

1. Remove storage drawer.
 - "Removing Storage Drawer" section.
2. Locate and remove screws attaching Z-shaped cover plate.
 - Cover plate located in center, rear of storage drawer cavity.
 - Removing cover plate exposes oven burner orifice and air shutter.



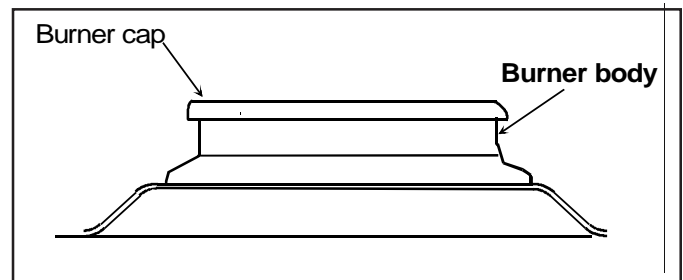
3. Loosen air shutter lock screw and open or close air shutter.
 - Tighten air shutter lock screw after adjusting.
4. Replace cover plate and storage drawer.

Broiler Flame

Broiler flame should appear hazy or fuzzy. Haze should be approximately $\frac{3}{8}$ inch thick. Because broiler has a fixed orifice it can not be adjusted. Broiler does not have an air shutter.

Placing Burner Caps

To replace burner caps after cleaning, make sure cap is properly aligned and leveled. Verify locating pegs in the burner body fit into recess in underside of burner cap. Burner cap must be correctly seated on burner body for proper operation of burner. Burner will not burn properly if wrong size burner cap is placed on wrong size burner body. Check for ignition after placement.



Installation Instructions for Freestanding Ranges

Level Range

Carefully level range using legs provided. Range must be level to cook and bake uniformly.



CAUTION

To avoid damaging oven door, do not lift or move range by oven door handle. Glass can break.

- Place a level on top oven rack or on top of range when leveling.
 - Leveling legs must be extended a minimum of $\frac{1}{4}$ inch to engage anti-tip bracket.
1. Extend leveling legs so when range is moved into position range top clears counter top.
 2. Slide range to where it will be installed.
 - Position range so rear leveling legs do not engage anti-tip bracket.
 3. Turn leveling legs to level range.
 - Turn legs clockwise to decrease range height or counter clockwise to increase range height.
 - Adjust rear leveling leg that engages anti-tip bracket first. Leveling leg can not be adjusted while in bracket. After adjusting leg that engages anti-tip bracket, slide range until leg engages bracket, and adjust other legs.
 4. Replace storage drawer.

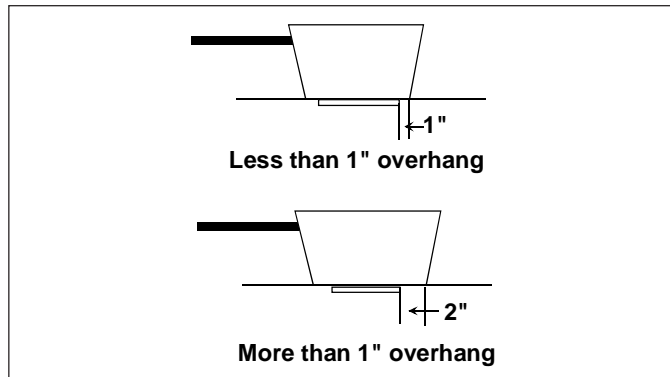
Removal and Replacement of Range

1. Disconnect power to range.
2. Slide range forward.
3. Unplug range cord and place range aside.
4. Remove anti-tip bracket.
5. Install anti-tip bracket into new location using instructions provided with bracket or see "Anti-tip Bracket Installation" section.
6. To reinstall range, follow installation instructions.

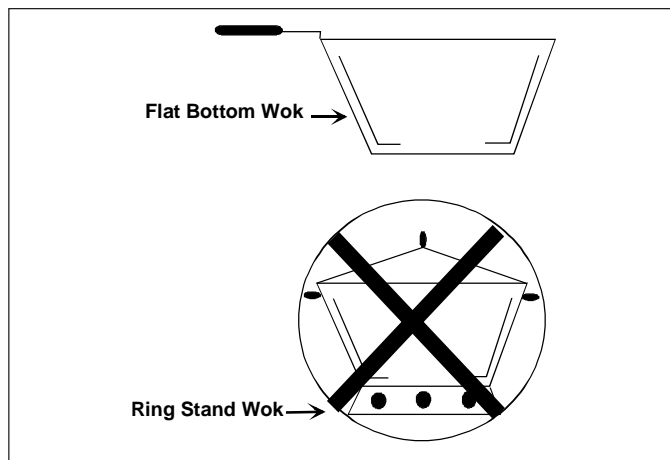
General Information

Cooking Utensils

- Use proper pan size. Do not use utensils that overhang element by more than 1 inch.



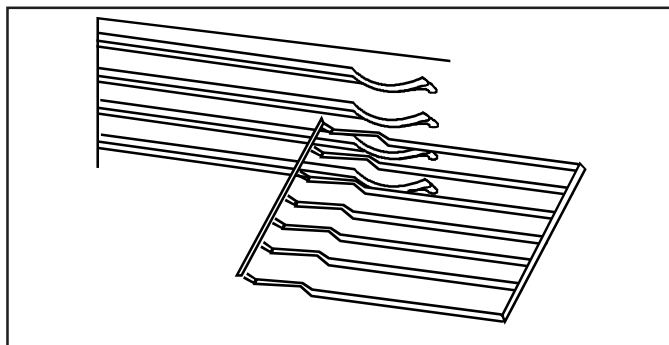
- Use care when using glazed cooking utensils. Some glass, earthenware, or other glazed utensils break due to sudden temperature changes.
- Select utensils without broken or loose handles. Handles should not be heavy enough to tilt pan.
- Select utensils with flat bottoms.
- Do not use a wok with a ring stand.



Oven Rack Placement

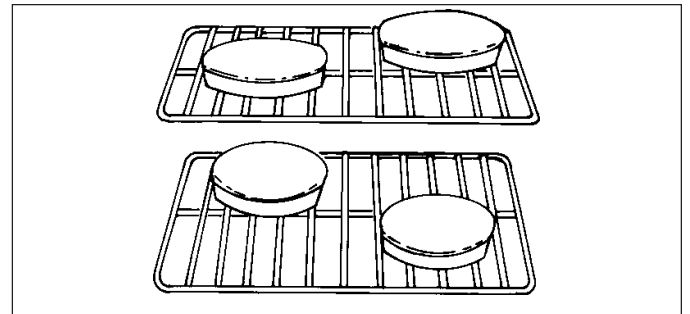
Position oven rack before turning oven on.

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



Pan Placement

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



Broiling Rack Placement

CAUTION

- Do not line oven bottom with aluminum foil, will damage porcelain coating.
- Do not line broiler with aluminum foil, will cause fire.
- Opendoor broiling is not recommended, may cause discoloring or component damage on Slide-In units.

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 or chip glass, or twist door. Glass may break suddenly.
- Replace door glass if damaged.

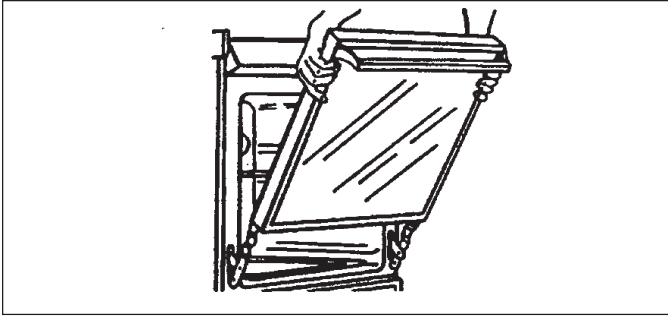
CAUTION

To avoid personal damaging oven door, do not lift or move range by oven door handle. Glass can break.

1. Open door fully.
2. Remove screws on each side of lower oven door.
3. Close door to first stop.
4. Grasp door firmly on each side and lift upward until door is off hinges.

General Information

- Do not lift door by handle. Glass can break.
- Only push hinges closed once oven door is removed if necessary. Use both hands when closing hinge. Hinge snaps closed.



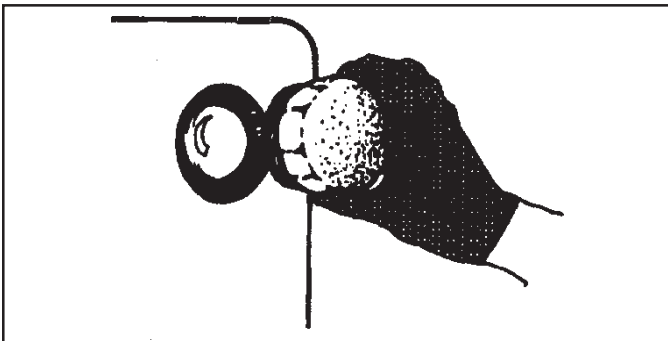
Replacing Oven Light

WARNING

To avoid risk of burns or electrical shock, disconnect electrical supply to range before changing light bulb.

- Before replacing light bulb make sure bulb is cool.
- Wear protective gloves.
- Do not operate oven without bulb and cover in place.

1. Disconnect electrical supply.
2. Remove oven door if desired.
3. Unscrew light bulb cover if so equipped and then light bulb. Turn counterclockwise.
4. Replace light bulb with 120 volt, 40 watt appliance bulb.
 - Do not overtighten bulb or light bulb cover. They may be difficult to remove later.
5. Replace light bulb cover and oven door before use.
6. Reconnect power supply.



Replacing Backguard Panel Light

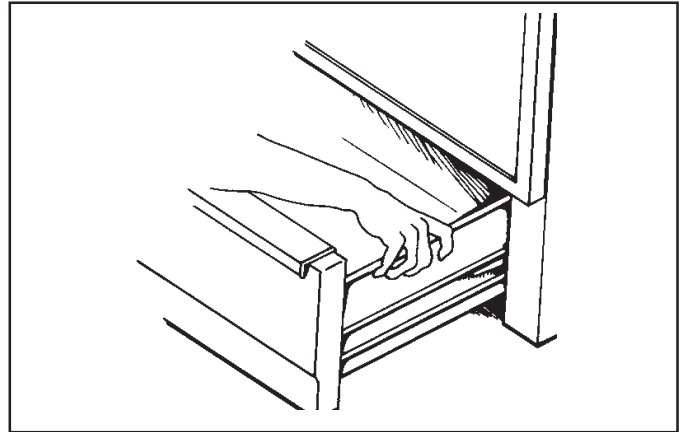
1. Lift up front edge of backguard top trim. Flip top trim towards rear of backguard.
2. Twist fluorescent bulb to remove it from the sockets.

CAUTION

Wear gloves to protect hands from accidental bulb breakage.

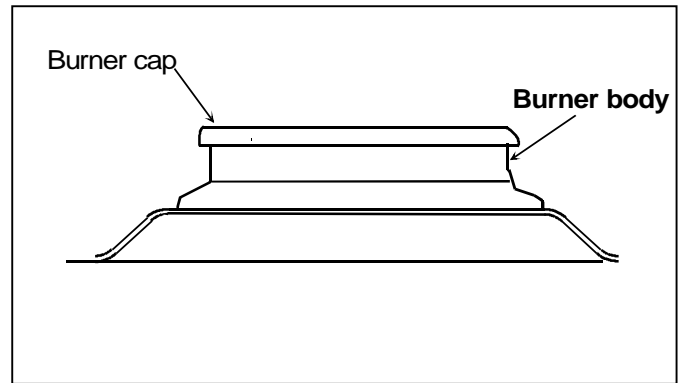
Removing Storage Drawer

1. Slide drawer out until it stops.
2. Grasp drawer sides near back of drawer.
3. Lift up and out.
 - Reverse to reinstall.



Replacing Burner Caps

To replace burner caps after cleaning, make sure cap is properly aligned and leveled. Verify locating pegs in the burner body fit into recess in underside of burner cap. Burner cap must be correctly seated on burner body for proper operation of burner. Burner will not burn properly if wrong size burner cap is placed on wrong size burner body. Check for ignition after placement.



Replacing Drip Pans

Drip pans may be removed for cleaning. When replacing Drip pans after cleaning, holes in drip pan must match properly with burners. Drip pans will fit properly only one way.

Care and Cleaning

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.
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 Interior Surfaces	Soap and Water	Cool before cleaning. Frequent wiping with mild soap and water prolongs time between self-cleanings. Be sure to rinse thoroughly.
Oven Racks and Storage Drawer	Soap and Water	For heavy soil, clean by hand and rinse thoroughly. Remove the drawer and racks for ease in cleaning. Be sure drawer is dry before replacing.
Drip Pans	Soap and a Non-abrasive Plastic Scouring Pad	Sprinkle with soap. Fill the pan with warm water. Let pan stand for a few minutes. Wash or scour if necessary. Rinse and dry. Drip pans may also be cleaned in dishwasher.

Operating Instructions

Operating Surface Burners

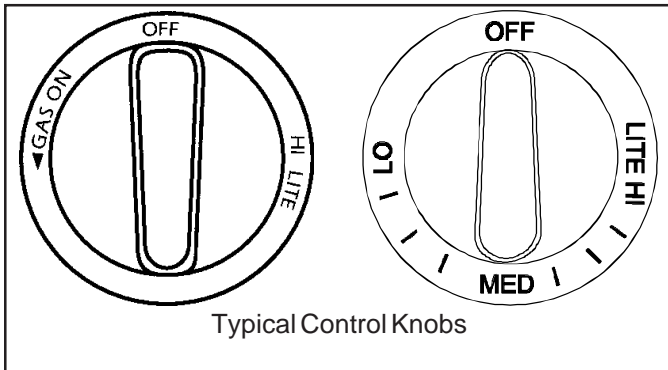


WARNING

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

Refer to individual technical sheets for specific information on element ratings.

1. Push in and turn control knob counterclockwise to "LITE" position.
 - All burner will spark.



Typical Control Knobs

2. After gas ignites, turn control 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 boiling temperature setting should be reduced.
3. Turn control knob to "OFF" position when finished cooking.
 - If left in "LITE" position, ignitor will continue to spark.

Operating Surface Burner during a Power Failure

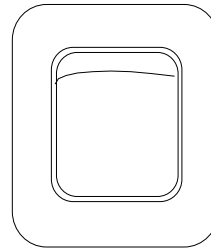
Although system that ignites the burners is electric, surface burners can be ignited during a power failure. Never attempt to light bake or broil burners during power failure.

1. Hold match at base of desired burner.
2. Push in burner control knob and turn to "LITE" position.
3. After gas ignites, remove match from burner and turn burner control knob to desired setting.

Oven Light

- Used to light inside of oven.
- Brightens oven cavity when oven door is opened or panel switch is turned on.
- Switch is located on right side of control panel next to clock.
- Operates automatically when oven door is opened.

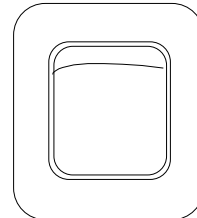
OVEN LIGHT



Panel Light

- Used to light backguard and illuminate cooking surface.
- Switch is located on left side of control panel next to clock.

PANEL LIGHT



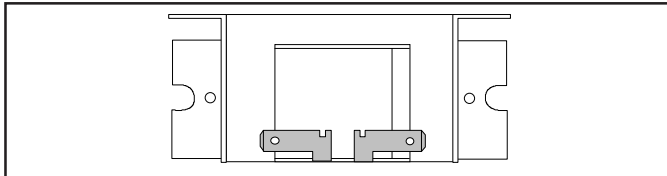
Testing Procedures

WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

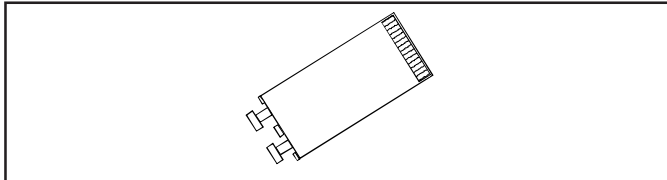
Fluorescent Light Ballast

1. Turn off power to the range.
2. Remove wires connected to ballast, and measure from terminal to terminal.
 - If infinite or zero resistance is indicated replace ballast.
 - Resistance should be indicated, but not a direct short.



Fluorescent Light Starter

If light does not illuminate verify voltage to ballast. If voltage is present, and ballast check OK, replace starter.



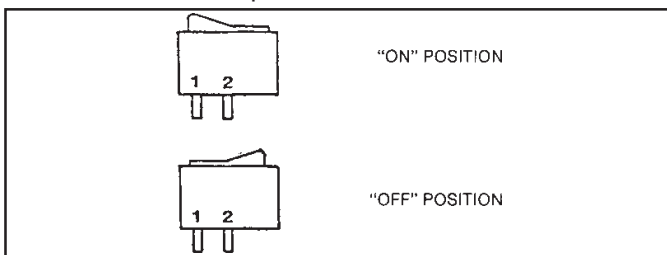
Fluorescent Light

If fluorescent tube has blackened ends and light flicker's, verify proper connection of tube, or replace tube.

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.

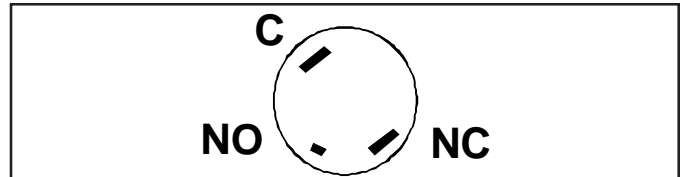
1. **Turn off power to the range.**
2. Disconnect the switch wire leads.
3. Attach an ohmmeter, set to the R x 1 scale, to the switch terminals 1 and 2. When the switch is set to the ON position, continuity should be indicated and open contacts should be indicated when the switch is set to the OFF position.



Oven Door Switch

Clean Safety/Light Switch (Power Off)

1. The switch has NO (normally open), NC (normally closed), and C (common) contacts.
2. Check the switch with an ohmmeter between C and NC with the plunger out. Continuity should exist. With the plunger in, no continuity.
3. Check the switch with an ohmmeter between C and NO with the plunger in. Continuity should exist. With the plunger out, no continuity.

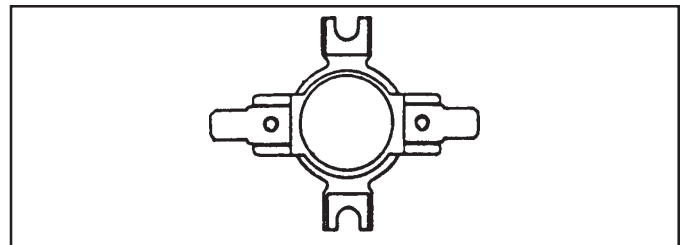


NOTE: When facing the range, the switch is on the left.

Oven High Limit/Fan Switch

Located on the rear of unit and connecting to the L2 side of electric supply, this switch is normally closed but will open if external temperature exceeds limits listed below.

Part Number	Open	Close
308417	115°F	155°F
316971	240°F	210°F



1. Turn off power to range.
2. Remove lower rear access panel on back of range.
3. Disconnect wires from switch terminal connections.
4. Attach ohmmeter leads to switch terminals. At ambient room temperature (70°F.) continuity should be indicated.

Testing Procedures



WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Gas Thermostat

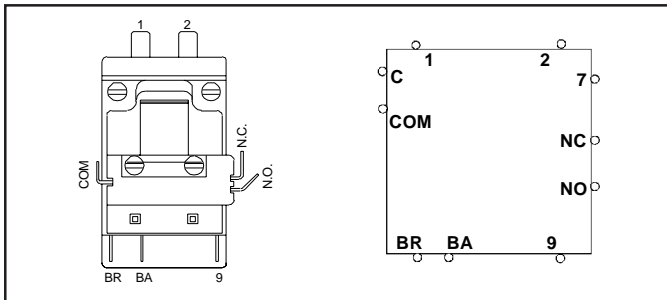
This system uses a thermostat which internally selects the Bake, Broil, and Clean circuits eliminating the separate selector switch.

Verify voltage being supplied to the gas thermostat by measuring voltage at terminal 2 of the gas thermostat, meter should indicate 120 VAC.

Verify gas thermostat is working correctly by measuring voltage at BA in bake mode, BR in broil mode, and C in clean mode. All terminal points should indicate 120 VAC.

Dial	Contacts					
	1-2 Main	COM-NO	COM-NC	C-BR	C-BA	7-9
Low Stop	N.S.	O	X	O	O	O
Bake	Cycles	N.S.	N.S.	O	X	O
Broil	Cycles	N.S.	N.S.	X	O	O
Clean	Cycles	X Below 700° F	X Above 700° F	O	O	X

NOTE: When switching oven thermostat from broil to bake always turn fully to OFF first. Otherwise the broil burner remains on by the thermostat.



Oven Temperature Sensor

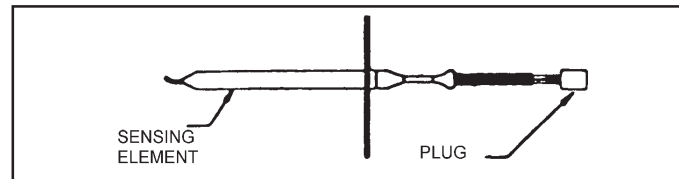
The oven temperature sensor can be checked by using the "Quick Test Mode" covered in this section of manual or detail testing can be accomplished as follows.

The oven temperature sensor is mounted in the oven cavity and electrically connected to the ERC. Following is approximate resistance.

75°F	—	1082 ohms
350°F	—	1656 ohms
550°F	—	2056 ohms
880°F	—	2686 ohms

Sensor resistance can be checked by removing the sensor interconnect harness plug from the ERC and inserting ohmmeter leads into the harness connector plug. A resistance reading of approximately 1100 ohms should be indicated at ambient room temperature (75°F.). If a higher resistance is indicated then remove sensor from oven, disconnect sensor from harness at plug, and recheck sensor resistance to assure that the problem is in the sensor and not in the interconnect harness or due to a bad connection.

NOTE: Sensor resistance will increase if held in your hand.



Cooling Fan Motor

Fan may come on at any time to cool components down.

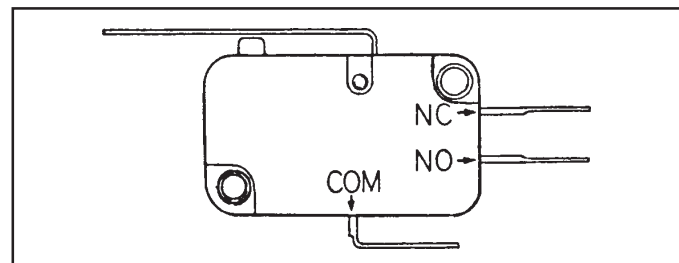
1. Turn off power to oven.
2. Disconnect wires from motor terminal connectors.
3. Attach ohmmeter leads to terminal tabs on motor.
4. A resistance reading of 15-30 ohms should be indicated but may vary with each motor tested. This test is to check the motor winding for an open or shorted winding. If zero or infinite ohms is indicated, the motor winding has failed and the motor must be replaced.

Clean Circuit Manual Latch Switch

The latch switch is a single pole, single throw switch. When the door latch is moved to the far right or locked position, the switch contacts COM-NO provide a connection path from gas thermostat to the clock timer, terminal AT3.

The switch contacts can be checked as follows:

1. **Turn off power to range.**
2. Disconnect the switch wire leads and check the COM-NO and COM-NC contacts for continuity.
3. When the door latch is in the left or unlocked position, the COM-NO contacts should be open and the COM-NC contacts should be closed.
4. Move the door latch to the far right or locked position. The COM-NO contacts should be closed and the COM-NC contacts should be open.



Testing Procedures

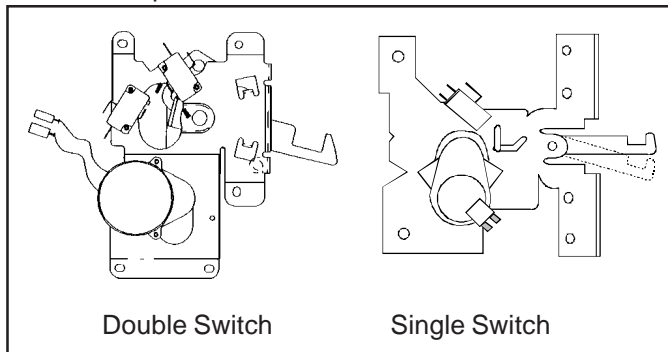
WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Auto Latch Motor

Do not remove latch motor from latch assembly. If latch motor is defective, replace latch assembly.

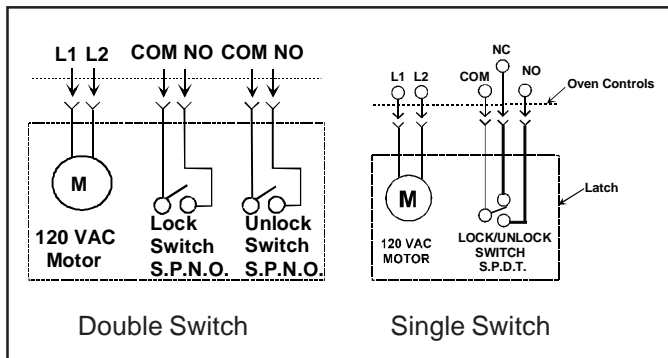
1. Disconnect power.
2. Remove screws securing maintop to frame, raise maintop, and secure.
3. Disconnect lead wires from latch motor.
4. Connect jumper cord leads to latch motor.
5. Connect jumper cord to 110 AC power source.
6. Replace if latch motor fails to operate.
7. Reverse procedure to reconnect.



Auto Latch Switches

Both unlock and lock door latch switches may be replaced.

1. Disconnect power.
2. Disconnect lead wires from door latch switch (unlock).
3. Set ohmmeter to the RX1 scale.
4. Attach meter leads to door latch switch (unlock).
5. Depress actuator arm. The meter should read continuity.
6. Reverse procedure to reconnect.
7. Use the same procedure to test the door latch switch (lock).



Bake and Broil Igniters

Bake and broil igniters are mounted to the bake and broil burners. They ignite the gas flowing into the burner.

During bake and broil operations, current flows through the ignitor, gas valve and thermostat to neutral. As the ignitor heats up and starts glowing, its internal resistance decreases. This allows more current to flow through the bake or broil circuit.

When circuit current reaches approximately 3.3 - 3.6 amps, bimetal arm in the gas valve flexes, opening the valve and allowing gas to flow to the burner where it is ignited by the glowing ignitor. Igniters glow anytime bake or broil burners are operating and cycle on and off with the thermostat cycling contacts.

Use the following procedure to check the igniters for continuity.

1. Disconnect power to oven.
2. Remove ignitor from burner. Disconnect ignitor wiring.
3. Set ohmmeter to RX10 scale. Attach one meter lead to each ignitor lead.
4. Resistance of several hundred ohms may be indicated. The amount of resistance may vary with each ignitor. This test determines if ignitor is opened internally.
5. Ignitor may still have to be replaced even though continuity is indicated and it glows when oven is set for bake, broil or clean function.

Ignitor current may be measured more exactly by testing with oven operating. Use the following procedure to test ignitor current with oven operating.

1. Insert an ammeter in series with one lead of the ignitor or any amp-probe attached to the lead to check the amount of current flowing through ignitor circuit.
2. Turn on oven and wait for ignitor to glow red. Meter should indicate approximately 3.3 - 3.6 amps.

The same procedure may be used to bench test ignitor. Connect an AC jumper or test cord to ignitor leads and follow the preceding procedure.

Testing Procedures

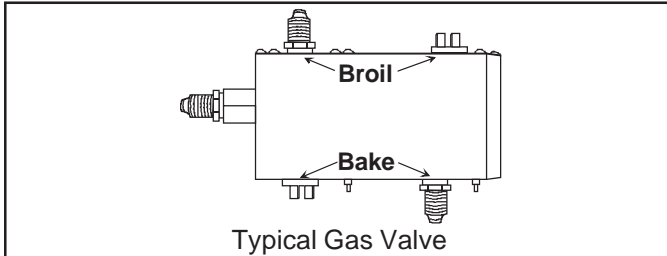


WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Gas Valve

Bake and broil dual gas valves supply gas to the bake and broil burners. Valves contain bimetal arms attached to the valve seats. These arms are wrapped with a small electric heater coil. When current range of approximately 3.3 - 3.6 amps flows through the bake or broil circuit, bimetal arm is heated. Heating causes the arm to bend, allowing gas to flow and be ignited by the burner ignitor.



The bimetal arms can be checked for continuity using the following procedure.

1. **Disconnect power to oven.** Remove gas valve wiring.
2. Access valves by removing control panel glass and control panel mounting bracket.
3. Set ohmmeter to low ohms scale. Attach meter leads to the two gas valve terminals facing rear of oven.
4. Meter should indicate low ohms or continuity.
5. Repeat on two gas valve terminals facing front of oven.
6. If meter indicates infinite ohms or an open heater coil, gas valve must be replaced.

NOTE: Do not apply 120 VAC to valve. Applying 120 VAC to valve will render valve inoperative.

Spark Module 4 + 0

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.
3. Prepare to measure voltage on spark module from terminal L to N.
4. Turn power supply back on.
5. Turn top burner to *LITE* position.
6. If no voltage is present on the meter, this will indicate the electrical circuit is interrupted before the spark module
7. If voltage is present, then check ignitor.
8. If ignitors are ok; then replace spark module.

Top Burner Spark Ignitors

All units have an electrode for each 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.

Spark Switch Test

Each spark switch is connected in parallel with spark ignition circuit. One terminal on each switch is connected to 120 VAC, while the other terminal connects to the "L" 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*.

Disassembly Procedures



WARNING

To avoid risk of electrical shock, personal injury, or death: disconnect electrical and gas supply before servicing.

Moving and Replacing Range

1. Turn off electrical power and gas to the range.
2. Pull the oven forward out of the cabinet 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).

Maintop Removal–Slide-In

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove screws securing top surface burners.
4. Remove surface burner and disconnect spark ignitor wire from surface burner.
5. Raise and remove maintop from unit.

Control Panel Disassembly–Slide-In

1. Turn off electrical power and gas to the range.
2. See “Maintop Removal–Slide-In” for removal.
3. Carefully pull surface burner knobs outward to remove.
4. Remove screws located on front of control panel.
5. Remove screws securing end caps to unit.
6. Remove screws securing control panel to unit.
7. Pull control panel forward and tilt downward.
8. Remove screws securing ERC to control panel.
9. Depress side locking arms, push forward on oven light switch, and disconnect wire terminals from switch.
10. Replace and reassemble in reverse order.

ERC–Slide-In



WARNING

While unplugging electrical connections pins may be damaged, use extreme care when disconnecting.

1. Remove control panel, see “Control Panel Removal–Slide-In” procedure, (steps 1-6).
2. Remove screws securing ERC to control panel.
3. Disconnect wires from ERC.
4. Replace and reassemble in reverse order.

Oven Light Switch–Slide-In

1. Remove control panel, see “Control Panel Removal–Slide-In” procedure, (steps 1-6).
2. Depress side locking arms and push forward on switch to release from control panel.
3. Disconnect wire terminals from switch.
4. Replace and reassemble in reverse order.

Top Surface Valve and Spark Switch–Slide-In

1. Remove control panel, see “Control Panel Removal–Slide-In” procedure, (steps 1-6).
2. Remove spark switch by pulling straight off valve.
3. Remove wires by depressing release arm or pulling terminal off.
3. Remove screw securing valve to front manifold.
4. Replace and reassemble in reverse order.

Spark Module–Slide-In

1. See “Maintop Removal–Slide-In” for removal.
2. Remove screws securing spark module bracket.
3. Disconnect wire terminals from spark module.
4. Replace and reassemble in reverse order.

ERC Cooling Fan–Slide-In

1. See “Maintop Removal–Slide-In” for removal.
2. Disconnect wire terminals from fan motor.
3. Remove screws securing cooling fan bracket.
4. Replace and reassemble in reverse order.

Oven High Limit/Thermal Fan Switch–Slide-In

1. See “Maintop Removal–Slide-In” for removal.
2. Disconnect wire terminals from limiter.
3. Remove screws securing limiter.
4. Replace and reassemble in reverse order.

Maintop Removal–Freestanding

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.

Front Control Panel–Freestanding

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. Pull forward on the bottom of control panel, then slide forward.
6. 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.

Top Surface Valve and Spark Switch–Freestanding

1. Remove control panel, see “Front Control Panel Removal–Freestanding” procedure, (steps 1-5).
2. Remove spark switch by pulling straight off valve.
3. Remove screw securing valve to front manifold.
4. Replace and reassemble in reverse order.

Glass Backguard–Freestanding

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove burner control knobs, by pulling outward (if so equipped).
4. Lift up on front edge of backguard top trim. Flip top trim towards rear of backguard.
5. Twist fluorescent bulb to remove it from sockets.
6. Remove screws securing light diffuser cover.
7. Remove screws securing backguard left and right lower end caps to unit.
8. Slide control panel up and out of backguard assembly.
9. Replace and reassemble in reverse order.

Metal Backguard–Freestanding

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
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.

Fluorescent Light Bulb–Freestanding

1. Push down and pull forward while lifting up on front edge of backguard top trim. Flip top trim towards rear of backguard.
2. Twist fluorescent bulb to remove it from sockets.



CAUTION

Wear gloves to protect hands from accidental bulb breakage.

Fluorescent Light Socket–Freestanding

1. Follow fluorescent light bulb removal procedure, Steps 1 and 2.
2. Release light socket secured to mounting bracket.
3. Remove wires from light socket by depressing tangs in socket with a paper clip or small screwdriver.
4. Insert wire terminals (with wire) into new socket.

Fluorescent Light Starter/Starter Base–Freestanding

1. Follow fluorescent light bulb removal procedure, Steps 1 and 2.
2. Depress and turn starter to remove starter from base.
3. Disconnect wires to starter base. Release base from backguard.

Ballast–Freestanding

NOTE: Some models require removal of range from cabinet.

1. Turn electrical power off to range.
2. Remove rear lower access panel from range.
3. Disconnect and label wire terminals.
4. Remove screws securing ballast to rear insulation cover.
5. Replace and reassemble in reverse order.

Oven Door Removal

1. Remove screws securing door to hinge assembly.
2. Open door to first stop position (1/3 open) then grasp both sides and lift up off the hinges.

Oven Sensor

1. Remove screws securing sensor to top left rear corner of oven wall.
2. Pull sensor forward enough to disconnect the wire connector.
3. Replace and reassemble in reverse order.

Top Burner

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove grates, caps, and burner bowls (if so equipped).
4. Remove screws securing top burner to maintop.
5. Lift burner up and disconnect spark ignitor wire.
6. 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.

Oven Burner Ignitor

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove storage drawer, oven door, racks, and oven bottom.
4. Remove Z panel (freestanding only).
5. Disconnect wire terminal plug, located underneath oven behind storage drawer.
6. Remove screws securing ignitor to oven burner and oven rear wall.
7. Remove oven ignitor, by sliding ignitor towards front of the oven, feeding wires through opening.
8. Replace and reassemble in reverse order.

Oven Burner

1. See "Oven Burner Ignitor" procedure (steps 1-3).
2. Remove screws securing oven ignitor and burner.
3. Carefully maneuver burner out of the oven.
4. Replace and reassemble in reverse order.

Broil Burner Ignitor

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove oven door, and racks.
4. Remove screws securing ignitor bracket to oven tank.
5. Disconnect wire terminals to free ignitor.
6. Replace and reassemble in reverse order.

Broil Burner

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove oven door, and racks.
4. Remove screws securing burner to oven tank.
5. Carefully maneuver burner out of the oven.
6. Replace and reassemble in reverse order.

Lower Burner Box

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove oven door, and racks.
4. Remove oven ignitor and oven burner.
5. Remove screws securing lower burner box to oven tank and insulation retainer.
6. Replace and reassemble in reverse order.

Gas Valve

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove storage drawer.
4. Disconnect wires and gas lines to gas valve.
5. Remove screws securing gas valve mounting and remove bracket with valve.
6. Remove screws securing gas valve to bracket.
7. Replace and reassemble in reverse order.

Pressure Regulator

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove storage drawer, for slide-in; or back access panel, for freestanding.
4. Disconnect gas line from regulator.
5. Disconnect regulator from manifold.
6. Replace and reassemble in reverse order.

Shut-Off Valve

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove storage drawer.
4. Disconnect gas line from shut-off valve.
5. Disconnect shut-off valve from manifold.
6. Replace and reassemble in reverse order.

Power Cord

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

Top Burner Venturi

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove maintop assembly.
4. Slide venturi to the side out of bracket, then slide back to release venturi from top burner orifice.

Manual/Automatic Oven Door Latch Assembly

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove maintop assembly.
4. Disconnect and wire terminals.
5. Remove plastic handle from manual latch arm.
6. Remove screws securing latch assembly to chassis.
7. 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.

Door Plunger Light Switch

1. Turn off electrical power and gas to the range.
2. Disconnect gas and power from unit.
3. Remove maintop assembly
4. Label and disconnect wire terminals from switch.
5. Squeeze metal tab and push switch outward to remove.
6. Replace and reassemble in reverse order.

Oven Light Bulb/Oven Light Socket

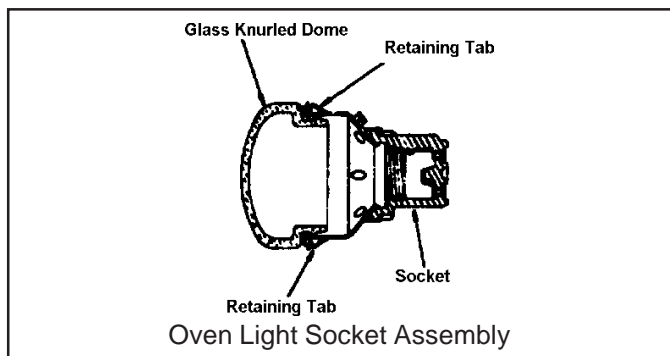
NOTE: Require's removal of range from cabinet.

1. Disconnect electrical power to range.
2. Unscrew (counterclockwise) glass knurled dome.
3. Using a glove, unscrew (counterclockwise) oven light bulb.

Proceed with the following steps for oven light socket removal.

4. Remove galvanized rear cover from range.
5. Disconnect wires from light socket.
6. Carefully displace fiberglass insulation away from rear of light socket.
7. With a flashlight, locate four tabs securing light socket to oven liner. While pushing light socket (towards front of range) depress the four tabs inward. Light socket will release into oven cavity.
8. Reverse procedure to reinstall light socket. Reposition insulation around lamp socket. Do not overtighten.

NOTE: Reposition Fiberglass Insulation around Oven Light Socket to Eliminate Possibility of Heat Related Problems.



Oven Liner Removal

1. Turn off electrical power and gas to the range.
2. Remove oven door and racks.
3. Remove bake burner, bake ignitor, broil burner, and broil ignitor. Remove thermostat capillary.
4. Remove chip cover and oven bottom securing screws.
5. Remove rear cover, disconnect wiring, remove oven bracket screws, and withdraw capillary tube.
6. Remove oven light cover, bulb, and socket.
7. Release oven tank brackets at rear. Maneuver tank from frame.
8. Reverse procedure to assemble.

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.

When removing oven liner be certain not to dislodge the broil air duct from the cabinet. If air duct is dislodged, broiler burner will not function as it will disrupt the air flow to the broiler, resulting in poor air-gas mixture.

Frameless Door Disassembly

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.

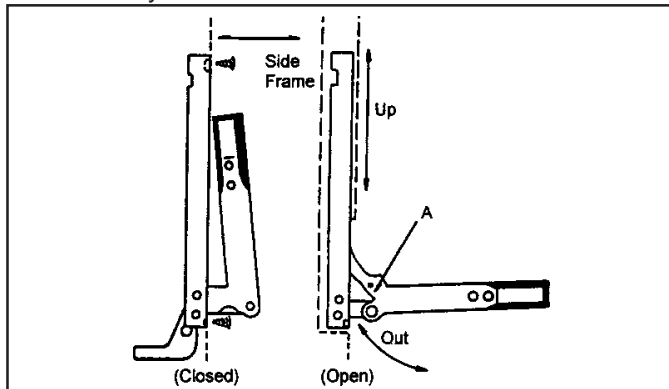
Disassembly Procedures



To avoid risk of electrical shock, personal injury, or death: disconnect electrical and gas supply before servicing.

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

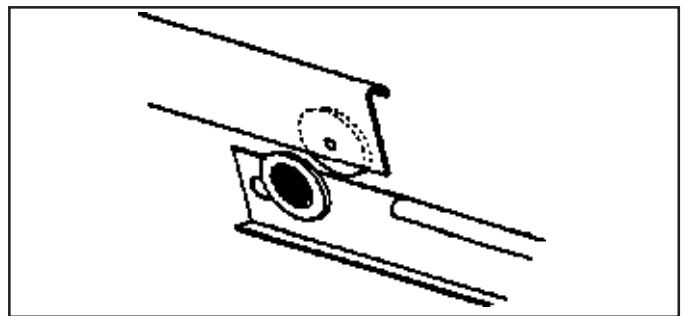
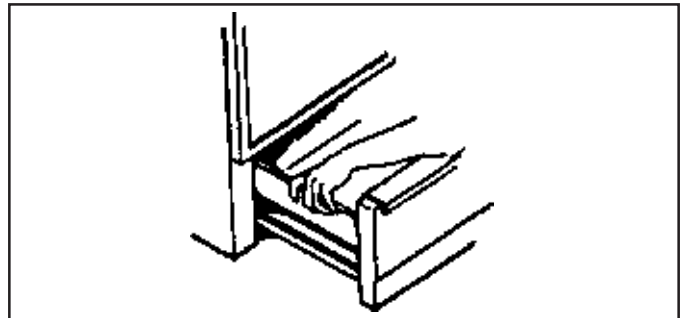
NOTE: Replace left or right side panel one at a time. Do not attempt to remove both side panels as lack of support may cause subsequent damage/twist to backguard.

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.

Storage Drawer and Storage Drawer Panel Removal

1. Pull drawer straight out to first stop. Lift front and pull out to second stop.
2. Let front of door rest on floor. Place hands toward back of drawer and lift it out.



3. To replace:
 - a. Place the set of rollers on the drawer behind the set of rollers on the oven. (As shown below.)
 - b. Align the guides and push the drawer back into position.

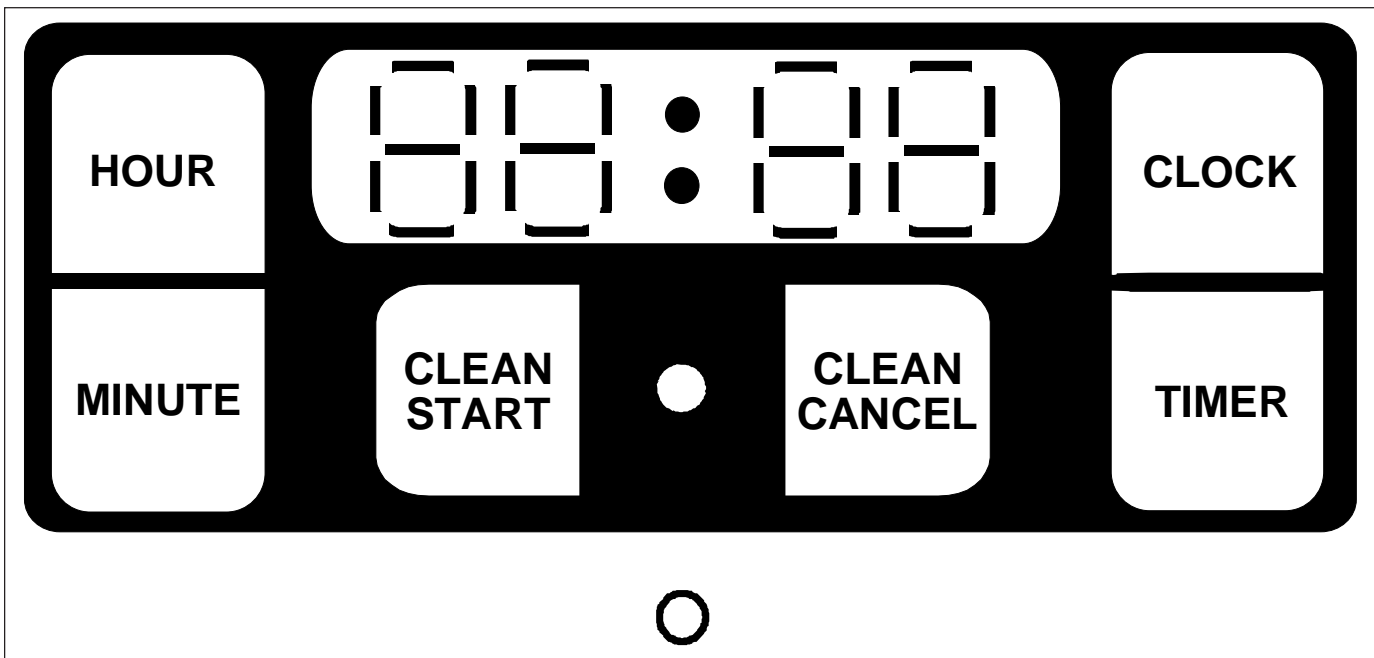
Storage Drawer Track Removal

1. Remove the storage drawer by pulling it out to the fully open or stop position, lifting the drawer at the rear to disengage the drawer track rollers from the drawer runners, and sliding the drawer out of the range.
2. The tracks are mounted to a rear support and the frame of the range. Remove the two track mounting screws and remove the track. If the track support is being replaced, remove the mounting screw securing it to the side frame and remove the support.

This page intentionally left blank.

Appendix

Clean Timer with Mylar Overlay—315568



Clean Timer/Clock Pads and Lights

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.

CLEAN START

- Use to begin self-cleaning.

CLEAN CANCEL

- Use to stop self-cleaning.

Self-clean indicator light

- Located between *CLEAN START* pad and *CLEAN CANCEL* pad.
- Glows when oven is self-cleaning.

Oven indicator light

- Located below clock.
- Glows when oven cavity is warming.

This Clean Timer/Clock will NOT delay bake or time bake.

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.
 - 12 hour clock.

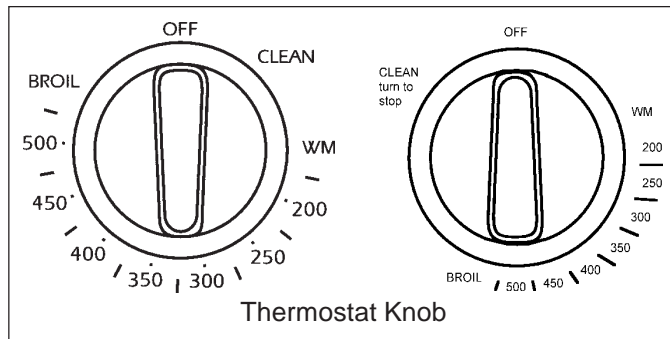
Setting Electronic Timer

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.

Programming Instructions

Baking

1. Open oven door to confirm nothing is stored in oven cavity and set racks to proper height.
2. To preheat oven, turn oven thermostat knob to desired temperature. See knob below.
 - Oven indicator light glows.
 - When indicator light turns off, oven has reached desired temperature. During cooking, indicator light turns off and on when oven cycles to maintain temperature.
 - For delicate baking allow oven to cycle at least 2 times.
3. Place food in oven.
4. After cooking time elapses, remove food and turn oven thermostat knob to "OFF".



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.
 - Fish should be broiled with skin side down. 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 browned enough, cook on a higher rack position. If food is too browned, cook on a lower rack position.
1. Center food on broiling grid and pan, and place in oven.
 2. Turn oven thermostat knob to *BROIL*.
 - Oven indicator light glows.
 3. After broiling, remove food and turn oven thermostat knob to *OFF*.

Self-Cleaning

CAUTION

To avoid risk of personal injury, do not touch oven vents or areas around vents during self-cleaning. These areas can become hot enough to cause burns.

- A small amount of smoke is normal when cleaning. Excessive smoke may indicate there is a faulty gasket or too much food residue has been left in oven. Move birds and small animals susceptible to fumes or smoke to another room.
 - Oven should be cleaned before it gets too dirty. Wipe up large spills before self-cleaning.
 - Do not use cleaning cycle if oven light cover is not properly in place.
1. Prepare oven for self-cleaning.

WARNING

To avoid risk of smoke damage or fire, clean excess spills from oven interior.

- Remove oven racks and all cooking utensils from oven.
 - Clean excess spills from oven interior.
 - Remove items from range top and backguard. These areas can become hot during self-cleaning cycle.
2. Move oven door lever located above oven door to right to lock oven door.



3. Turn oven thermostat knob to *CLEAN* position.
4. Press *CLEAN START* pad.
 - Self-clean and oven indicator light glow. If oven indicator does not glow check oven door lever.
 - Self-clean cycle lasts for approximately 3½ hours. After 3½ hours oven turns off. There is no signal at the end of cleaning cycle.
5. Turn oven thermostat knob to *OFF* position when finished.
 - After oven has cooled, door can be unlocked and opened.
 - To avoid damaging door lock, do not force lever to unlocked position.

Interrupt Self-Clean Cycle

1. Push *CLEAN CANCEL* pad and turn oven thermostat knob to *OFF* position.
2. When oven has cooled to a safe temperature, unlock and open oven door. Do not force handle, damage will occur to latch mechanism. If handle will not open allow 1/2 hour for cool down and try again.

Testing Procedures



WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Service Information

The LED Clock with Minute and Clean Timer is designed to provide clock and timer functions as well as a timed relay for cleaning operation. This clock consists of a display, relay, and all circuitry which are housed in a single component.

Functions for the clean cycle to operate correctly consist of latch switch, clock, and thermostat to work in series with each other to operate the clean cycle. If one of the components is not operating correctly, this will effect the operation of cleaning cycle.

Test Procedure

Performance of this clock is very simple to verify proper operation. Follow the procedures below:

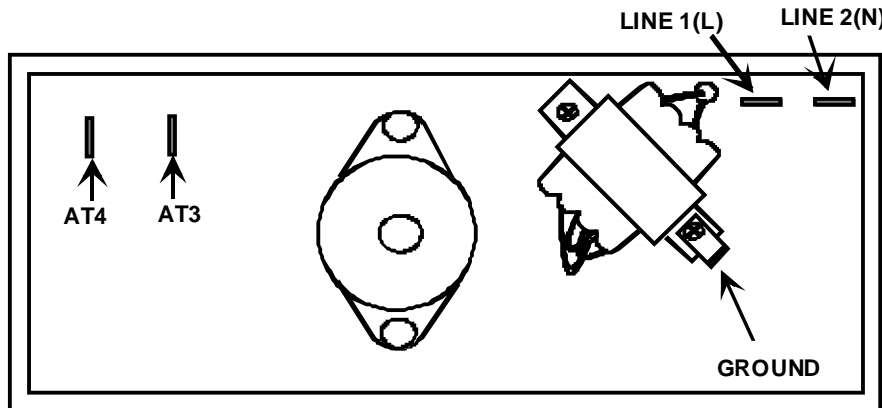
Clock Display Not Operating

1. Verify voltage is present at Line 1 and Line 2 terminals of the clock.
2. If no voltage is present, verify wire connection are properly in place, and check wire continuity.
3. Replace clock if voltage is present at clock and no display is present.

Clean Operation of Clock

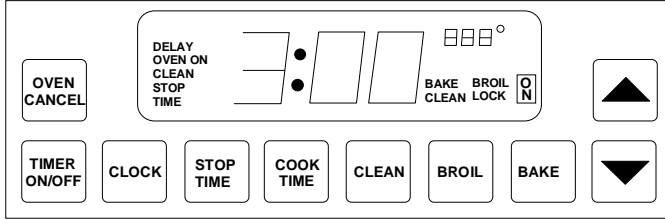
1. Verify voltage to AT3. If no voltage check latch switch operation, and thermostat operation..
2. Verify voltage at AT4 when programmed for clean. If no voltage, replace the clock.

Refer to wiring diagram for thermostat switch schedule.

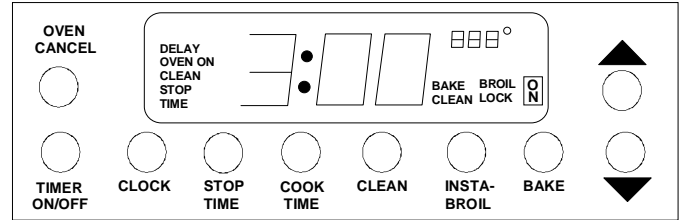


Electric Slew ERC3—315569

Mylar Overlay



Backguard Glass



Electronic Oven Control

OVEN CANCEL

- Cancels any cooking or cleaning function except timer.

TIMER ON/OFF

- Use to time any kitchen function or cancel timer.
- Does not control bake, broil, or clean function.

CLOCK

- Use to set time of day.

STOP TIME

- Use to set delayed or timed bake, and self-clean.

COOK TIME

- Use to set delayed or timed bake.

CLEAN

- Use to select self-clean cycle.

BROIL/INSTA-BROIL

- Use to select broil.

BAKE

- Use to select bake.

SLEW ▲ or ▼

- Use to set temperature or time.

Special Oven Control Functions

Timer Signal

When time elapses timer beeps 3 times then once every 6-8 seconds.

Preheat Signal

After setting oven to bake and selecting a temperature, oven preheats. When oven reaches set temperature, signal sounds for approximately 1 second.

End of Cycle Signal

When a timed cooking or cleaning cycle is complete, three long signals sound. Oven signal sounds 3 times, then approximately once every 3 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.

If minute timer end of cycle signal is sounding push *TIMER ON/OFF* pad.

Child Lock Out

This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control. Touch and hold *BAKE* and *CLOCK* for 5 seconds. "OFF" will display where the temperature normally appears.

To reactivate the control, touch and hold *BAKE* and *CLOCK* for 5 seconds. Child lockout features must be reset after a power failure.

12 Hour Automatic Cancel

This is a safety feature that prevents oven from continuing to operate if it has been left on for over 12 hours. If a cooking function continues longer than 12 hours without any options on oven control being touched, this feature turns oven off. Any time an option is touched, 12 hour automatic cancel is reset.

Increasing Slew Pad Speed ▲ or ▼

When setting time and temperature, hold pad to accelerate the rate at which the numbers increase or decrease.

Self-Diagnostic System

Electronic range control has a self-diagnostic system. Self-diagnostic system sounds a series of short, rapid beeps and shows a "F-code" in display when there is a problem.

Programming Instructions

Quick Reference Instructions

Read "Important Safety Information" before using "Quick Reference Instructions". If there are unanswered questions, refer to detailed sections of this manual.

Flashing Display

When power is connected to range, numbers flash in electronic range control. Press OVEN CANCEL pad to stop flashing.

Setting Clock

12 hour clock does not display a.m., p.m., or military time.

1. Press CLOCK pad.
 - "TIME" displays.
2. Press ▲ or ▼ pad until correct time of day is displayed.
3. Press OVEN CANCEL pad to set time.
 - If OVEN CANCEL pad is not pressed, approximately 30 seconds after last entry, "TIME" disappears and time is set.

Setting Minute Timer

Timer can be used while another feature is in use.

1. Press TIMER ON/OFF pad.
 - "TIMER" displays.
2. Press ▲ or ▼ pad until desired amount of time is displayed.
 - Timer can be set from 5 seconds to 9 hours and 50 minutes.
 - Timer begins counting down automatically.
3. When time elapses timer beeps 3 times then approximately once every 6-8 seconds.
 - Press TIMER ON/OFF to cancel beep but remain in timer mode.

Canceling Minute Timer

Press TIMER ON/OFF pad for 3 seconds.

- When canceling minute timer do not press OVEN CANCEL pad. Pressing OVEN CANCEL pad cancels cooking function.

Baking or Broiling

1. Press BAKE or BROIL pad.
2. Press ▲ or ▼ pad until desired temperature or broiler setting is displayed.
3. Oven begins baking or broiling automatically.

Canceling Bake or Broil

Press OVEN CANCEL pad.

Self-Cleaning

1. Remove oven racks and all utensils from oven and range top. Clean excess spills from oven.
2. Press CLEAN pad, 3 hour time in display.
3. Press ▲ or ▼ pad to adjust clean time. Clean can be set from 2 to 4 hours.
4. Oven begins cleaning automatically.

Canceling Self-Cleaning Cycle

1. Press OVEN CANCEL pad.
2. When oven has cooled to a safe temperature, door will unlock.
 - When "LOCK" no longer displays, oven temperature is safe. Do not force door while "LOCK" displays.


Baking

Open oven door to confirm nothing is stored in oven cavity and set racks to proper height before baking. For most recipes, preheat oven before placing food inside oven. To bake delicate food items, like pastries, preheat oven for an additional 10-15 minutes after preheat signal. Pans must be staggered for even browning.

1. Press BAKE pad.
 - "BAKE" and "---°" display.
2. Press ▲ or ▼ pad until desired temperature is displayed.
 - Temperature begins at 350°F and can be set from 170°F to 550°F in 5 degree increments.
 - Time of day, oven temperature, "BAKE", and "ON" display.
 - Temperature starts at 100°F and increases in 5° increments until reaching set temperature. Some minor smoking is normal when using oven for first time.
 - When cook temperature is reached preheat signal sounds.
3. Press OVEN CANCEL pad when finished.
 - Remove food from oven when cooking time has elapsed. Food left in oven can overcook.

Programming Instructions

Timed Baking

1. Place food in oven.
2. Press COOK TIME pad.
 - “OVEN”, “TIME”, “HR”, and “0:00” display.
3. Press ▲ or ▼ pad until cooking time is displayed.
 - “TIME”, “BAKE”, and “HR” display. “HR” does not display if less than an hour of time is set.
 - Cook time can be set up to 11 hours and 55 minutes.
 - 10 minutes minimum cooking time.
 - If cook time is entered and temperature not entered “BAKE” flashes and oven signals.
4. Press BAKE pad.
 - “BAKE” and “---°” display.
5. Press ▲ or ▼ pad until desired temperature is displayed.
 - “OVEN”, “TIME”, “BAKE”, “”, and “HR” display.
 - Cooking time begins to count down.
 - Temperature begins at 350°F and can be set from 170°F to 550°F in 5°F increments.
 - Temperature display increases in 5°F increments starting at 100°F until reaching set temperature. Some minor smoking is normal when using oven for first time. When cook temperature is reached oven signals.
 - Preheat signal sounds when oven cavity reaches temperature.
 - When cooking time has elapsed, an end-of-cycle signal sounds, oven automatically turns off and display returns to time of day.
6. Press OVEN CANCEL pad when finished.
 - Remove food from oven when cooking time has elapsed. Food left in oven can overcook.
 - Pressing OVEN CANCEL stops end of cycle signal.

To Cancel Remaining Cooking Time




Press OVEN CANCEL pad.

Delayed Baking



CAUTION

To reduce the risk of food poisoning, never hold meat, milk, fish, or eggs for more than 2 hours before cooking.

1. Place food in oven.
2. Press BAKE pad.
 - “BAKE” and “---°” display.
3. Press ▲ or ▼ pad until desired temperature is displayed.
 - Temperature begins at 350°F and can be set from 170°F to 550°F in 5 degree increments.
 - Time of day, oven temperature, “BAKE”, and “” display.
4. Press STOP TIME pad.
 - Current time of day, “STOP”, “TIME”, “BAKE”, and “” display.
5. Press ▲ or ▼ pad until desired stop time displays.
 - Stop time can be set up to 11 hours 55 minutes ahead of current time of day.
6. Press COOK TIME pad.
 - “OVEN”, “TIME”, and “BAKE” display.
 - To view cook time later, press COOK TIME pad.
7. Press ▲ or ▼ pad until desired cooking time displays.
 - Maximum cooking time, “DELAY”, “OVEN”, “TIME”, “HR”, and “BAKE” display.
 - When start time is reached “DELAY” no longer displays and “” displays.
 - 10 minutes minimum cooking time.
 - Electronic range control calculates start time.
 - To view cook time, press COOK TIME pad.
 - When cooking time has elapsed, end-of-cycle signal sounds, oven automatically turns off and display returns to time-of-day.
 - Press OVEN CANCEL to stop end of cycle signal.

To Cancel Remaining Cooking Time

Press OVEN CANCEL pad.

Programming Instructions


Broiling

Preheating is not required when using broil.

WARNING

- To avoid risk of fire, do not line the broiler grid with foil. Foil may trap grease on top of grid close to element causing a fire.
- Never leave oven unattended while broiling. Overcooking may result in a fire.

- Oven door must be closed while broiling.
- 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.
- Season meat after it has browned.
- Begin cooking using suggested rack levels in “Broiling Guide” section to test broiler results. If food is not browned enough, cook on a higher rack position. If food is too browned, cook on a lower rack position.
- All foods should be turned at least once except fish, which does not need to be turned.

1. Center food on broiling grid and pan, and place in oven.
 - Oven door must be closed while broiling.
2. Press BROIL pad.
 - “BROIL” and “---” displays.
3. Press ▲ or ▼.
 - Oven begins to broil automatically. “BROIL”, “

Self-Cleaning

- A small amount of smoke is normal when cleaning. Excessive smoke may indicate too much food residue has been left in oven or a failed gasket .
- Clean oven before it gets too dirty. Wipe up large spills before self-cleaning.
- Do not use cleaning cycle if oven light cover is not properly in place.


WARNING

To avoid risk of smoke damage or fire, clean excess spills from oven interior and under oven bottom before self-cleaning range. Wear hand protection to avoid injury from sharp edges.

1. Pull oven bottom forward and lift out of range.
2. Wipe out burner area with a cloth and warm soapy water.
3. Dry area thoroughly and replace oven bottom.

CAUTION

To avoid risk of personal injury, do not touch oven vents or areas around vents during self-cleaning. These areas can become hot enough to cause burns.

1. Prepare oven for self-cleaning.
 - Remove oven racks and cooking utensils from oven.
 - Clean excess spills from oven interior.
 - Remove items from range top and backguard. These areas can become hot during self-cleaning cycle.
2. Press CLEAN pad.
 - “CLEAN”, “TIME”, and “----” display.
3. Press ▲ or ▼ pad to adjust cleaning time.
 - “3:00” displays when ▲ or ▼ is pressed.
 - Increase or decrease cleaning time by 5 minute increments.
 - Clean can be set from 2 to 4 hours. Minimum recommended cleaning time is 3 hours.
 - Oven begins to clean. “HR”, “CLEAN”, “TIME”, “CLEAN”, “LOCK”, and “

Interrupt Self-Clean Cycle

1. Press OVEN CANCEL pad.
2. When oven has cooled to a safe temperature, door will unlock and can be opened. Delayed Self-Cleaning

Delayed Self-Cleaning

- A small amount of smoke is normal when cleaning. Excessive smoke may indicate there is a faulty gasket or too much food residue has been left in oven.
- Clean oven before it gets too dirty. Wipe up large spills before self-cleaning.
- Do not use cleaning cycle if oven light cover is not properly in place.

WARNING

To avoid risk of smoke damage or fire, clean excess spills from oven interior and under oven bottom before self-cleaning range. Wear hand protection to avoid injury from sharp edges.

1. Pull oven bottom forward and lift out of range.
2. Wipe out burner area with a cloth and warm soapy water.
3. Dry area thoroughly and replace oven bottom.

Programming Instructions



CAUTION

To avoid risk of personal injury, do not touch oven vents or areas around vents during self-cleaning. These areas can become hot enough to cause burns.

1. Prepare oven for self-cleaning.
 - Remove oven racks and all cooking utensils from oven.
 - Clean excess spills from oven interior.
 - Remove items from range top and backguard. These areas can become hot during self-cleaning cycle.
2. Press CLEAN pad.
 - “CLEAN”, “TIME”, and “----” display.
3. Press ▲ or ▼ pad until desired amount of cleaning time is displayed.
 - “3:00” displays when ▲ or ▼ is pressed.
 - Increase or decrease cleaning time in 5 minute increments.
 - Clean can be set from 2 to 4 hours. Minimum recommended cleaning time is 3 hours.
4. Press STOP TIME pad.
5. Press ▲ or ▼ pad until desired stopping time appears in display.
 - Starting time is automatically calculated based on amount of cleaning time and stop time.
 - “DELAY”, “CLEAN”, “STOP”, “TIME”, “CLEAN”, and “LOCK” display. “LOCK” flashes in display when automatic door latch is locking.
 - To view remaining cleaning time, press and hold CLEAN pad.
 - To view calculated stop time, press STOP TIME pad.
 - When cleaning time has elapsed, oven automatically turns off and display returns to time-of-day.
 - When oven cools to a safe temperature, door latch opens and “LOCK” light flashes while opening. After door latch opens, “LOCK” light no longer displays and door can be opened.

Interrupt Self-Clean Cycle

1. Press OVEN CANCEL pad.
2. When oven has cooled to a safe temperature, door will unlock and can be opened.

Child Lock Out

This feature disables oven control. Surface elements can be used while child lock out is on.

1. Press and hold BAKE and CLOCK pads simultaneously.
 - “OFF” displays briefly.
2. Repeat step 1 to cancel child lock.

Adjusting Oven Temperature

Oven temperature has been factory calibrated and tested.

If oven consistently over or under cooks food, adjust temperature offset. Oven temperature can be increased or decreased 35°F. To avoid over adjusting oven, move temperature 5°F each time.

1. Push BAKE pad.
2. Press ▲ pad until an oven temperature greater than 500°F shows in display.
3. Immediately push and hold, approximately 5 seconds, BAKE button until “00” appears in display.
4. Press ▲ or ▼ pad knob to adjust oven temperature.
 - To increase oven temperature (for a hotter oven), Press ▲ or ▼ pad until a positive number appears in display.
 - To decrease oven temperature (for a cooler oven), Press ▲ or ▼ pad until a negative number appears in display.
5. Press OVEN CANCEL pad to save adjustment.
 - Setting is saved if power fails or is disconnected.

Service Tones and Codes

Electronic range control has a self-diagnostic system. Self-diagnostic system sounds a series of short, rapid beeps and shows a “F-code” in display when there is a problem. When electronic range control signals a problem, follow steps listed below.

1. Record “F-code” shown.
 - F1—pad malfunction
 - F2—high oven temperature
 - F3—temperature sensor malfunction
 - F4—temperature circuit malfunction
 - F5—control malfunction
 - F7—door lock malfunction
 - F9—door lock or oven door not completely closed
- Door—door not closed/malfunction in door switch circuit or latch switch
- “Lock”—flashing—malfunction in door switch or lock switch circuit
2. Press TIMER ON/OFF pad or disconnect electrical supply.
 - Disconnecting electrical supply eliminates “F-code”. If failure continues, contact an authorized servicer.
3. Contact an authorized servicer to check range.

Testing Procedures



WARNING

To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Service Information

The ERC consist's of a display, relays and all circuitry housed in a Lexan enclosure.

The ERC has eight function pads oven cancel, timer on/off, clock, stop time, cook time, clean, broil, bake, and two slew pads to select time and temperature.

The oven temperature sensor is mounted in the oven cavity and is connected to the J2-1 and J2-2 connectors on the rear of the ERC. As the oven temperature increases, the sensor resistance also increases. The ERC converts this resistance change to a corresponding temperature readout and to cycle the bake/broil relays to maintain the desired temperature setting.

The ERC is also capable of sensing certain failure conditions which can occur in the temperature sensor, the self-clean latch switch or the ERC itself. If the ERC senses a failure, power will be removed from the bake/broil relays, an alarm will sound, and a failure code will be displayed.

Each major component of the Electronic Range Control System (ERC control board, and temperature sensor) is serviced as a separate part. However, each component and related wire harness must be tested prior to replacing an individual component.

Control will automatically cancel any cooking operation and remove all relay drives twelve hours after mode was initiated if user forgets to cancel it or no input is made. This model is not equipped with child lock out programming.

Testing Procedures

'Quick Test' Mode for Electronic Range Control

Follow procedure below to use the quick test mode. Entries must be made within 32 seconds of each other or the control will exit the quick test mode. The quick test mode cannot be reactivated until power is disconnected from the oven.

1. Apply power to oven **press and hold COOK TIME** pad for 5 seconds within the first 5 minutes of power up. (This must be the first pad/button pressed).
2. Test mode functions are accessed by pressing and holding down individual pads to activate. Activation of the pad will stop when the pad is released.

Pad	Response
BAKE	Energizes bake relay
BROIL/ INSTA-BROIL	Energizes broil relay
CLEAN	3 represents lock and unlock contacts closed - invalid 2 represents lock contacts closed, unlock contacts open 1 represents lock contacts open, unlock contacts closed 0 represents both contacts open - invalid
STOP TIME	Beeper on and micro ID number
TIMER	Last time of day displayed
CLOCK	All display segments lite
COOK TIME	Displays checksum and sensor temperature
SLEW PADS	Sequences through display segment
CANCEL	Exits quick test mode

If relays do not "click" when Bake or Broil pads are pressed, replace the ERC.

If other function's do not perform as specified, replace the ERC.

ERC Warnings and Failure Codes

The Electronic Range Control is capable of detecting certain failures within the ERC, the oven temperature

Testing Procedures



To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

sensor and the self-clean latch switch.

The failure codes and warnings which may appear on the display are listed below. A brief description of the failure codes is also listed:

DIGIT FAILURE DISPLAY

- F1- A shorted input pad/button.
Verify function pad/buttons are not binding on control panel glass. Reposition glass and/or the ERC. Make sure buttons spring outward after being depressed.
- F2- Oven cavity over temperature.
Check sensor resistance, wiring harness and connections.
- F3- Open circuit in oven temperature sensor circuit.
Check sensor resistance, wiring harness and connections.
- F4- Shorted circuit in oven temperature sensor circuit.
Check sensor resistance, wiring harness and connections.
- F5- Defective watchdog circuit in control.
Check all components and wiring prior to replacing the ERC.
- F7- Failure of door lock switch sensing with door locked.
Check latch switch, door motor, and wiring.
- F9- Failure of door lock switch sensing with door unlocked.
Check latch switch, door motor, and wiring.
- Door- door not closed/malfuction in door switch
circuit or latch switch
- "Lock"-flashing malfuction in door switch or lock
switch circuit

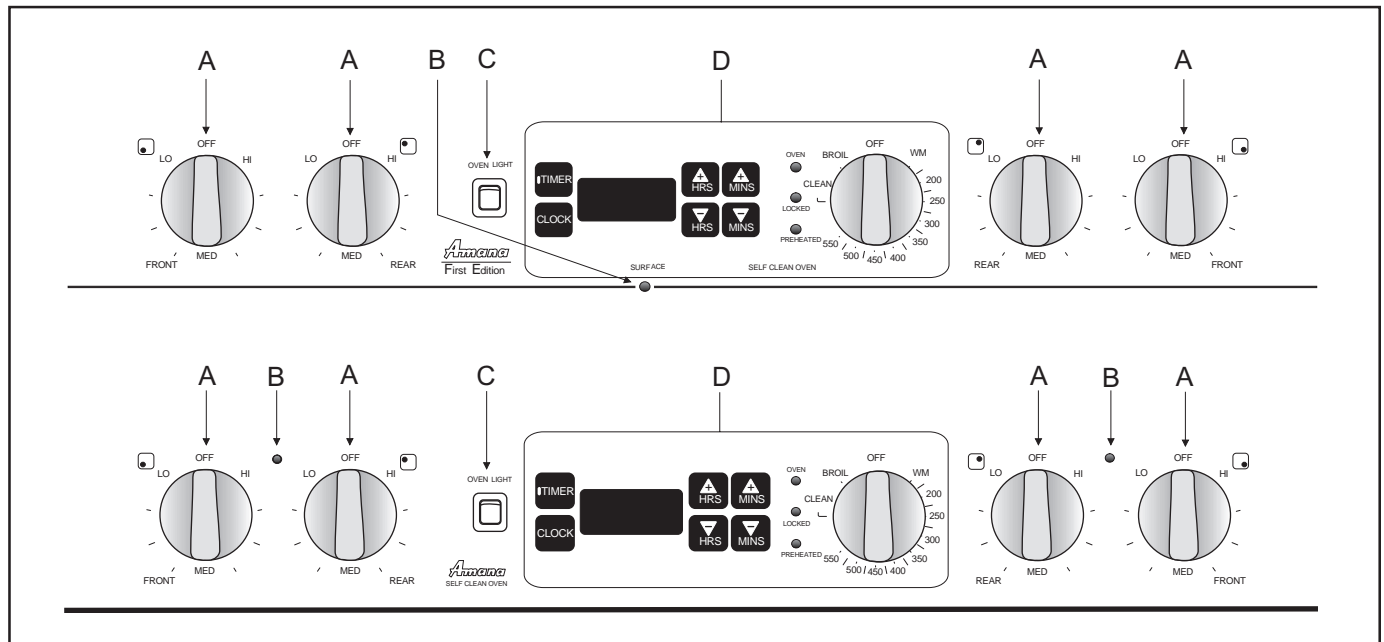
Temperature Sensor

Sensor resistance may be checked by removing the sensor interconnect plug from the ERC J2 connector and inserting ohmmeter leads into the harness connector plug (pin one and two). Refer to the appropriate wiring diagram/schematic for exact pin placement and color coding. A resistance reading of approximately 1075 ohms should be indicated at room temperature (75 degrees F). If a higher resistance is indicated, disconnect wire harness from sensor and recheck sensor resistance to verify the failure is in sensor and not in wire harness or connections. The following list gives corresponding resistance for different oven temperatures.

<u>Temperature</u>	<u>Approximate Sensor Resistance</u>
75 degrees F	1075 ohms
350 degrees F	1625 ohms
550 degrees F	2025 ohms
880 degrees F	2675 ohms

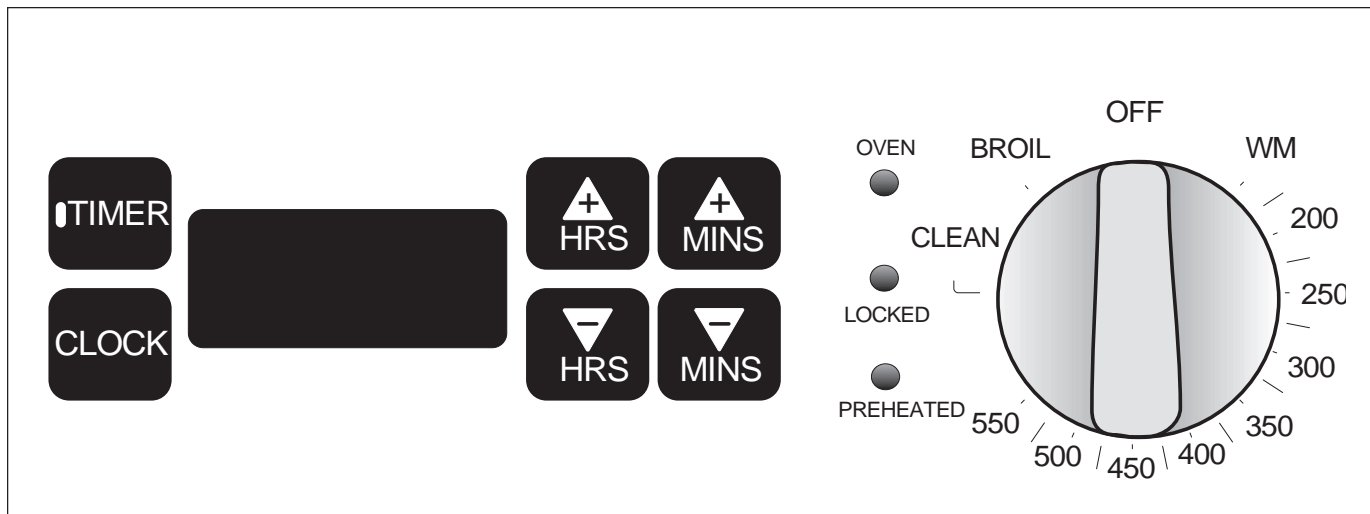
Replace sensor if it does not meet these specifications.

Eaton KRC with Mylar Overlay



A	Surface element control knob	<p>Use to turn surface elements on and off. Settings:</p> <p>LO—Use to prepare food at less than boiling temperatures or to simmer.</p> <p>MED—Use to maintain boiling of larger amounts of food, low temperature frying and to maintain correct pressure in a pressure cooker.</p> <p>HI—Use to bring food to boiling temperatures. When food is boiling temperature setting should be reduced to MED through HI.</p>
B	Surface element indicator light	<p>Some ranges have two indicator lights, one for elements on right side and one for elements on left side of range. When either front or rear element is on, corresponding indicator light glows.</p> <p>Some ranges have one indicator under clock. When any element is on, indicator light glows.</p> <p>Smoothtop ranges can have one or two indicator lights. After the surface controls are turned off, the appropriate surface indicator light will continue to glow until the surface elements have cooled. The time each light remains on will vary. Do not expect the lights for two different heating areas to go off at the same time even if the elements were turned off simultaneously.</p>
C	Oven light switch	<p>Used to light inside of oven. On some models, light turns on when oven door is opened. On all models, switch located next to clock, turns oven light on and off without opening door.</p>
D	Range control	<p>Used to control oven functions like baking, broiling, and self-clean. Also controls clock and minute timer.</p>

Programming Instructions



Electronic Oven Control Pads and Lights

TIMER pad selects timer feature. Timer can be set up to 11 hour 59 seconds. Timer does not control oven operation. Timer light flashes when timer is being set and glows when timer is counting down. Timer light allows user to identify timer mode quickly and easily.

CLOCK pad is pressed to set clock and turn clock display on and off.

HRS pads increase or decrease time by hours.

MIN pads increase or decrease time by minutes.

OVEN light glows when oven is on. Light flashes after self-clean cycle turns off as a reminder to turn temperature knob to **OFF**.

LOCKED light glows when oven door is locked and oven is set for self-cleaning. After self-clean cycle, light flashes. Unlatch oven door and turn temperature knob to **OFF**.

PREHEATED light glows when oven reaches selected temperature.

Temperature knob controls oven temperature, self-clean, and broil. Push-to-turn knob prevents accidentally turning oven on.

Time display shows the time-of-day and timer minutes.

Setting Electronic Clock

Electronic clock has 3 modes—Clock displayed, set clock (flashing), and clock not displayed. Press **CLOCK** pad to advance through modes.

When power is connected or restored, display flashes until pad is pressed or temperature knob is turned.

Reset clock.

1. Verify display is flashing.
 - If display does not flash, press **CLOCK** pad repeatedly until display flashes.
2. Press **HRS** + or - pad to set hours and **MINS** + or - pad to set minutes.

3. Press **CLOCK** pad to save time-of-day.
 - Clock saves time-of-day approximately 60 seconds after time is entered if **CLOCK** pad is not pressed.

Turning Off/On Clock Display

Press **CLOCK** pad until display is blank. Clock retains time while not displayed. To turn on display, press **CLOCK** pad until time-of-day displays and is not flashing.

Setting Electronic Timer

The minute timer is a timer only. Electronic timer does not control bake, broil, or self-clean function. Timer can be set up to 11 hours and 59 minutes.

1. Press **TIMER** pad.
2. Press **HRS** + or - pad to set hours and **MINS** + or - pad to set minutes.
 - Timer begins counting down automatically after time is entered.
 - To view clock while timer counts down, press **CLOCK** pad. To view timer again, press **TIMER** pad.
3. Press **TIMER** pad again to cancel.

Resetting and Canceling Timer

To reset or cancel timer, display must show remaining time. If display does not show remaining time, press **TIMER** pad.

To reset the time when remaining time is displayed, press the **HRS** + or - pad to set hours and **MINS** + or - pad to set minutes until new time displays.

To cancel timer when remaining time is displayed or signal after time elapses, press **TIMER** pad.

Programming Instructions

Automatic Oven Shutoff

As a safety feature, oven control automatically shuts off oven after 12 hours of operation. This feature can be turned on or off.

To allow the oven to operate for more than 12 hours, confirm temperature knob is in *OFF* position. Then, press and hold the *MINS* + and - pads for approximately 4 seconds. Display will change from time-of-day, show "OFF", and then return to time-of-day..

To set oven to shut off after 12 hours, confirm temperature knob is in the *OFF* position. Then, press and hold the *MINS* + and - pads for approximately 4 seconds. Display will change from time-of-day, show "ON", and then return to time-of-day.

Quick Reference Instructions

Read "Important Safety Instructions" before using "Quick Reference Instructions". If there are unanswered questions, see detailed sections of this manual.

Setting Electronic Clock

1. Verify display is flashing.
2. Press *HRS* + or - pad to set hours and *MINS* + or - pad to set minutes.
3. Press *CLOCK* pad to save time-of-day.

Turning Off/On Clock Display

Press *CLOCK* pad until display is blank. Clock retains time while not displayed. To turn on display, press *CLOCK* pad until time-of-day displays and is not flashing.

Setting Electronic Timer

1. Press *TIMER* pad.
2. Press *HRS* + or - pad to set hours and *MINS* + or - pad to set minutes.
3. Press *TIMER* pad again to cancel.

Resetting and Canceling Timer

To reset time when remaining time is displayed, press the *HRS* + or - pad to set hours and *MINS* + or - pad to set minutes until new time displays.

To cancel timer when remaining time is displayed or signal after time elapses, press *TIMER* pad.

Operating Surface Elements

1. Push in and turn surface element control to desired setting.
2. When finished cooking, turn control to *OFF* position.

Baking

1. Open oven door to confirm nothing is stored in oven cavity and set racks to proper height.
2. To preheat oven, turn oven temperature knob to desired temperature.
3. Place food in oven.
4. After cooking time elapses, remove food and turn oven temperature knob to *OFF*.

Adjusting Factory Set Baking Temperature

1. Turn oven temperature knob to *OFF*.
2. Press and hold *HRS* + and *HRS* - pad for approximately 5 seconds.
3. Immediately, press either Press *HRS* + or *HRS* - pad.
 - *HRS* + increases oven temperature by 5°F.
 - *HRS* - decreases oven temperature by 5°F.

Broiling

1. Center food on broiling grid and pan, and place in oven.
 - Oven door should be opened to first stop.
2. Turn oven temperature knob to *BROIL*.
3. After broiling, remove food and turn oven temperature knob to *OFF*.

Self-Cleaning

1. Prepare oven for self-cleaning.
2. With oven door closed, move oven door lever located above oven door to right to lock oven door.
3. Turn oven temperature knob to *CLEAN* position.

Interrupt Self-Clean Cycle

1. Turn oven temperature knob to *OFF* position.
2. When oven has cooled to a safe temperature, *LOCKED* light flashes. Door can be unlocked and opened.
 - Do not force door lever open. If door lever is forced, lock can be damaged.

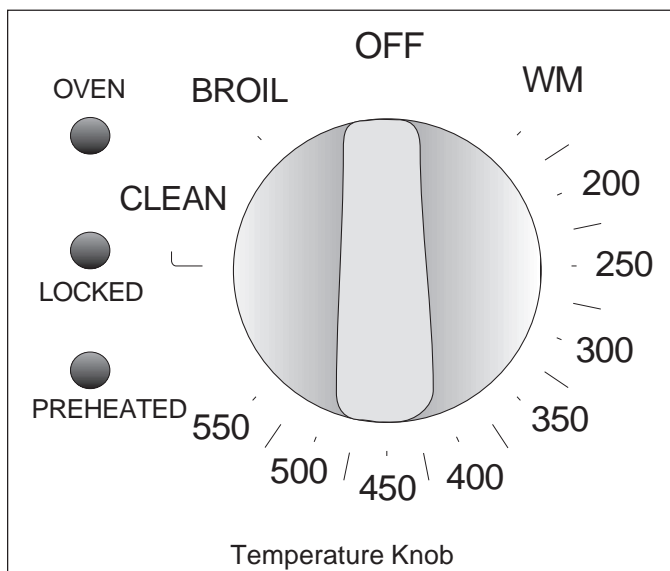
After Self-cleaning Cycle

Turn oven temperature knob to *OFF* position when finished. After oven has cooled *LOCKED* light flashes. Door can be unlocked and opened.

Programming Instructions

Baking

1. Open oven door to confirm nothing is stored in oven cavity and set racks to proper height.
2. To preheat oven, turn oven temperature knob to desired temperature.
 - Oven indicator light glows if knob is set to any position but *OFF*.
 - When oven reaches desired temperature, *PREHEATED* light glows and oven beeps 6 times.
3. Place food in oven.
 - If self-clean lever is moved to lock position while baking, *LOCKED* light flashes and oven does not heat. Move lever to unlocked position to resume baking.
4. After cooking time elapses, remove food and turn oven temperature knob to *OFF*.



Adjusting Factory Set Baking Temperature

Oven temperature is set at factory. When first using oven, follow recipe times and temperatures. If you think 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. Turn oven temperature knob to *OFF*.
2. Press and hold *HRS +* and *HRS -* pad for approximately 5 seconds.
3. Immediately, press either *HRS +* or *HRS -* pad.
 - *HRS +* increases oven temperature by 5°F.
 - *HRS -* decreases oven temperature by 5°F.
 - Oven temperature can be changed up to 35°F. When temperature is adjusted cooler “-” shows in display followed by offset temperature.
 - After a few seconds control saves new setting and returns to previous display.

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.
 - Begin cooking using suggested rack levels in *Broiling Guide* section to test broiler results. If food is not brown enough, cook on a higher rack position. If food is too brown, cook on a lower rack position.
1. Center food on broiling grid and pan, and place in oven.
 - Oven door should be opened to first stop or remain closed.
 2. Turn oven temperature knob to *BROIL*.
 - Oven indicator light glows.
 - If self-clean lever is moved to lock position while broiling and oven door is closed, *LOCKED* light flashes and oven does not heat. Move lever to unlocked position to resume broiling.
 3. After broiling, remove food and turn oven temperature knob to *OFF*.

Programming Instructions

Self-Cleaning



WARNING

To avoid risk of personal injury, do not touch oven vents or areas around vents during self-cleaning. These areas can become hot enough to cause burns.



WARNING

To avoid risk of smoke damage or fire, clean excess spills from oven interior.

Prepare for Self-clean Cycle

- A small amount of smoke is normal when cleaning. Excess smoke may indicate a faulty gasket or too much food residue has been left in oven. Move birds and small animals susceptible to fumes or smoke to another room.
- Oven should be cleaned before it gets too dirty. Wipe up large spills before self-cleaning.
- Do not use cleaning cycle if oven light cover is not properly in place.

Self-cleaning

1. Prepare oven for self-cleaning.
 - Remove oven racks and all cooking utensils from oven.
 - Clean excess spills from oven interior.
 - Remove items from rangetop and backguard. These areas can become hot during self-cleaning cycle.
2. With oven door closed, move oven door lever located above oven door to right to lock oven door.
 - If oven is too hot before starting self-clean cycle, oven lever will not move to locked position. Allow oven to cool before starting cycle.



3. Turn oven temperature knob to *CLEAN* position.
 - If oven temperature knob is set before oven door lever is moved, *LOCKED* light flashes. Move oven door lever to locked position.
 - *LOCKED* and *OVEN* indicator light glows.
 - Self-clean cycle lasts for approximately 4 hours. After self-clean cycle, *OVEN* and *LOCKED* lights flash. Turn temperature knob to *OFF* position and move oven door lever to unlocked position.

Interrupt Self-Clean Cycle

1. Turn oven temperature knob to *OFF* position.
2. When oven has cooled to a safe temperature, *LOCKED* light flashes. Door can be unlocked and opened.
 - Do not force door lever open. If door lever is forced, lock can be damaged.

After Self-cleaning Cycle

Turn oven temperature knob to *OFF* position when finished. After oven has cooled *LOCKED* light flashes. Door can be unlocked and opened.

Service Tones

Range control is equipped with a self diagnostic system. Self diagnostic system will alert you if there is a error or problem in the control. If electronic range control sounds a series of short, rapid beeps for over 16 seconds and display shows a F-code. Disconnect electrical supply to range and contact an authorized servicer.

Some F-codes can be cleared by disconnecting power to the range. If code continues to reoccur, record the F-code shown and call an authorized servicer.

Code Description

F2—High oven temperature.
F3—Temperature sensor.
F4—Temperature sensor.
FFF—Control failure.

Testing Procedures



WARNING

To avoid risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

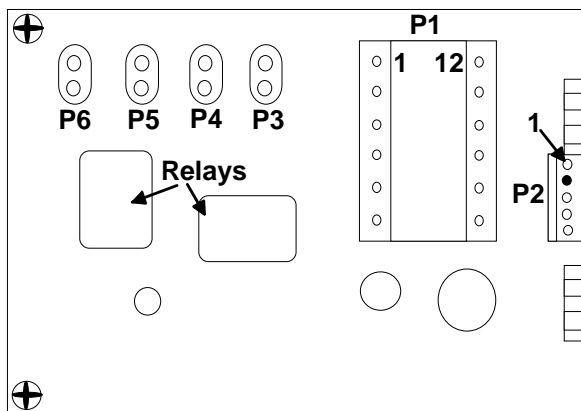
Service Information

This control consists of a display, relays, and all circuitry which are housed in a single component. The mylar overlay is not part of the clock assembly, and needs to be replaced separately if the unit is replaced.

Components for the clean cycle to operate correctly consist of latch switch, control, and temperature sensor which work in series with each other to operate the clean cycle. If one of the components is not operating correctly, this will effect the operation of cleaning cycle.

KRC Terminal Identification Chart

Location	Connection
P2-1	Door lock
P2-2	No connection
P2-3	Door lock
P2-4	Sensor
P2-5	Sensor
P3	Line
P4	Neutral
P5	Broil
P6	Bake



Drive Element Requirements

Bake

100% bake element

Broil

100% broil element

Clean

Stage 1 Time controlled 30 minutes, 100% broil

Stage 2 Same element control as bake mode

Time Total clean time 4 hours with last 30 minutes for cool down

KRC Warnings and Failure Codes

This control is capable of detecting certain failure within the control, oven temperature sensor, and wiring.

The failure codes and warnings which may appear on the display are listed below. A brief description of the failure codes are also listed.

DIGITAL FAILURE DISPLAY

F2—Oven cavity over temperature.

Check sensor resistance, wiring harness, and connections.

F3—Open circuit in oven temperature sensor circuit.

Check sensor resistance, wiring harness, and connections.

F4—Shorted circuit in oven temperature sensor circuit.

Check sensor resistance, wiring harness, and connections.

FFF—Control failure.

Check all components and wiring prior to replacing control.

Testing Procedures



WARNING

To avoid risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.

Temperature Sensor

Sensor resistance may be checked by removing the sensor interconnect plug from the KRC P2 connector and inserting ohmmeter leads into the harness connector plug (P2-4 and P2-5). Refer to the appropriate wiring diagram/schematic for exact pin placement and color coding. A resistance reading of approximately 1075 ohms should be indicated at room temperature (75° F). If a higher resistance is indicated, disconnect wire harness from sensor and recheck sensor resistance to verify the failure is in sensor and not in wire harness or connections. The following list gives corresponding resistance for different oven temperatures.

<u>Temperature</u>	<u>Approximate Sensor Resistance</u>
75° F	1075 ohms
350° F	1625 ohms
550° F	2025 ohms
880° F	2675 ohms

Replace sensor if it does not meet these specifications.

Test Procedure

Performance of this clock is very simple. To verify proper operation, follow the procedures below:

KRC Control not Operating

1. Verify 120 VAC is present at P3 (L1) and P4 (NEU) terminals of the control.
2. If no voltage is present, verify wire connection are properly in place, and check wire continuity.
3. Replace control if voltage is present and no display is present.

NOTE: Press clock pad to verify display is not turned off.

Clean Operation of Control

1. If no voltage is present, verify wire connections are properly in place, and check wire continuity.
2. If voltage is present and clean function does not operate. Verify latch switch is operating properly.
3. If latch switch is operating properly, verify relay voltage at terminals, to confirm relay is operating properly.
4. If relay is operating, verify temperature sensor is operating properly.
5. If latch switch and sensor is operating properly, but clean cycle does not operate, replace control.