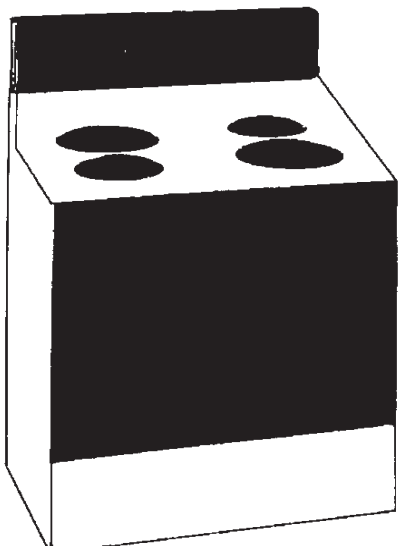
This manual covers general information on Freestanding/Slide-In Electric Ranges. Refer to individual Technical Sheets for information on specific models.

Service

Freestanding/Slide-In Electric 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

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Important Information

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

Important Notices for Consumers and Servicers

⚠ WARNING

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

⚠ CAUTION

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

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

CONSUMER AFFAIRS DEPT. **OR** 1 (800) 843-0304
AMANA APPLIANCES **CALL**
AMANA, IOWA 52204

If outside the United States contact:

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

Recognize Safety Symbols, Words, and Labels

⚠ DANGER

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

⚠ WARNING

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

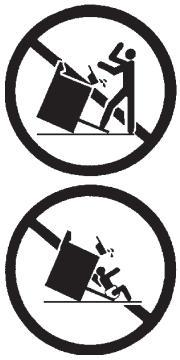
⚠ CAUTION

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

Important Safety Information

⚠ WARNING

To reduce the risk of the appliance tipping, it must be secured by a properly installed anti-tip bracket(s). To make sure bracket has been installed properly, remove the storage drawer and look under the range with a flashlight. Bracket(s) must be engaged in the rear corner of the range.



- ALL RANGES CAN TIP
- INJURY TO PERSONS COULD RESULT
- INSTALL ANTI-TIP BRACKET(S) PACKED WITH RANGE
- SEE INSTALLATION INSTRUCTIONS

⚠ WARNING

To avoid personal injury, do not sit, stand or lean on oven door or oven drawer.

⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, make sure your range has been properly grounded and always disconnect it from main power supply before any servicing.

⚠ WARNING

This appliance contains or produces a chemical or chemicals which can cause death or serious illness and 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 booklet.

⚠ 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.

ALL APPLIANCES

1. Proper Installation—Be sure your appliance is properly installed and grounded by a qualified technician.
2. Never Use Your Appliance for Warming or Heating the Room.
3. Do Not Leave Children Alone—Children should not be alone or unattended in the area where the appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
4. Wear Appropriate Apparel—Loose fitting or hanging garments should never be worn while using appliance.
5. User Servicing—Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified technician.
6. Storage in or on Appliance—Flammable materials should not be stored in an oven or near surface units.
7. Do Not Use Water on Grease Fires—Smother fire or flame, or use dry chemical or foam-type extinguisher.
8. Use Only Dry Potholders—Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch elements. Do not use a towel or other bulky cloth.

SURFACE COOKING UNITS

1. Use Proper Pan Size—This appliance is equipped with one or more surface units of different size. Select utensils having flat bottoms large enough to cover the surface unit heating element. The use of undersized utensils will expose a portion of the heating element to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
2. Never Leave Surface Units Unattended at High Heat Settings—Boilover causes smoking and greasy spillovers that may ignite.
3. Protective Liners—Do not use aluminum foil to line oven bottom. Improper installation of these liners may result in a risk of electrical shock or fire.
4. Glazed Cooking Utensils—Do not use glass, ceramic, earthware, or other glazed utensils. They can damage smoothtop and can break due to sudden change in temperature.
5. Utensil Handles Should be Turned Inward and Not Extend Over Adjacent Surface Units—To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward, and does not extend over adjacent surface units.

Important Safety Information

OVENS

1. Use Care When Opening Door—Let hot air or steam escape before removing or replacing food.
2. Do Not Heat Unopened Food Containers—Buildup of pressure may cause container to burst and result in injury.
3. Keep Oven Vent Ducts Unobstructed.
4. Placement of Oven Racks—Always place oven racks in desired location while oven is cool. If rack is removed while oven is hot, do not let potholder contact hot heating element in oven.

SELF-CLEANING OVENS

1. Do Not Clean Door Gasket—The door gasket is essential for a good seal. Care should be taken not to rub, damage, or move the gasket.
2. 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 liner.
3. Clean Only Parts Listed in Manual.
4. Before Self-Cleaning the Oven—Remove broiler pan, oven racks, and other utensils.
5. Remove all items from range top and backguard.

GLASS/CERAMIC COOKING SURFACES

1. Do Not Cook on Broken Cooktop—If cooktop should break, cleaning solutions and spillovers may penetrate the broken cooktop and create a risk of electrical shock. Contact a qualified technician immediately.
2. Clean Cooktop With Caution—If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid a steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.

VENTILATION HOODS

1. Clean Ventilation Hoods Frequently—Grease should not be allowed to accumulate on hood or filter.
2. When flaming foods under hood, turn fan off. The fan, if operating, may spread the flame.

In Case of Fire

Fires can occur as a result of over cooking or excessive grease. Though a fire is unlikely, if one occurs, proceed as follows:

Surface Element Fire

1. Smother the fire with a nonflammable lid or baking soda, or use a Class ABC or BC extinguisher. Not water. Not salt. Not flour.
2. As soon as it is safe to do so, turn the surface controls to “OFF”.

Oven Fires

1. If you see smoke from your oven, do not open oven door.
2. Turn oven control to “OFF”.
3. As an added precaution, turn off power at main circuit breaker or fuse box.
4. Turn on vent to remove smoke.
5. Allow food or grease to burn itself out in oven. Do not open oven door.
6. If smoke and fire persist, call fire department.
7. If there is any damage to components, call an authorized servicer before using range.

Precautions

- Do not cook food directly on range top surface, always use cookware.
- Do not mix household cleaning products. Chemical mixtures may interact with objectionable or even hazardous results.
- Do not put plastic items on warm cooking areas. They may stick and melt.
- Do not slide rough objects across range top surface. Scratching or metal marking can result.
- Do not use cookware with rough bottoms. They may scratch smoothtop surface. Glass and ceramic cookware should not be used.
- Do not use damp sponge or dishcloth to clean range top. A film of soil-laden detergent water may collect on range top. If this should happen, Amana Cleaning Conditioning Cream removes this type of stain.
- Do not leave fat heating unless you remain nearby. Fat can ignite if overheated by spilling onto hot surfaces.
- Do not allow pots to boil dry as this can cause damage to cooking surface and pan.
- Do not use range top surface as a cutting board.
- Do not use range for storage or as a display counter.

Installation Instructions

Packing Material

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

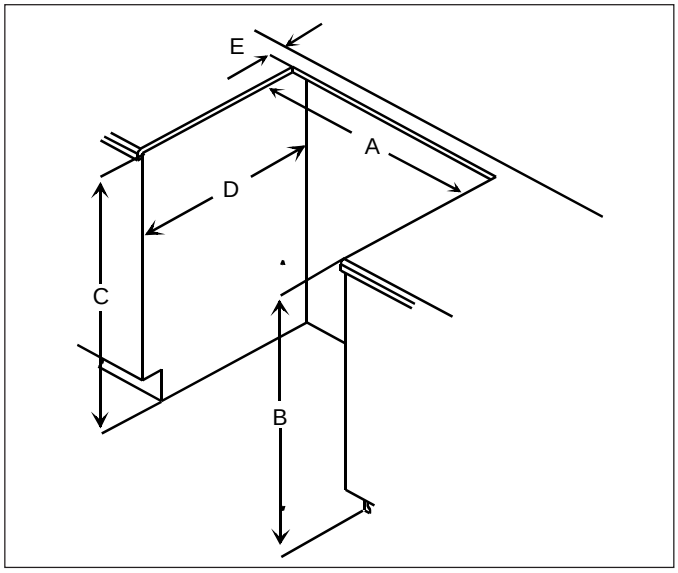
Range Location

Underwriter's Laboratories Inc. specifies that range can be installed flush against right and left base cabinets, and rear vertical wall. Range can also be installed flush against left or right vertical wall extending above 36 inch standard counter top height.

⚠ 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.

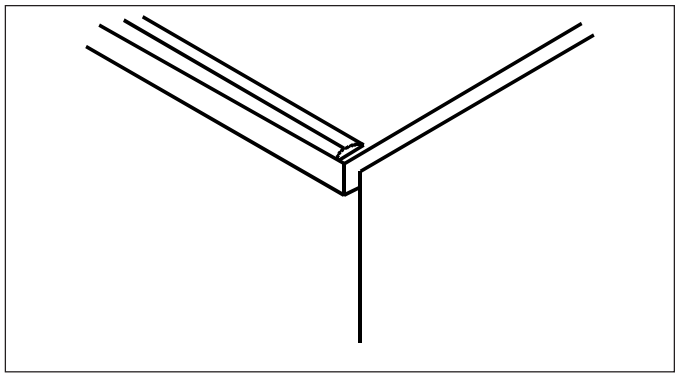
Standard Cabinet and Countertop Height and Depth—Slide-In Range



A—30⅛ to 30¼ inches
B—36 inches standard
C—35 inches standard
D—23 inches standard
E—½ inch minimum

Countertop Front Edge

Countertop front edge may require cutting to fit 31 inch wide range top. Allow for ½ inch overlap on each side.



Irregular Cabinet and Countertop Heights

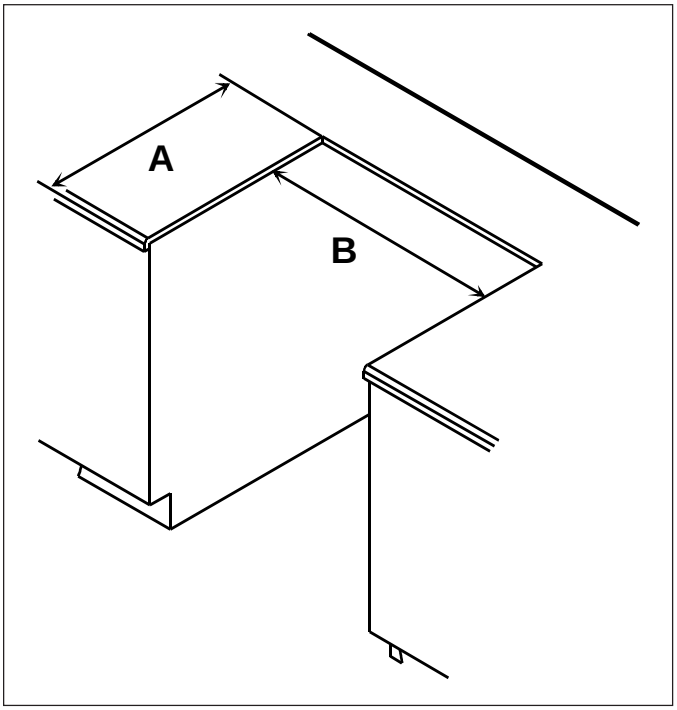
Countertops such as ceramic tile tops can cause cabinet and countertop to be higher than 36 inches. Follow instructions below when counter top is higher than 36 inches.

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

Installation Instructions

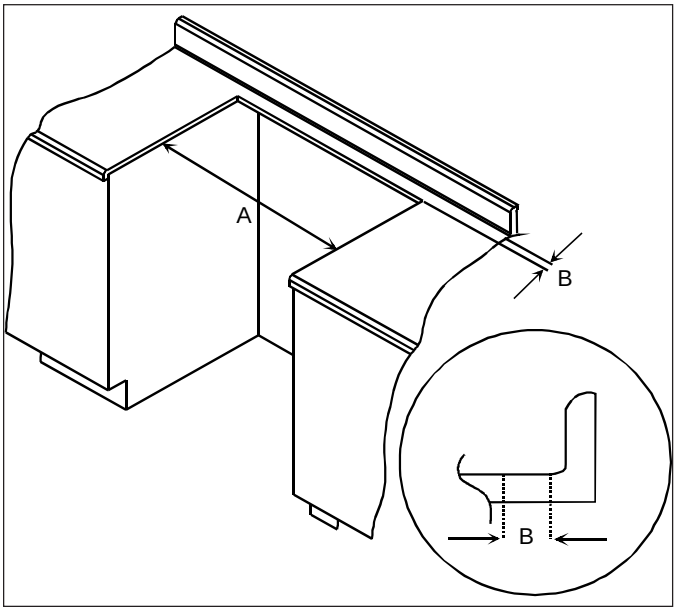
Countertop Opening

Island Installation—Slide-In Range



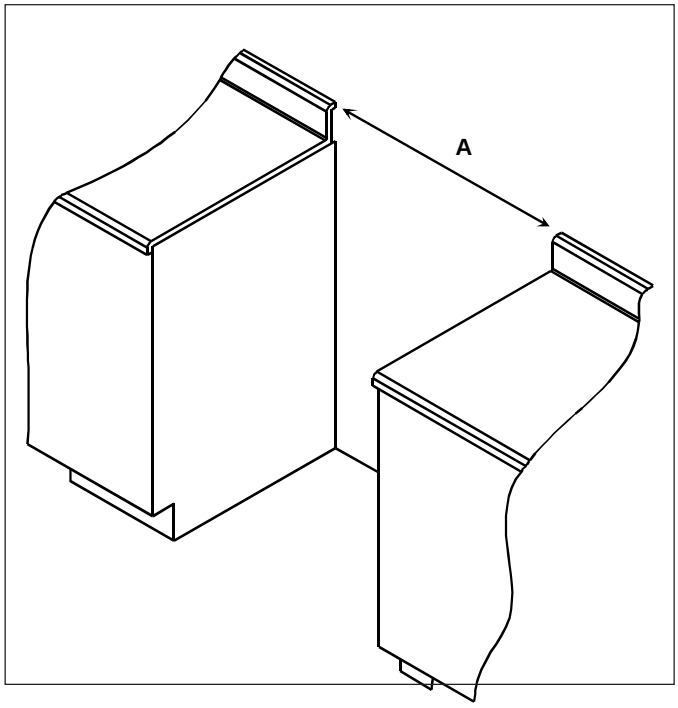
A—25 inches
B—30⅛ to 30¼ inches

Countertop with Backsplash—Slide-In Range



A—30⅛ to 30¼ inches
B—**½** inch minimum starting on horizontal plane

Countertop without Backsplash—Freestanding Range

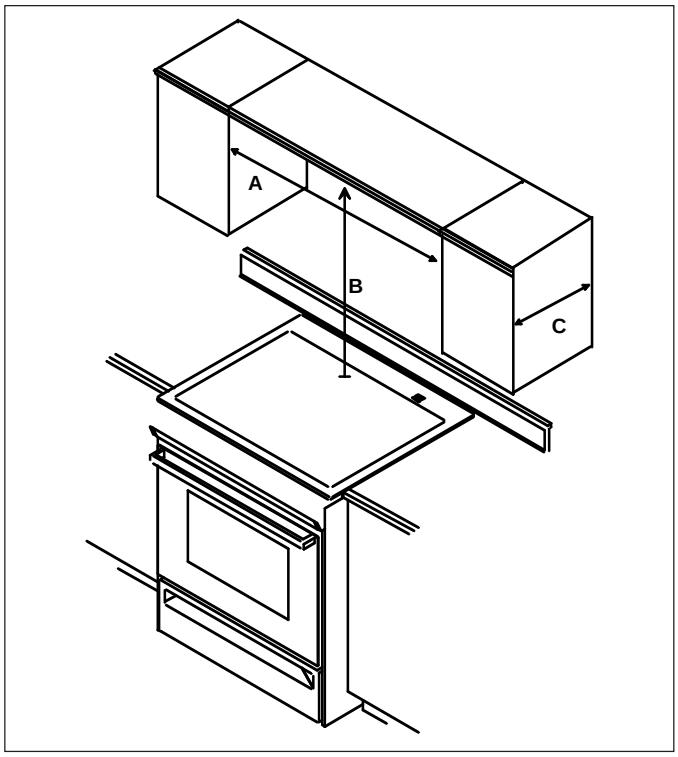


A—30⅛ to 30¼ inches
Backguard for Slide-In Range Kit AXF100W—(White), E—(Ebony), or L—Almond is available. Contact an authorized Amana dealer to purchase backguard kit.

Minimum Clearances to Combustible Surfaces—Slide-In and Freestanding Ranges

- Minimum clearance to rear wall is 0 inches.
- Minimum clearance to a vertical right or left side wall is 0 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 copper.

Installation Instructions



A—30 inches minimum
B—30 inches unprotected/24 inches protected minimum
C—13 inches maximum

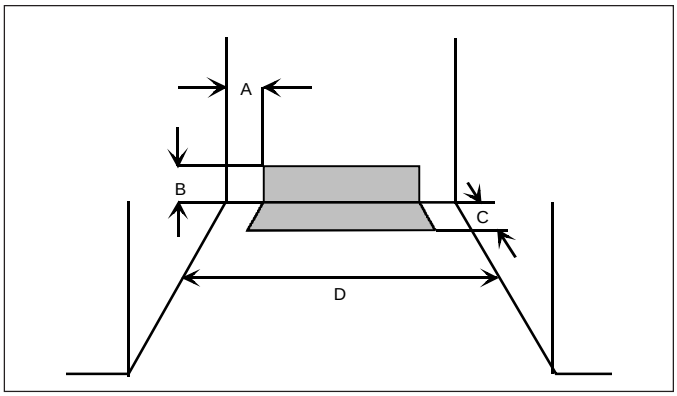
Line Voltage Requirements

Line voltage must not exceed rated voltage. Line voltage less than rated voltage will result in slow heating. Wiring system must conform to Underwriters Laboratories, Inc. standards and National Electrical Code. Installation must conform to all local, municipal and state building codes, and local utility regulations. Range must be connected only to a supply circuit as specified on range name plate.

Most ranges require 3 wires, 120/240 Volts, 60 Hertz A.C. See rating plate attached to range for kilowatt rating and 208 VAC capability. House wiring and fusing must comply with local wiring codes. If no codes apply, wire according to National Electrical Codes.

Power Supply Location

Shaded areas show range clearance for electrical connection.



A—3 inches
B—7 inches
C—6 inches
D—30⅛ to 30¼ inches

Power Cord Requirements

Power Cord is not supplied with range. Power cord must be U.L. Listed and meet NEC and Mobile Home Manufacturers Association Standards. Cord must be rated at a minimum 250V - 50 AMP, equipped with a plug configuration in accordance with NEMA and conductors must end with closed loop (ring) terminals at the range.

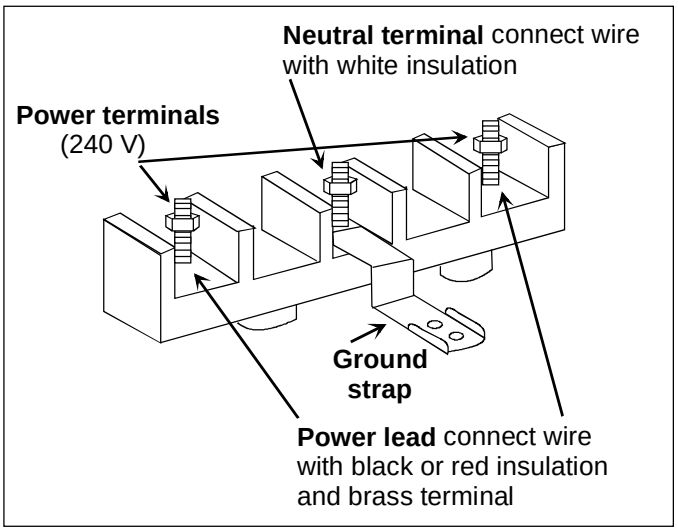
- Three conductor cord plug NEMA 10-50P allowed for residential.
- Four conductor cord plug NEMA 14-50P required for most mobile home installations but can be used for residential.

Range has been grounded at the factory to the center (nickel plated) terminal of the terminal block in accordance with the National Electrical Code (section 2560). When a separate ground is required by local code, disconnect the grounding strap from the terminal block. Ground frame by connecting a grounding wire to range frame using **only** the grounding screw removed from the grounding strap.

Installation Instructions

Range Terminal Block

Connection block is located at bottom rear of range behind rear cover panel. Remove rear cover screw. Directly below terminal block is a hole for a power supply service cord. Power Cord is not supplied with range.



Terminal block is approved for copper wire connection only, NOT aluminum wiring. If aluminum house wiring is to be connected, the following procedure is suggested.

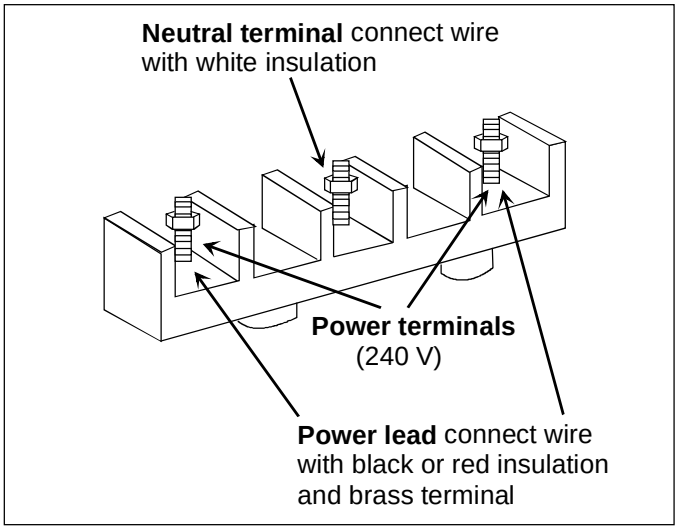
1. Connect length of copper building wire to range terminal block with ring terminals.
2. Splice copper wires to aluminum wiring using connectors which are designed certified by Underwriters Laboratories and recognized for joining copper to aluminum. Follow the connector manufacturer's recommended procedure.
3. Wire used, location and enclosure of splices must conform to local codes.

NOTE: Only a power cord suitable for use with ranges may be used. For installation in a mobile home, or area where local codes do not permit grounding through the neutral terminal, a 4-wire cord must be used.

Installing 3-Wire Power Cord

1. Remove rear wire cover.
2. Place strain relief (winged clamp) in cord access hole below terminal block.
   - Place wings through hole, entering from bottom.
   - Screw holes in clamp should be below mounting panel.
3. Place cord through strain relief.
   - Attach neutral (center) or white wire to center terminal on terminal block.
4. Attach power lead, red wire or black wire to left side power terminal.
5. Attach power lead, red wire or black wire to the right side power terminal.
6. After wires have been placed on terminals, attach with hex nuts provided.
   - Firmly tighten to insure proper electrical connection.
7. Place screw through strain relief and tighten.
8. Replace rear wire cover.

Installing 4-Wire Power Cord



⚠ WARNING

To avoid the risk of severe electrical shock or death, ground wire must be attached to frame of range, using ground screw provided. Ground wire must not contact any other terminal.

1. Remove rear wire cover.
2. Place strain relief (winged clamp) in cord access hole below terminal block.
   - Place wings through hole entering from bottom.
   - Screw holes in clamp should be below mounting panel.
3. Remove grounding strap attached to center terminal on terminal block.
   - Strap is not needed for this installation.
   - Remove green ground screw and retain for use in step 7.
4. Place cord through strain relief.
   - Attach cord neutral (center) or white wire to center terminal on terminal block.
5. Attach power lead, red wire or black wire to left terminal.
6. Attach power lead, red wire or black wire to right terminal.
7. Attach green or bare wire to back of range using green ground screw previously removed in step 3.
8. Attach wires using hex nuts provided.
   - Firmly tighten to insure proper electrical connection.
9. Place screw through strain relief, tighten, and replace rear wire cover.

Installation Instructions

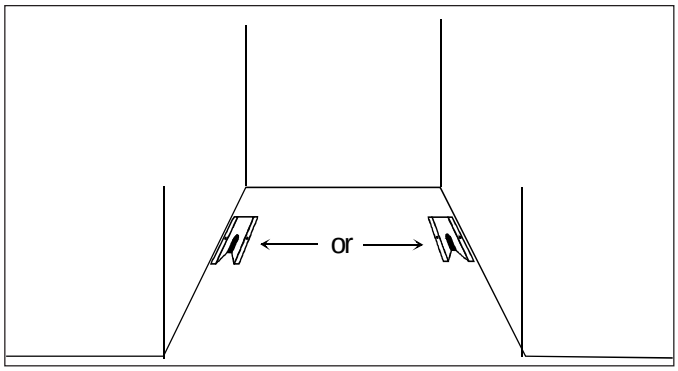
Converting 3-Wire to 4-Wire Power Cord

1. Remove rear wire cover.
2. Remove bottom strain relief screw and retain for further use.
3. Remove screw/hex nuts from terminal block and retain for further use.
4. Remove all 3-wire or cable leads from the terminal block and proceed to remove the power cord from the unit by pulling in a downward motion so that cord is removed from strain relief.
5. Remove the grounding strap attached to the center terminal on the terminal block.
   - Grounding strap is not needed for this installation.
   - Remove green ground screw and retain for future use.
6. To install the 4-wire cord, please follow step 4 through step 9 of *Installing 4 Wire Cord*.
7. Reinstall rear cover and secure it with screw removed earlier.

Anti-tip Bracket Installation

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

1. Remove storage drawer from range.
   - See “Removing Storage Drawer” section.
2. Unscrew leveling legs so when range is moved into position range top clears counter top.
   - Left or right rear leveling leg must extend at least ¼ inch to engage bracket.
   - Anti-tip bracket can be installed on either right or left rear leveling leg.



3. Move range to where it will be installed.
4. Position anti-tip bracket.
   - With range in position, reach through storage drawer opening and slide anti-tip bracket on either left or right rear leveling leg. Slide leg into V-shaped notch in bracket.
5. Mark location of side and front of anti-tip bracket on floor.
6. Remove anti-tip bracket and range from opening.
7. Position anti-tip bracket according to lines marked on floor.
8. Mark 2 hole locations in anti-tip bracket.
9. Drill 2 holes.
   - If drilling into wood, use a $^{3}/_{32}$ inch drill bit.
   - If drilling into concrete, use a $^{3}/_{16}$ inch masonry drill bit and insert plastic anchors.
10. Secure bracket to floor using screws supplied.
11. Slide range into position.
    - See “Level Range” section of manual.
12. Confirm anti-tip bracket is engaged with range leveling leg and replace storage drawer.

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 ¼ 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 that 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 forward until leg engages bracket, and adjust other legs.
4. Replace storage drawer.

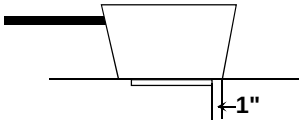
Removal and Replacement of Range

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 in this manual.
6. To reinstall range, follow instructions in “Installation” section of this manual.

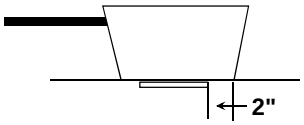
General Information

Cooking Utensils

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

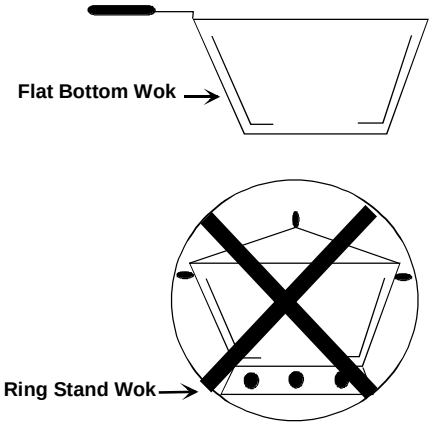


Less than 1" overhang



More than 1" overhang

- 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.



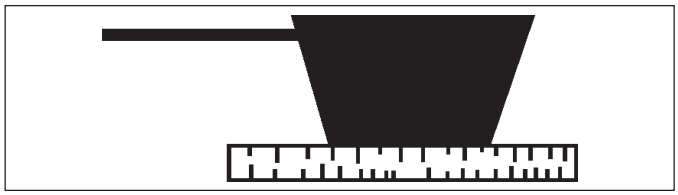
Utensils for Smoothtop

⚠ CAUTION

Using cast iron cookware can damage cooking surface. Cast iron retains heat which can cause damage.

For best cooking results, use a pan with a flat bottom. Determine if pan has a flat bottom.

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

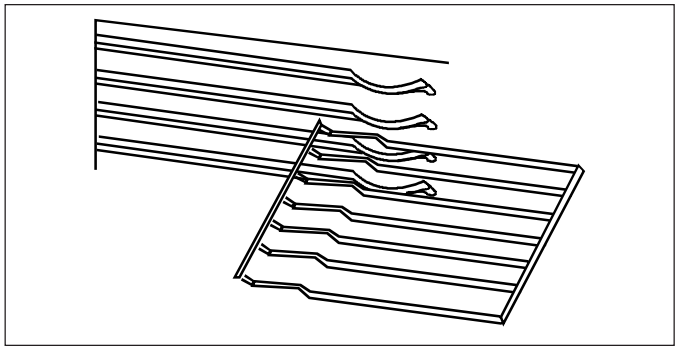


Follow these recommendations only as a guide for times and temperature. Times, rack position, and temperatures may vary depending on conditions and food type. For best results, always check food at minimum time. When roasting, choose rack position based on size of food item.

Oven Rack Placement

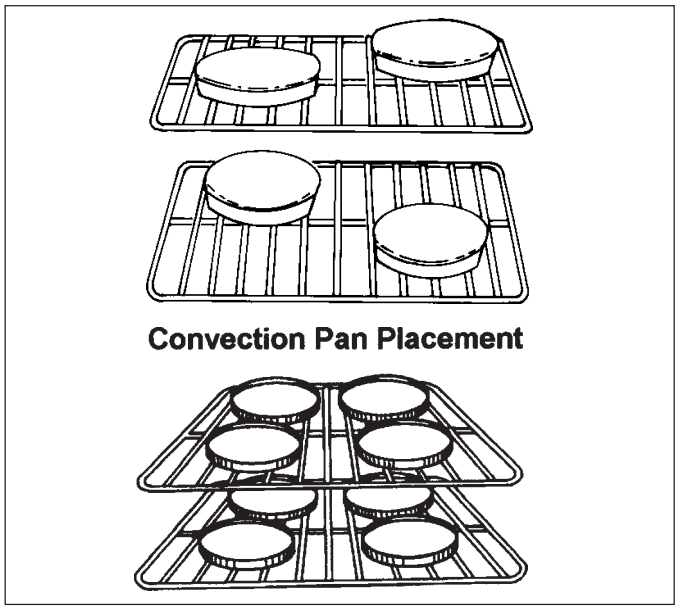
Position oven rack before turning oven on.

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.

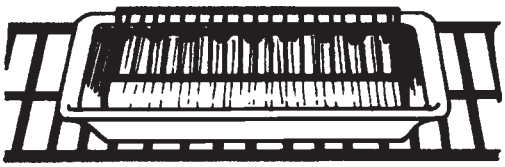


Convection Pan Placement

Care and Cleaning

Broiling Rack Placement

Convection Broiling Rack



⚠ 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

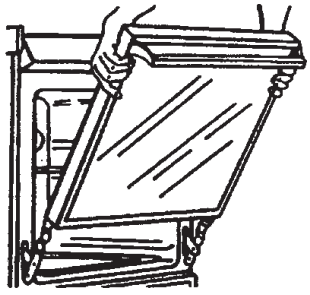
To avoid personal injury or property damage, handle oven door with care.

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



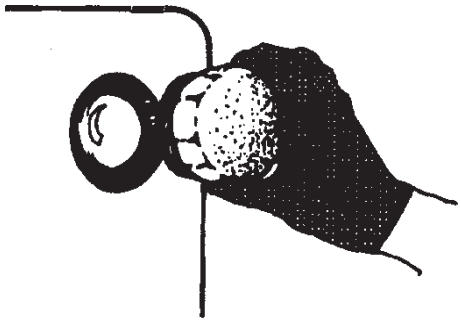
Replacing Oven Light

⚠ WARNING

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

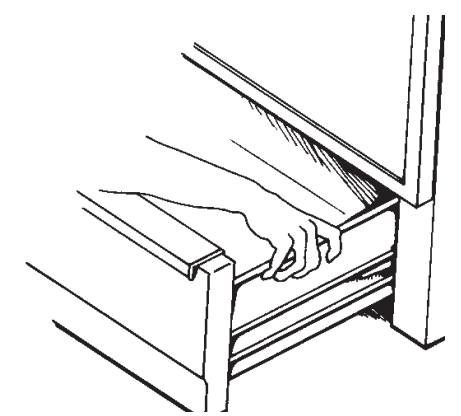
- Before replacing light bulb make sure bulb is cool.
- Wear protective gloves.
- Do not operate oven without bulb and cover in place.

1. Disconnect electrical supply.
2. Remove oven door if desired.
3. Unscrew light bulb cover if so equiped 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.



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.



Care and Cleaning

Cleaning

Part	Materials to Use	General Directions
Bake and Broil, Element		Do not clean bake element or broil element. Any soil will burn off when element is heated. Bake element is hinged and can be lifted to clean oven bottom.
Broiler Pan and Grid	Soap and a Nonabrasive 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	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.

Care and Cleaning

Cleaning Smoothtop Range

Problem	Cause	To Prevent	To Remove
Brown streaks and specks	Cleaning with a sponge or cloth containing soil laden detergent water.	Use smoothtop cleaner conditioner with clean damp paper towel.	Use light application of smoothtop cleaner conditioner with clean damp paper towel.
Blackened, burned-on spots	Spatters or spillovers landing on a hot cooking area or accidental melting of plastic film like a bread bag.	Wipe all spillovers when it is safe to touch cooking surface. Do not place plastic items on warm cooking area.	Clean area with smoothtop cleaner conditioner with clean damp paper towel, nonabrasive nylon pad, or scouring brush. If spot is not removed, allow cooktop to cool and carefully scrape area with a single edge razor blade held at a 30 degree angle.
Fine brown gray lines or fine scratches or abrasions which have collected soil	Course particles, like salt, become embedded in top if trapped under pan. Using abrasive cleaning materials. Scratches from rough ceramic, glass or ceramic coated cookware.	Wipe bottom of cookware before cooking. Clean top daily with smoothtop cleaner conditioner with clean damp paper towel. Do not use ceramic or ceramic coated cookware.	Fine scratches are not removable but can be minimized by daily use of smoothtop cleaner conditioner.
Smearing or streaking	Using to much smoothtop cleaner conditioner or using a soiled dish cloth.	Use small amounts of smoothtop cleaner conditioner. Rinse area thoroughly before drying. Use only clean damp paper towel, nonabrasive nylon pad, or scouring brush.	
Metal or silver/gray marks	Sliding or scraping metal utensils across top.	Do not slide metal objects across top.	Remove marks before top is used again. After top cools, clean marks with smoothtop cleaner conditioner with clean damp paper towel, nonabrasive nylon pad, or scouring brush. Rinse thoroughly and dry.
Pitting or flaking	Boilovers of sugar syrup on a hot range top can cause pitting if not removed immediately	Watch sugar and syrups carefully to avoid boilovers.	Turn control to “LO” setting. Using several papertowels. Allow cooktop to cool and carefully scrape area with a single edge razor blade held at a 30 degree angle.
Hard water spots	Condensation from cooking can cause minerals found in water and acids in food to drip onto range top and cause gray deposits. Spots are often so thin they appear to be in or under range top.	Make sure bottom of cookware is dry before cooking. Daily use of smoothtop cleaner conditioner helps keep top free of hard water, mineral deposits and food discoloration.	Mix smoothtop cleaner conditioner with water and apply thick paste to stained area. Scrub vigorously. If stain is not removed, reapply cleaner and repeat process. Also try cleaning process of smearing and streaking.

Operating Instructions

Cooking with Smoothtop Elements

⚠ WARNING

To avoid risk of serious personal injury never cook on a broken smoothtop cooking surface. Spillovers or cleaners can penetrate surface and create a risk of electrical shock. If smoothtop cooking surface breaks, discontinue use and notify an authorized servicer immediately.

⚠ CAUTION

Do not use cast iron cookware. Cast iron retains heat and may result in cooktop damage.

- Use heavy-gauge metal cookware not including cast iron.
- Bottom of cookware must be flat. Cookware that is warped or slightly curved on the bottom heats slowly and may not boil water. Cookware with an aluminum disk bottom makes excellent contact with cooking surface. See *Utensils* section for more information.
- Do not use glass, glass-ceramic, or enamel-porcelain cookware. Small imperfections on bottom of such cookware can scratch smoothtop module surface.
- Smoothtop cooking surface is not “scratch proof”. Surface is highly scratch and impact resistant. With recommended cooking utensils and proper care, it will continue looking good through years of use.
- Do not use a pan that overhangs burner by more than 1 inch.

Cooking with Coil Elements

- Do not use a pan that overhangs burner by more than 1 inch.

Oven Light

- Used to light inside of oven.
- Light turns on when oven door is opened.
- Some models have switch that turn oven light on and off without opening door. Switch is next to clock.

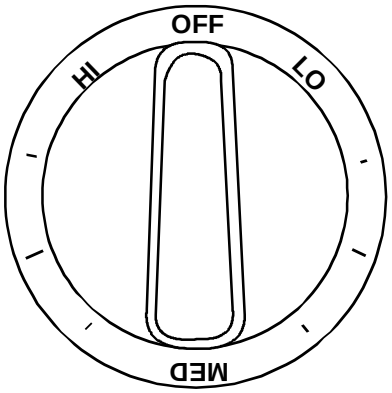
Single Smoothtop and Coil Surface Elements

- Do not use a pan that overhangs burner by more than 1 inch.

⚠ WARNING

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

1. Push in and turn surface element control to desired setting.
   - Some ranges have four hot indicator lights, one located above each knob. Hot indicator lights will glow red when the corresponding element is turned on. Light will remain on until surface element has cooled to a safe temperature. Element cycles on and off to maintain desired heat setting.
   - 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.
2. When finished cooking, turn control to “OFF” position.



Surface Element Control Knob

Settings

LO

Use to prepare food at less than boiling temperatures or to simmer.

MED

Use to maintain boiling of larger amounts of food, low temperature frying and to maintain correct pressure in a pressure cooker.

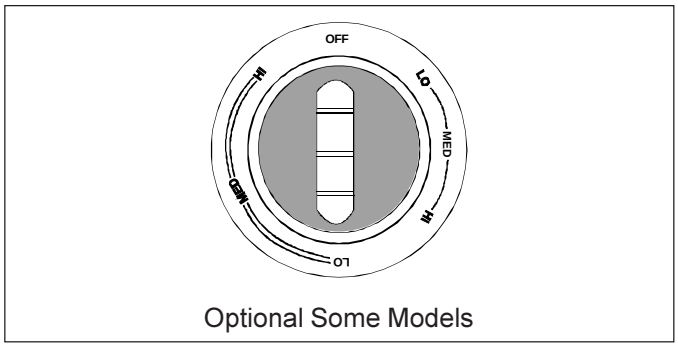
HI

Use to bring food to boiling temperatures. When food is boiling temperature setting should be reduced to MED through HI.

Operating Instructions

Dual Radiant Element

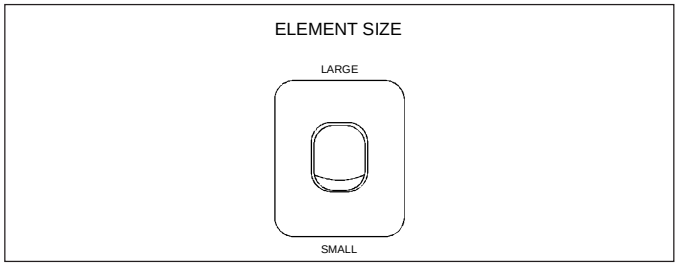
Dual Element can be operated using inner 6 inch element only or both inner and outer 9 inch element.



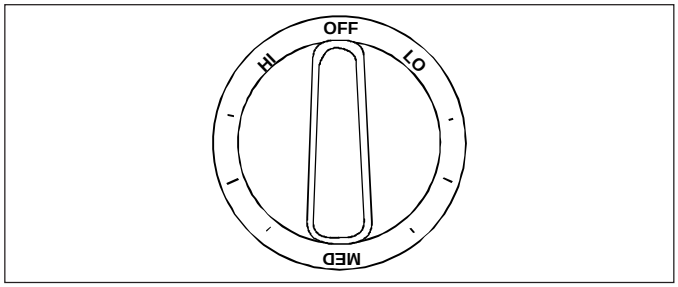
Optional Some Models

To use inner element

1. Depress *Element Size* switch downward. Dual Element switch is located in upper right corner of control panel.



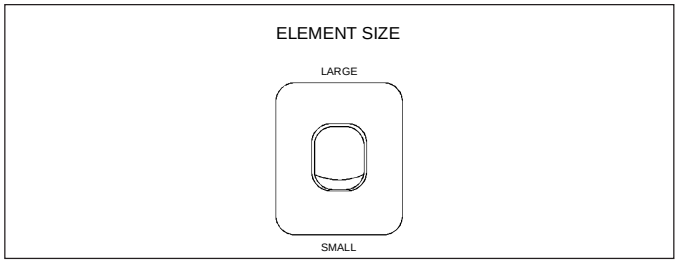
2. Push in and turn surface element control to desired setting.
   - Element will cycle on and off to maintain desired heat setting.



3. When finished cooking turn control to *OFF* position.

To use both inner and outer element

1. Depress *Element Size* switch upward.

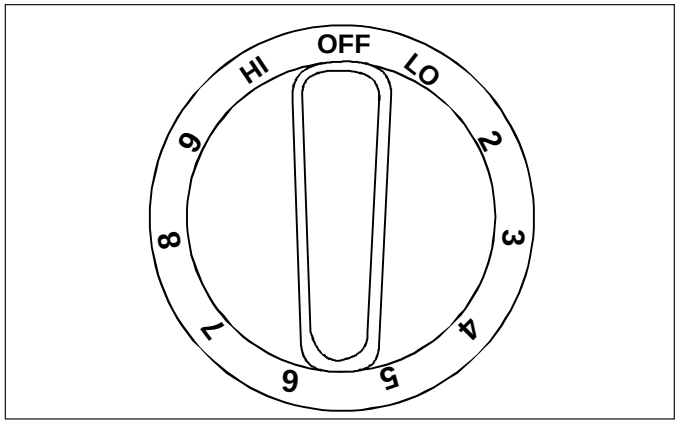


2. Follow steps 2-3 above.

10 Position Surface Element

Surface element is able to provide constant non cycling power. *LO* setting allows excellent simmer and keep warm capabilities.

1. Push in and turn control knob to the desired setting.
   - LO through 3 should be used for food that is prepared at less than boiling temperatures or to simmer. When using settings LO through 3 the element will not be illuminated.
   - 4 through 5 can be used to maintain boiling in moderate amounts of liquid.
   - 6 through 7 should be used to maintain boiling or larger amounts of food, low temperature frying and to maintain correct pressure in a pressure cooker.
   - 7 through 9 can be used to fry meat and poultry or to maintain deep-fat frying temperatures.
   - HI should be used to bring food to boiling temperatures. When food is boiling, temperature should be reduced to 4-7 as required.



2. When finished cooking, turn control to *OFF* position.

Quartz Halogen Variable Intensity System

Position	% of Power Output	% of Lamp Brightness
1	6	0
2	8	0
3	11	0
4	16	25
5	23	25
6	30	50
7	41	50
8	56	75
9	76	75
10	100	100

Testing Procedures

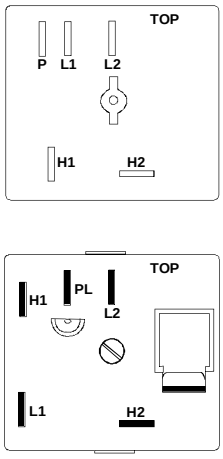
WARNING **To avoid the risk of electric shock, personal injury or death, disconnect power before servicing, unless testing requires it.**

Surface Elements (Infinite) Switch

The surface units and controls offer infinite heat settings. Controls must be pushed down before turning. All surface controls are marked on the control panel for their respective heating unit. Infinite switch contacts L1 - H1 and L2 - H2 provide power to the surface elements.

Check continuity on infinite switch contacts by using the following steps.

1. Turn off power to range.
2. Remove all control panel knobs. Remove control panel assembly.
3. Remove switch mounting bracket screws. Lift bracket upward. The location of the switch terminals is shown below.



Infinite Switch Contacts

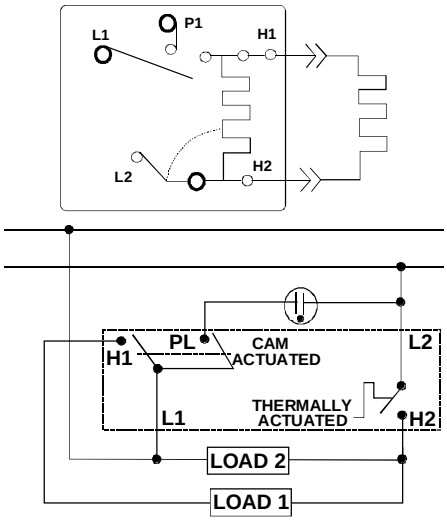
4. Remove wiring from switch.
5. Set ohmmeter on R x 1K scale. Check for continuity according to the following chart.

	DIAL POSITION		
Contact	OFF	LO-MED	HI
L1 - L2	0	E	X
L1 - P	0	X	X
L1 - H1	0	X	X
L2 - H2	0	X - C	X
H1 - H2	X	E	X

O - Open X - Closed C - Cycles
E - Indicates resistance across internal heater

6. If any contacts fail continuity test, replace infinite switch.

NOTE: During actual surface element operation, contacts L2 - H2 will cycle to maintain the correct heat setting. Contacts L1 - P provide power to the surface element indicator light.



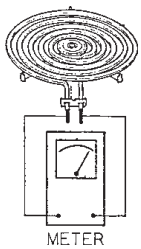
Infinite Switch Schematic

If the infinite switch contacts are good and the element does not heat, check for voltage at the heating element terminal plug block. A voltage of 240 V should be indicated. If no voltage is indicated, check for a broken wire or loose connection.

Coil Surface Element

If the heating element does not heat, check for voltage at the element plug block, a indication of 240 V should be present at the plug block terminals. If no voltage is present at the plug block, check for loose connections, broken wiring, or a failed infinite switch. If voltage is present at the plug block, check the element for continuity.

1. Turn off power from ramge.
2. Remove element from receptacle.
3. Set meter to R x 10 scale. Attach meter leads to element terminals. Meter should indicate continuity or low ohms on outside terminals. Replace element if meter indicates infinite ohms.



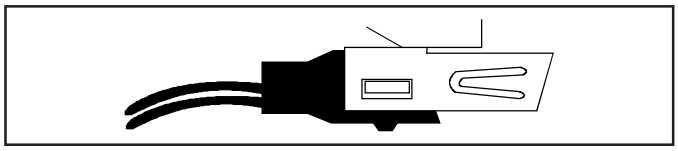
Surface Element Testing

Testing Procedures

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

Coil Surface Terminal Block

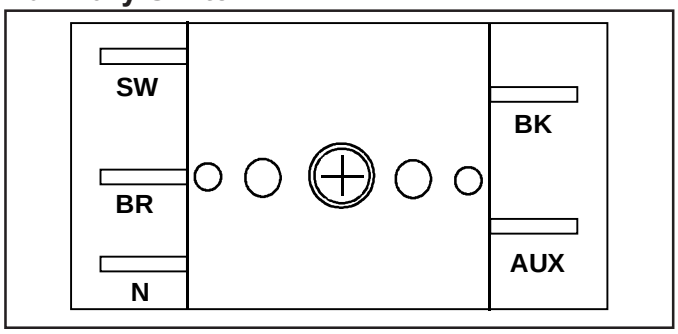
1. Turn off power to range.
2. Remove terminal block from element, and wiring.
3. Test terminal block for continuity.
4. Replace if terminal block has infinite resistance.

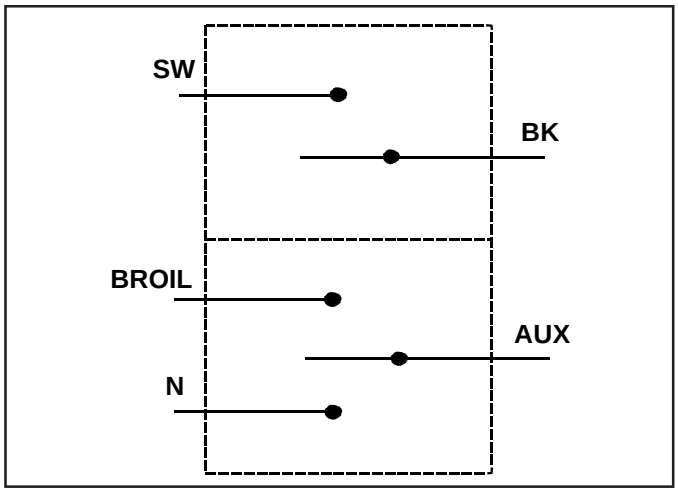


Dual Element Hi–Lo Switch

1. Disconnect wire terminals from switch.
2. Place switch in upward position.
3. Measure resistance of terminals, should indicate continuity. If continiuty is not indicated replace switch.

Auxiliary Switch



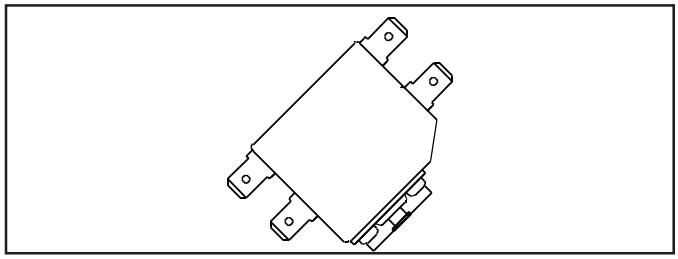


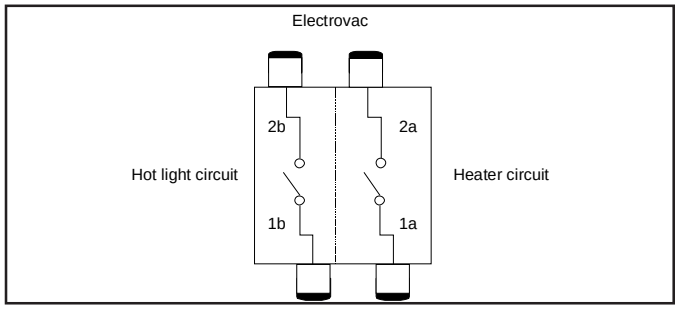
	BK - SW	AUX - N	AUX - BR
OFF/BROIL	O	O	------
BAKE	X	X	-----
OFF/BAKE	-----	-----	O
BROIL	-----	-----	X

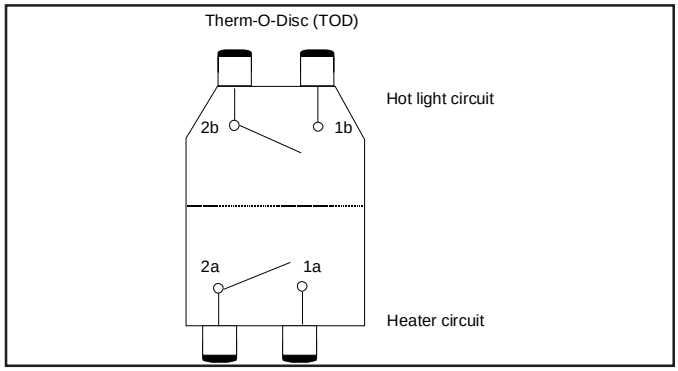
Hi-Limit/Hot Light Switch—Glass Ceramic Elements/Halogen Elements

A hi-limit thermostat is mounted in each glass ceramic heating element as a safety device to limit excessively high temperatures. The hi-limit contacts open at approximately 1200° F. The hi-limit switch contacts can be checked for continuity by following the procedures below:

1. Turn off power to range.
2. Remove screws securing main top to the frame.
3. Raise and secure main top.
4. Disconnect the hi-limit switch wire leads.
5. Set an ohmmeter to the R x 1 scale and attach the meter leads to the switch terminals. Zero OHMS or continuity should be indicated. If no continuity is indicated, the element must be replaced.





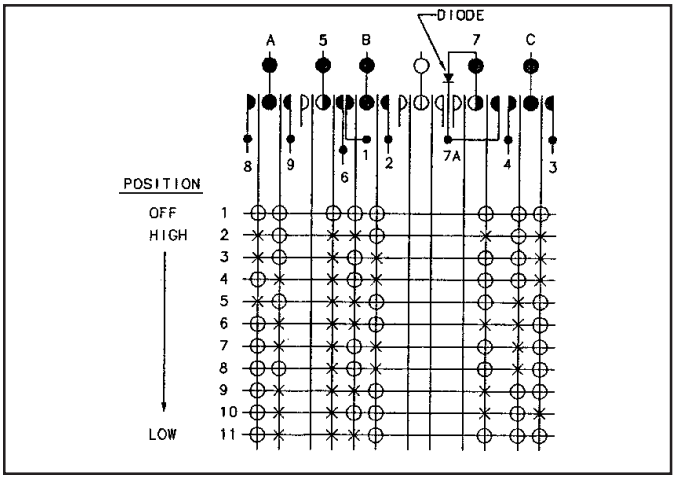


Testing Procedures

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

10 Position Halogen Switch Test

1. Turn off power to range and check for correct wiring. Refer to wiring diagrams and schematics. Make sure all connections are tight.
2. If all wiring is connected correctly and are tight, use a continuity tester or ohmmeter to check switch contacts. Remove all wire terminals. Check for continuity as indicated in illustration below. If continuity is not present where indicated, the switch has failed and must be replaced.



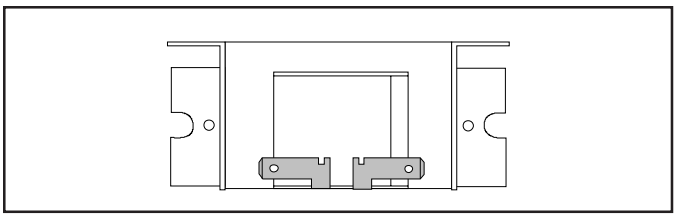
NOTE: 10 position element must have a neutral to operate at low positions

Indicator Light

If the range surface units opeate normally but the indicator lights do not glow, check for voltage at the indicator light terminals. If voltage is present at the indicator terminals and the indicator does not glow, replace the indicator light. If no voltage is present at the teminals, check for loose connections or broken wiring.

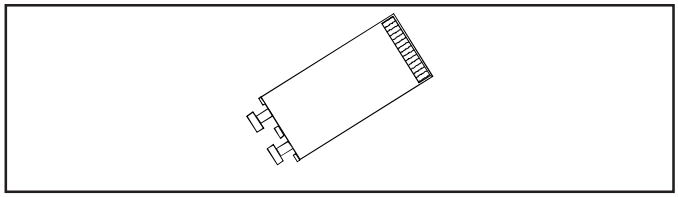
Flourescent Light Ballast

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.



Flourescent Light Starter

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



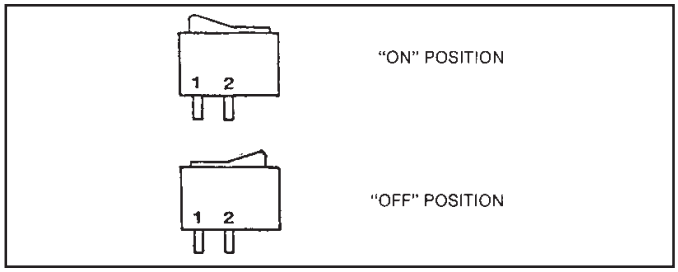
Flourescent Light

If flourescent tube has blackend ends of light flicker. Verify proper connect of tube, or replace tube.

Oven Light Switch

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

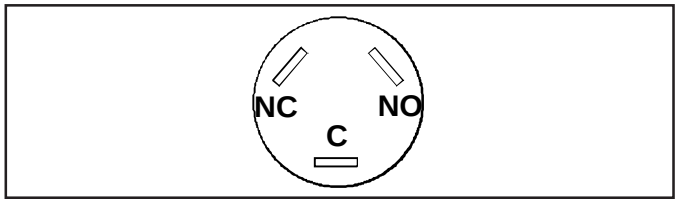
1. **Turn off power to the range.**
2. Disconnect the switch wire leads.
3. Attach an ohmmeter, set to the R x 1 scale, to the switch terminals 1 and 2. When the switch is set to the ON position, continuity should be indicated and open contacts should be indicated when the switch is set to the OFF position.



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.

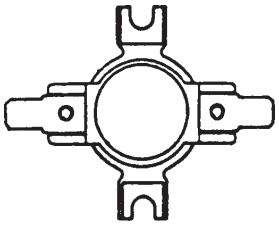
Testing Procedures

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

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 275°F or 235°F, see chart below.

Part Number	Open	Close
053584	275°F	245°F
316699	235°F	205°F



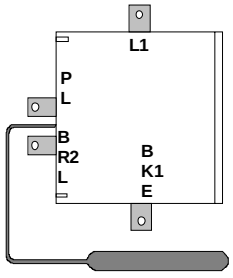
1. Turn off power to range.
2. Remove lower rear access panel on back of range.
3. Disconnect wires from switch terminal connections.
4. Attach ohmmeter leads to switch terminals. At ambient room temperature (70°F.) continuity should be indicated.

Oven Thermostat

This system uses a thermostat which internally selects the Bake and Broil circuits eliminating the separte selector switch. Also with the system, broil element comes on with the oven elemen to give faster preheating of the oven. When temperature is within 50° of the set temperature the broil element cuts out and from then on only the bake element operates to maintain the set temperature.

Power supply from L1 is connected to one side of the oven thermostat, which is controlled by oven air temperature. When the oven air calls for more heat, switch will close and complete the circuit to the bake or broil element.

NOTE: When switching oven thermostat from broil to bake always turn fully to OFF first. Otherwise the broil element remains energizedby the thermostat.



Oven Temperature Sensor

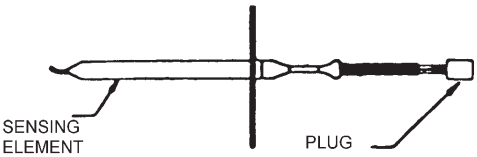
The oven temperature sensor can be checked by using the "Quick Test Mode" covered in this section of manual or detail testing can be accomplished as follows.

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.

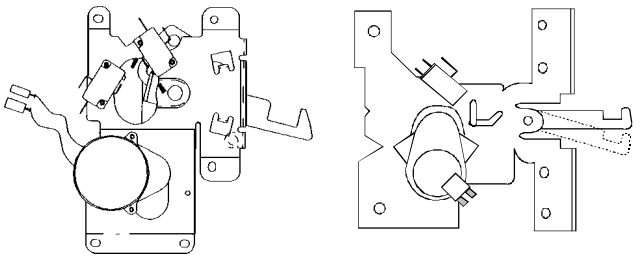
NOTE: Sensor resistance will increase if held in your hand.



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.



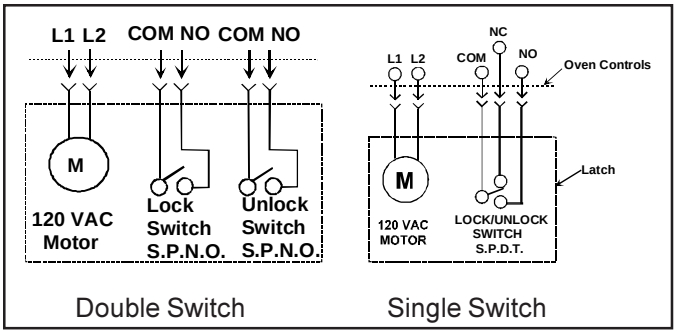
Double Switch Single Switch

Testing Procedures

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

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).



Double Switch Single Switch

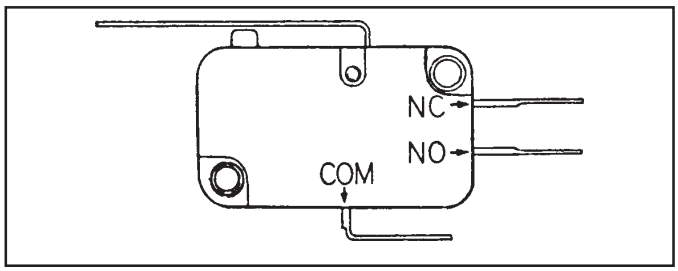
Clean Circuit Manual Latch Switch

The latch switch is a single pole, double throw switch. When the door latch is set to the left or unlocked position, the switch contacts COM-NC provide a power path to the oven light switch for oven light operation if desired.

When the door latch is moved to the far right or locked position, the switch contacts COM-NC open eliminating oven light operation, and COM-NO close providing a door latch signal to the ERC allowing self–cleaning operation.

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.



Convection Fan Motor

1. Turn off power to oven.
2. Remove lower rear access panel from back of oven.
3. Disconnect wires from motor terminal connectors.
4. Attach ohmmeter leads to terminal tabs on motor.
5. 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.

Bake - Broil - Convection Element Testing

1. Disconnect power to oven.
2. Remove fasteners securing lower rear access panel.
3. Remove wire connector from element.
4. Attach ohmmeter leads to each of the element terminals. Set ohmmeter to RX1 or RX10 scale.
5. Low ohms or continuity should be indicated.
6. Attach voltmeter lead to E5 connector on relay board.

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.

WARNING **TO AVOID THE RISK OF ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT POWER TO THE OVEN BEFORE SERVICING.**

Removing and Replacing Oven

1. Turn off power to the oven at the circuit breaker.
2. Pull the oven forward out of the cabinet opening.
3. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
4. Replace the oven using the installation instructions and anti-tip bracket(s).

Control Panel Glass

1. Turn off power to unit.
2. Pull outward on top of control panel top trim, while lifting upward on the top trim. Repeat procedure for the other side.
3. Remove fluorescent bulb from socket, by spinning bulb.
4. Remove screws securing light diffuser cover.
5. Remove burner control knobs, by pulling outward.
6. Lean control panel forward, and lay it down to gain access to ribbon.
7. Release terminal plug securing ribbon, by pulling outward on end relaese tabs of adaptor board terminal plugs.
8. Slide ribbon out of terminal plug and remove.
9. Reverse procedure to reinstall control panel.

E.R.C. Display/Control Module

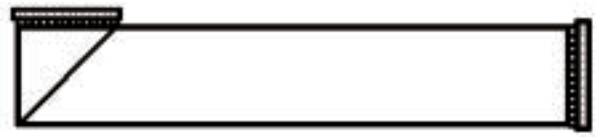
1. Turn off power to unit.
2. See "Control Panel Glass" for removal.
3. Remove screws securing rear top access panel.

WARNING

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

4. Disconnect all electrical connector blocks from E.R.C. unit.
5. Remove screws securing E.R.C..
6. Reverse procedure to reinstall E.R.C..

NOTE: Unlock and remove ribbon connectors from P.C.B.'s. **DO NOT** "unfold" ribbon connector bends otherwise ribbon will have to be refolded as shown below.



Adapter Board

1. Turn off power to unit.
2. See "Control Panel Glass" for removal.
3. Disconnect ribbon from terminal block.
4. Release plastic tabs (squeeze tab together) securing board to metal frame.
5. Reverse procedure to reinstall adaptor board.

Transformer/Relay Board

NOTE: Requires removal of oven from cabinet.

1. Turn power off to unit.
2. Remove rear lower access panel from oven.
3. Disconnect and label wire terminals.
4. Release plastic tabs securing circuit board.
5. Reverse procedure to reinstall.

Infinite Switch

NOTE: Requires removal of oven from cabinet.

1. Turn off power to unit.
2. See "Control Panel Glass" for removal.
3. Remove top rear access panel.
4. Disconnect and label wire terminals.
5. Remove screws in front securing infinite switch.
6. Reverse procedure to reinstall.

Surface Indicator Lights

NOTE: Requires removal of oven from cabinet.

1. Turn off power to unit.
2. See "Control Panel Glass" for removal.
3. Remove top rear access panel.
4. Disconnect and label wire terminals.
5. Squeeze tabs on indicator lamp and pull out towards the rear of unit.
6. Reverse procedure to reinstall.

Metal Backguard Freestanding

1. Turn off power to unit.
2. Pull outward on top of control panel top trim, while lifting upward on the top trim. Repeat procedure for the other side.
3. Remove screws securing bottom of backguard.
4. Reverse procedure to reinstall backguard.

Control Panel Slide-In

1. Turn off power to unit.
2. Raise and secure maintop assembly.
3. Remove screws securing control panel heat shield.
4. Remove screws securing control panel to unit.
5. Reverse procedure to install control panel.

WARNING **TO AVOID THE RISK OF ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT POWER TO THE OVEN BEFORE SERVICING.**

Fluorescent Light Bulb

1. Lift 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

1. Follow fluorescent light bulb removal procedure, Steps 1 and 2.
2. Remove screws securing light socket to mounting bracket.
3. Cut the existing wires off as close as possible to the old fluorescent light socket. Remove about 1/4" of insulation from wire ends and crimp on new wire terminals.
4. Insert wire terminals (with wire) into new socket.

Fluorescent Light Starter/Starter Base

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. Remove screws securing base to backguard.

Ballast

NOTE: Requires removal of oven from cabinet.

1. Turn power off to unit.
2. Remove rear lower access panel from oven.
3. Disconnect and label wire terminals.
4. Remove screws securing ballast to rear insulation cover.
5. Reverse procedure to reinstall ballast.

Oven High Limit/Thermal Fan Switch

NOTE: Requires removal of oven from cabinet.

1. Turn off power to unit.
2. Remove lower rear access panel.
3. Disconnect and label wire terminals connected to limit switch.
4. Remove screws securing high limit switch.
5. Reverse procedure to reinstall switches.

Oven Sensor

1. Remove screws securing sensor to top right rear corner of oven wall.
2. Pull sensor forward enough to disconnect the two wire plug connector.
3. Reverse procedure to reinstall sensor.

Bake Element

1. Turn off power to unit.
2. Remove screws securing bake element to rear of oven wall.
3. Pull element forward far enough to allow disconnection of terminals on each element leg.
4. Reverse procedure to reinstall bake element.

Broil Element

1. Turn off power to unit.
2. Remove screws securing broil element to rear of oven wall.
3. Remove screws securing broil element brackets to broil element shield.
4. Pull broil element forward enough to allow disconnection of terminals on each element leg.
5. Reverse procedure to reinstall broil element.

Convection Heating Element

1. Turn off power to unit.
2. Remove screws securing fan shield to rear of oven wall.
3. Remove screws securing convection heating element to rear wall of oven.
4. Pull element forward to expose wire connections for disconnection.
5. Reverse procedure to reinstall convection heating element.

Convection Fan Blade

1. Remove screws securing fan shield to rear of oven wall.
2. Using a **flat** screwdriver or adjustable wrench, and **turning clockwise**, remove the nut in center of convection fan blade. (Nut is Left Hand Thread).
3. Remove fan blade from D stem motor shaft.

NOTE: Behind fan blade is a washer and C clip on motor shaft which must be in position for correct reassembly. (To prevent Fan Blade hitting cavity).

WARNING **TO AVOID THE RISK OF ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT POWER TO THE OVEN BEFORE SERVICING.**

Convection Fan Motor

NOTE: Requires removal of oven from cabinet.

1. Turn off power to unit.
2. Remove convection fan blade and spacer washer, see "Convection Fan Blade" procedure.
3. Remove rear lower access panel from the oven.
4. Disconnect and label wires from convection fan motor.
5. Remove screws securing convection fan motor assembly to rear insulation retainer.
6. Transfer hardware (C clip, mounting plate, etc.) to new convection fan motor.
7. Reverse procedure to reinstall.

Maintop Assembly Freestanding

NOTE: Requires removal of oven from cabinet.

1. Turn power off to unit.
2. Open oven door and lift door to remove from hinges (optional).
3. Remove screws securing main top assembly to oven chassis. Located under front trim cover.
4. Raise and brace open maintop assembly.
5. Label and disconnect all wire terminals.
6. Remove rear lower access panel from oven.
7. Remove screws securing rear maintop assembly brackets.
8. Reverse procedure to reinstall.

Maintop Assembly Slide-In

1. Turn off power to unit.
2. Wrap tape (duct) around a puddy knife, place it between maintop and control panel pressing towards the rear to release maintop clips (one each side).
3. Grasp front edge of unit, raise and secure maintop assembly.
4. Reverse procedure to reinstall maintop assembly.

Drip Baffle Removal (if so equipped)

1. Remove surface elements and burner bowls.
2. Raise and secure maintop assembly.
3. Remove screws securing drip baffle to range front frame and side panels.
4. Reverse procedure to reinstall drip baffle.

Ribbon and Halogen Burners

1. Refer to maintop assembly steps 1 through 4.
2. Loosen bracket securing burner being replaced.
3. Label and disconnect wire terminals.
4. Remove screw securing burner to burner bracket.
5. Reverse procedure to reinstall.

Automatic Oven Door Latch Assembly

1. Turn off power to unit.
2. Remove or open oven door.
3. Remove three screws in front securing main top assembly to chassis on smoothtops only. Raise and secure main top assembly.
4. Disconnect and label wire terminals.
5. Remove screws securing latch assembly to chassis.
6. Reverse procedure to reinstall door latch assembly.

Door Plunger Light Switch

1. See "Main Top Assembly", steps 1 through 4, and drip baffle procedures (if so eqipped).
2. Label and disconnect wire terminals from switch.
3. Squeeze metal tab and push switch outward to remove.
4. Reverse procedure to reinstall.

Oven Light Bulb/Oven Light Socket

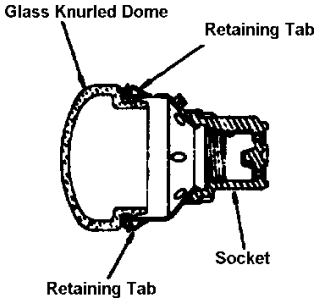
NOTE: May require removal of oven from cabinet.

1. Disconnect power to unit.
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 lower rear cover from range.
5. Carefully displace fiberglass insulation away from rear of light socket.
6. 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.
7. Disconnect wires from light socket.
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 Light Socket Assembly

WARNING **TO AVOID THE RISK OF ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT POWER TO THE OVEN BEFORE SERVICING.**

Oven Tank Removal

1. Turn off power to unit.
2. Remove oven door and racks.
3. Remove bake element, broil element and smoke eliminator. Remove capillary hole cover and capillary clip, or, remove heat sensing element. Remove chip cover and tank securing screws.
4. Remove rear cover, disconnect wiring, remove oven bracket screws (2), and withdraw capillary tube.
5. Release oven tank brackets at rear. Maneuver tank from frame.
6. Transfer oven light assembly to replacement tank.
7. Reverse procedure to assemble.

Oven Door Removal

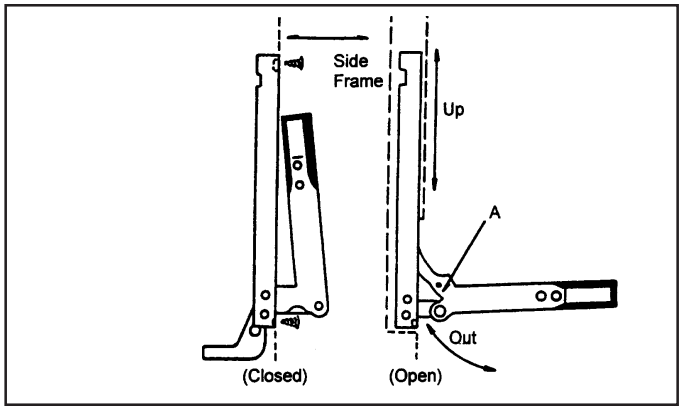
1. Remove screws securing door to hinge assembly (new compression hinges only).
2. Open door to first stop position (1/3 open) then grasp both sides and lift up off the hinges.

Frameless Door Disassembly

1. Open oven door and remove screws securing door to hinges (if so equpped).
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. Seperate glass outer door, trim and handle from door assembly.
6. Detach door handle by removing door handle screws.
7. Detach heat shield from oven door backer, by removing hex screws.
8. Access remainder of door assembly by removing hex screws from oven door backer.
9. Reverse procedure to reassemble.

Oven Door Hinge

1. Turn off power to unit.
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

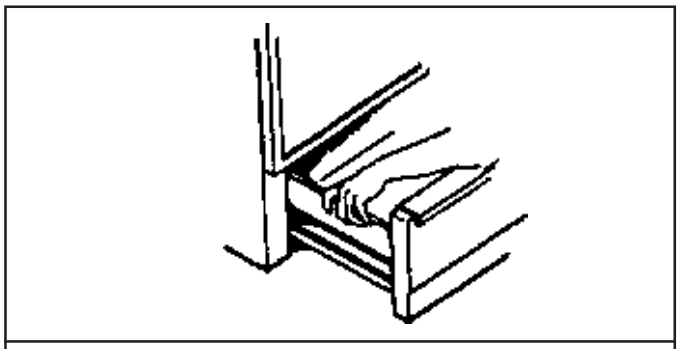
NOTE: Replace left or right side panel one at a time. Do not attempt to remove both side panels as lack of support may cause subsequent damage/twist to backguard.

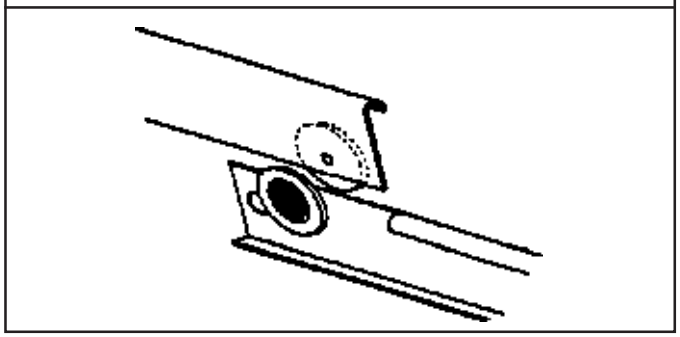
1. Turn off power to unit.
2. Disconnect 240 VAC power line from range terminal block then remove 240 VAC power line from range.
3. Remove oven door assembly.
4. Remove storage drawer assembly.
5. Raise main top.
6. Put protective cloth on both sides of main top, in the left and right rear, to prevent main top damage from backguard side trims.
7. Remove lower rear galvanized cover from appliance.
8. Support side of range four to six inches off floor. Remove four screws from bottom flange of side panel.
9. Remove main top support rod on side being repaired, if applicable.
10. Remove screws securing side panel to rear insulation retainer.
11. Remove screws securing backguard support to side panel.
12. Remove screws securing drip baffle to side panel.
13. Remove screws securing side panel to front frame flange.
14. Move rear of side panel away from range then move side panel forward to clear flange.
15. Reverse procedure to reinstall side panel.

WARNING **TO AVOID THE RISK OF ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT POWER TO THE OVEN BEFORE SERVICING.**

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.





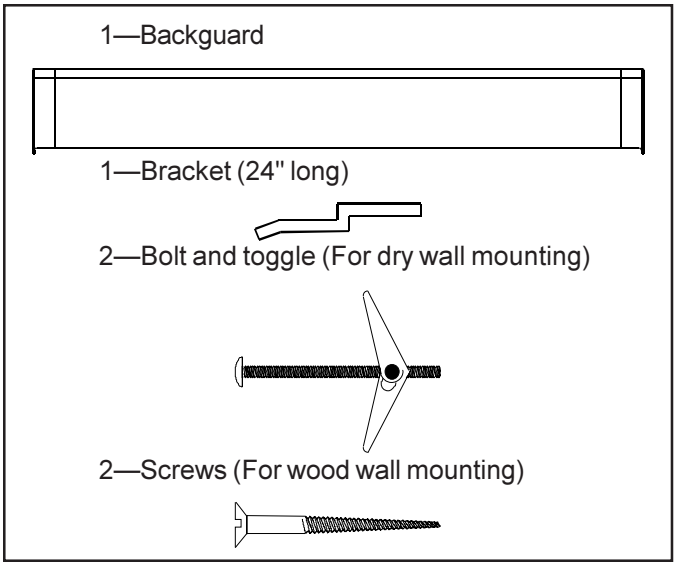
3. To replace:
   a. Place the set of rollers on the drawer behind the set of rollers on the oven. (As shown below.)
   b. Align the guides and push the drawer back into position.

Storage Drawer Track Removal

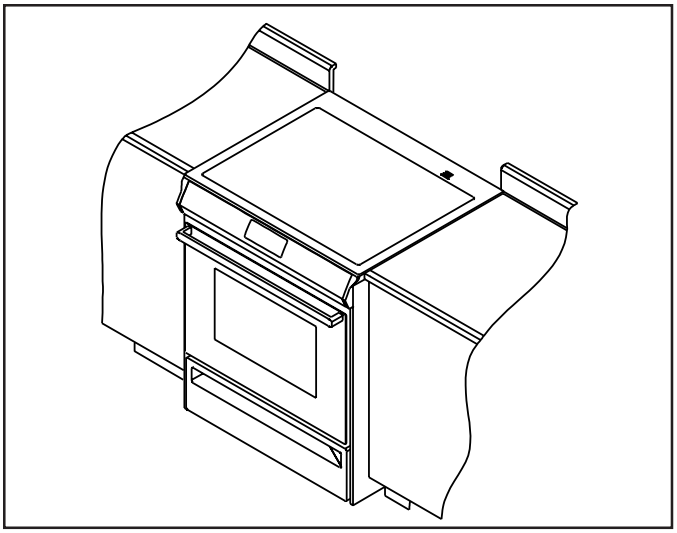
1. Remove the storage drawer by pulling it out to the fully open or stop position, lifting the drawer at the rear to disengage the drawer track rollers from the drawer runners, and sliding the drawer out of the range.
2. The tracks are mounted to a rear support and the frame of the range. Remove the 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.

Installation Instructions for Slide-In Ranges

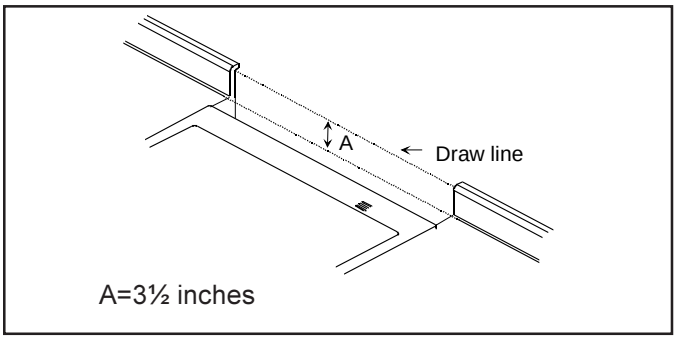
AXF100 Backguard Kit Installation Instructions Contents



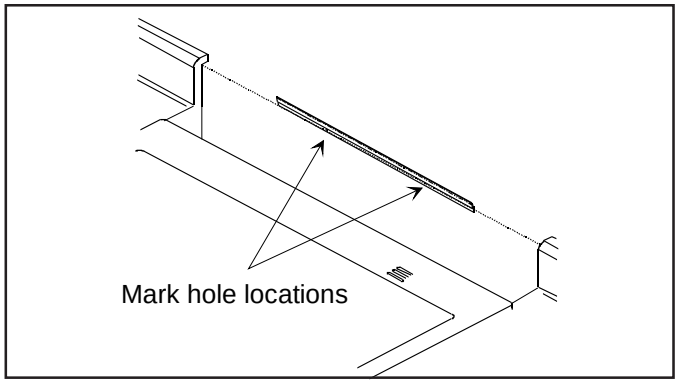
1. Install range according to Owner's Manual instructions.
   - Install Kit AXF100 where countertop backsplash has been removed.



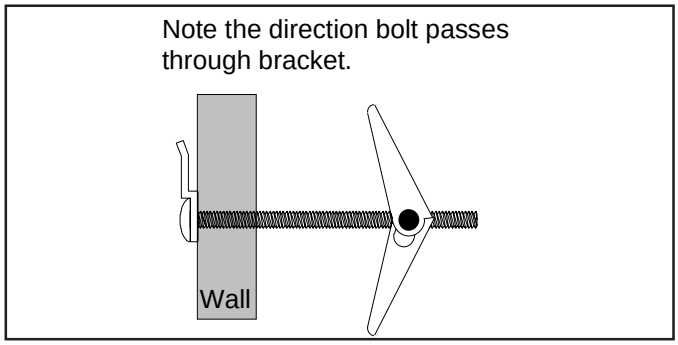
2. Measure 3½ inches above countertop and draw a line across cutout.



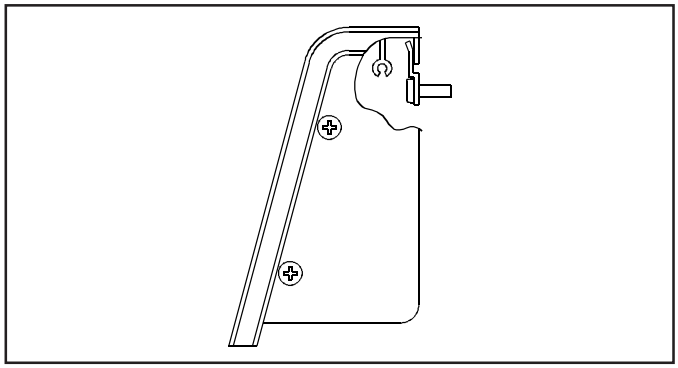
3. Place bracket against rear wall in center of cutout. Move bracket until line shows through screw holes. Mark screw hole locations on wall.



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.

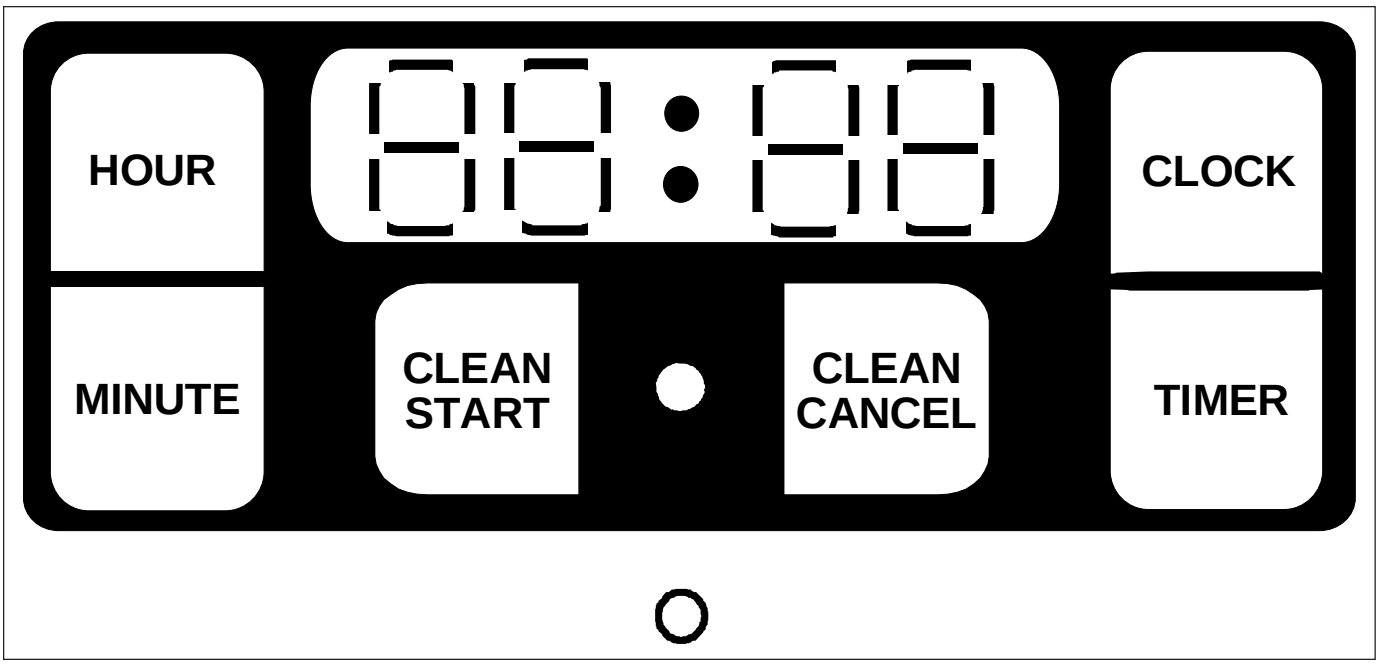


6. Push toggle bolts into holes and tighten. If using wood screws, screw bracket to wall.
7. Place backguard onto bracket.



Appendix

Clean Timer with Mylar Overlay—315568



Electronic Oven Control 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.

Setting Electronic Clock

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

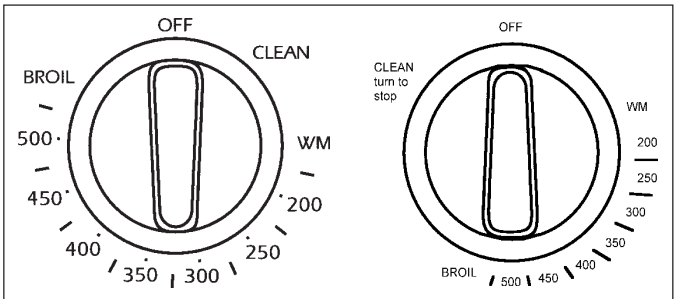
Setting Electronic Timer

1. Press *TIMER* pad.
   - 59 minutes displays.
   - Maximum time 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.
3. Place food in oven.
4. After cooking time elapses, remove food and turn oven thermostat knob to “OFF”.



Thermostat Knob

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.

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

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 sould be broiled with skin side down, when using broil. 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.

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.

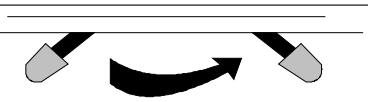
- A small amount of smoke is normal when cleaning. Excessive smoke may indicate there is a faulty gasket or too much food residue has been left in oven. Move birds and small animals susceptible to fumes or smoke to another room.
- Oven should be cleaned before it gets too dirty. Wipe up large spills 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 and an end of cycle signal sounds.
5. Turn oven thermostat knob to *OFF* position when finished.
   - After oven has cooled, door can be unlocked and opened.

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 cicuitry which are house in a single conponent. The mylar overlay is not part of the clock assembly, and needs to be replace seperately if the unit is replaced.

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

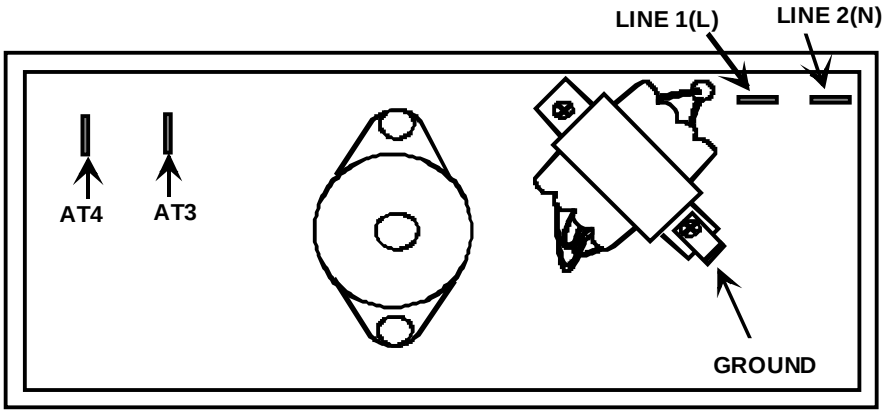
Performance of this clock is very simple to verify proper operation. Follow the procedures below:

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.

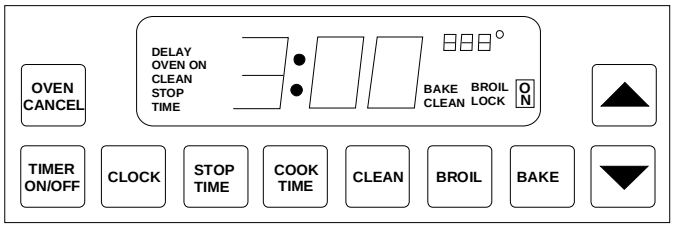
Clean Operation of Clock

1. If no voltage is present, verify wire connection 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 AT3 and AT4 to confirm relay is operating properly.
4. If relay is operating, verify thermostat is operating properly.
5. If latch switch and thermostat is operating properly, but clean cycle does not operate replace clock.

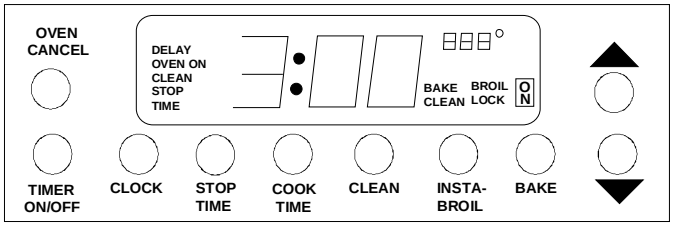


Electric Slew ERC3—315570

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 accidently 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, see detailed information in this section.

Setting Clock

1. Press *CLOCK* pad.
   - "TIME" appears in display.
2. Press appropriate *SLEW* pad ▲ or ▼ until correct time of day is displayed.
3. Press *OVEN CANCEL* pad to set time.
   - Approximately 25 seconds after last entry, "TIME" disappears and time is set.

Setting Minute Timer

1. Press *TIMER ON/OFF* pad.
   - "TIMER" appears in displayed.
2. Press appropriate *SLEW* pad ▲ or ▼ until desired amount of time is displayed.
   - Timer can be set from 5 seconds to 9 hours and 50 minutes in 5 second increments.
   - Timer begins counting down within 5 seconds.
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 and hold the *TIMER ON/OFF* pad for approximately 3 seconds.

Cancel minute timer to get back to time of day mode.

NOTE: When canceling minute timer do not press *OVEN CANCEL* pad. Pressing *OVEN CANCEL* pad, cancels cooking function.

Bake or Broil/Insta-Broil

1. Press *BAKE* or *BROIL/INSTA-BROIL* pad.
2. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature or broiler setting is displayed.
3. Oven begins baking or broiling within 5 seconds.

Canceling Bake or Broil/Insta-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. Press appropriate *SLEW* pad ▲ or ▼ to adjust clean time. Clean can be set from 2 to 4 hours.
4. Oven begins cleaning within 5 seconds.

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" is displayed.

Baking

Open oven door to confirm nothing is stored in oven cavity and set racks to proper height before baking. Preheat approximately 10 minutes before placing food inside oven.

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

Timed Baking

1. Place food in oven.
2. Press *COOK TIME* pad.
   - "OVEN", "TIME", and "HR" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ until cooking time is displayed.
   - 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" and "---°" flashes and signals.
   - To view cook time, press and hold *COOK TIME* pad.
4. Press *BAKE* pad.
   - "BAKE" and "---°" appears in display.

5. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - Temperature begins at 350°F and can be set from 170° to 550°F in 5° increments.
   - "OVEN", "TIME", "BAKE", "ON", and "HR" appears in display.
   - Temperature display increases in 5° increments starting at 100°F until reaching set temperature. Some minor smoking is normal when using oven bake for first time. When cook temperature is reached oven signals.
   - To view cook time, press and hold *COOK TIME* pad.
   - To view stop time, press and hold *STOP TIME* pad.
   - When cooking time has elapsed, an end of cycle signal sounds, oven automatically turns off and display returns to time of day. Oven signal sounds 3 times, then once every 3 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.
6. Press *OVEN CANCEL* pad when finished.
   - Remove food from oven when cooking time has elapsed. Food left in oven can overcook.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Delayed Baking

1. Place food in oven.
2. Press *BAKE* pad.
   - "BAKE" and "---°" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - Temperature begins at 350°F and can be set from 170° to 550°F in 5° increments.
4. Press *STOP TIME* pad.
   - Current time of day appears in display.
5. Press appropriate *SLEW* pad ▲ or ▼ until desired stop time displays.
   - Stop time can be set 11 hours 55 minutes ahead of current time of day.
6. Press *COOK TIME* pad.
   - "OVEN", "TIME", and "HR" appears in display.
7. Press appropriate *SLEW* pad ▲ or ▼ until desired time cooking displays.
   - 10 minutes minimum cooking time.
   - "DELAY", "OVEN", "TIME", and "BAKE" appears in display. When start time is reached "DELAY" no longer displays and "ON" will appear in display.
   - To view cook time, press and hold *COOK TIME* pad.
   - To view stop time, press and hold *STOP TIME* pad.
   - When cooking time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day. Oven signal sounds 3 times, then once every 3 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Broil/Insta-Broil

- Open oven door to first stop 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.
- Fish should be broiled with skin side down, when using broil. 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.

⚠ 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.

1. Center food on broiling grid and pan, and place in oven.
   - Open oven door to first stop.
2. Press *BROIL/INSTA-BROIL* pad.
   - "BROIL" and "---" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ to set from HI to settings 5 thru 1.
   - Oven begins to broil within 5 seconds. "BROIL", "ON" and "HI" or "5 thru 1" will appear in display.

Setting	Use
HI	Cooking red meats
5	Cooking pork
4	Cookng poultry
3	Cooking seafood
2	Cooking fruit or vegatables
1	Toasting breads

4. Press *OVEN CANCEL* pad when finished.

Programming Instructions

Self-Cleaning

- Small amount of smoke is normal when cleaning. Excessive smoke may indicate if too much food residue has been left in oven or there is a faulty 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 fire, clean excess spills from oven interior.

⚠ 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 "----" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ 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 at calculated time. "CLEAN, "TIME" and "ON" appears in display. "LOCK" flashes in display while automatic door latch is locking.
   - When cleaning time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day. Oven signal sounds 3 times, then once every 3 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.
4. Press *OVEN CANCEL* pad when finished.
   - When oven has cooled to a safe temperature, door latch opens and "LOCK" light flashes. When oven has cooled enough to open door "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.

Delayed Self-Cleaning

- 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 fire, clean excess spills from oven interior.

⚠ 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 "----" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ 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 appropriate *SLEW* pad ▲ or ▼ 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" appears in display. "LOCK" flashes in display while automatic door latch is locking.
   - To view remaining cleaning time, press and hold *CLEAN* pad.
   - To view calculated stop time, press and hold *STOP TIME* pad.
   - When cleaning time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day. Oven signal sounds 3 times, then once every 3 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.

6. Press *OVEN CANCEL* pad when finished.
   - When oven has cooled to a safe temperature, door latch opens and “LOCK” light flashes. When oven has cooled enough to open door “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

This feature disables oven control. Surface elements will heat when child lock is on.

1. Press and hold *BAKE* and *CLOCK* pad for approximately 5 seconds.
   - “OFF” appears in display.
2. Repeat step 1 to cancel child lock.

Adjusting Oven Thermostat Temperature

Oven temperature has been factory calibrated and tested. In unlikely event that oven consistently overcooks or undercooks food, make following adjustment.

1. Press *BAKE* pad.
2. Press *SLEW* pad ▲ until an oven temperature greater than 500°F displays.
3. Immediately press and hold *BAKE* pad until “00” displays, approximately 5 seconds.
4. To decrease oven temperature (for a cooler oven), Press *SLEW* pad ▼ until negative numbers appear. Oven can be adjusted from -05° to -35° lower. To avoid over adjusting oven move temperature -5° each time.
5. To increase oven temperature (for a warmer oven), Press *SLEW* pad ▲ until positive numbers appear. Oven can be adjusted from 5° to 35° higher. To avoid over adjusting oven move temperature 5° each time.
6. Press *OVEN CANCEL* button. Temperature adjustment will be retained even through a power failure.

Service Tones and Codes

Electronic range control has a self-diagnostic system.

Self-diagnostic system sounds a series of short, rapid beeps and shows an “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—Shorted pad button.
   - F2—Oven cavity over temperature.
   - F3—Open circuit in oventemperature sensor circuit.
   - F4—Shorted circuit in oven temperature circuit.
   - F5—Defective watchdog circuit in control.
   - F7—Failure of door lock switch sensing with door locked.
   - F9—Failure of door lock switching sensing with door unlocked.
2. Disconnect electrical supply.
   - Pressing TIMER ON/OFF pad or disconnecting electrical supply may eliminate “F-code”. If failure continues, contact an authorized servicer.
3. Contact an authorized servicer to check range.

Service Information

The ERC consist's of a display, relays and all circuitry

Testing Procedures

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

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	No Amana production use (Engineering Calibration)
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

Testing Procedures

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

certain failures within the ERC, the oven temperature 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.

Temperature Sensor

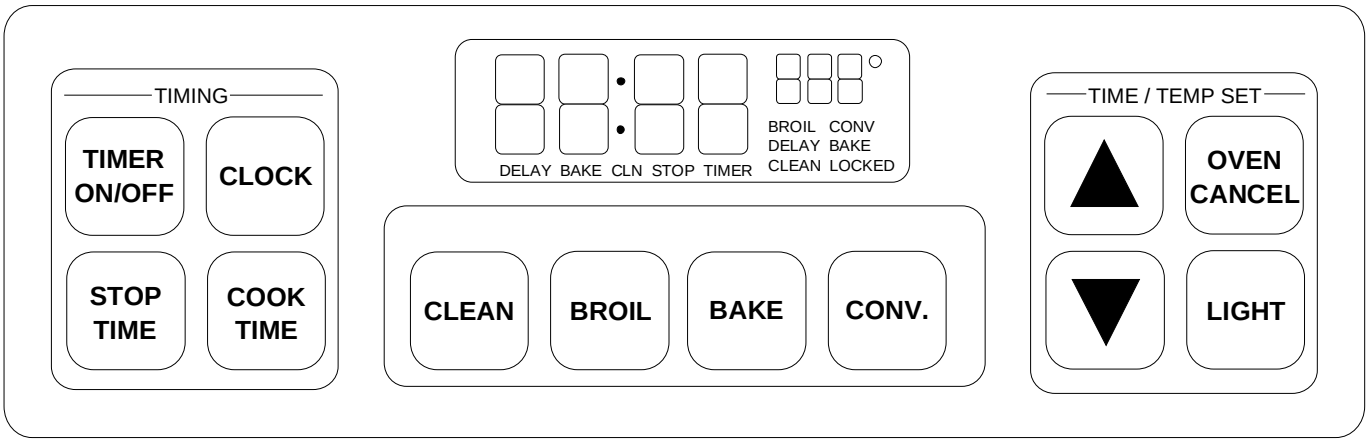
Sensor resistance may be checked by removing the sensor interconnect plug from the ERC J2 connector and inserting ohmmeter leads into the harness connector plug (pin one and two). Refer to the appropriate wiring diagram/schematic for exact pin placement and color coding. A resistance reading of approximately 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.

Temperature	Approximate Sensor Resistance
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.

Electric Slew Membrane ERC3—315614

Switch Panel Membrane



Electronic Oven Control Pads

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 bake or delayed self-clean.

COOK TIME

- Use to set delayed or timed bake.

CLEAN

- Use to select self-clean cycle.

BROIL

- Use to select broil.

BAKE

- Use to select bake.

CONV.

- Use to select convection.

SLEW ▲ or ▼

- Used to set temperature or time.

OVEN CANCEL

- Cancels any cooking or cleaning function except timer.

LIGHT

- Used to turn on and off light inside oven.

Special Oven Control Functions

Timer Signal
When time elapses, timer beeps 3 times then once every 10 seconds.

Preheat Signal
After setting oven to bake and selecting a temperature, oven preheats. When oven reaches set temperature, oven signal sounds 3 times.

End of Cycle Signal
When a timed cooking cycle is complete, three long signals sound. After first 3 signals, 1 signal sounds approximately every 10 seconds for 5 minutes or until *OVEN CANCEL* pad is pressed.

Child Lock Out
This is a safety feature that can be used to prevent children from accidently programming the oven. It disables the electronic oven control. Touch and hold *BAKE* and *COOK TIME* for 10 seconds. “OFF” will display where the temperature normally appears.

To reactivate the control, touch and hold *BAKE* and *COOK TIME* for 10 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, see 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 am, pm, or military time.

1. Press *CLOCK* pad.
   - “TIME” appears in display.
2. Press appropriate *SLEW* pad ▲ or ▼ until correct time of day is displayed.
3. Press *OVEN CANCEL* pad to set time.
   - If oven cancel is not pressed, approximately 5 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” appears in display.
2. Press appropriate *SLEW* pad ▲ or ▼ until desired amount of time is displayed.
   - Timer can be set from 5 seconds to 9 hours and 55 minutes.
   - Timer begins counting down automatically.
3. When time elapses timer beeps 3 times then approximately once every 10 seconds.
   - Press *TIMER ON/OFF* to cancel beep.

Canceling Minute Timer

Press *TIMER ON/OFF* pad.

NOTE: 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 appropriate *SLEW* pad ▲ or ▼ 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

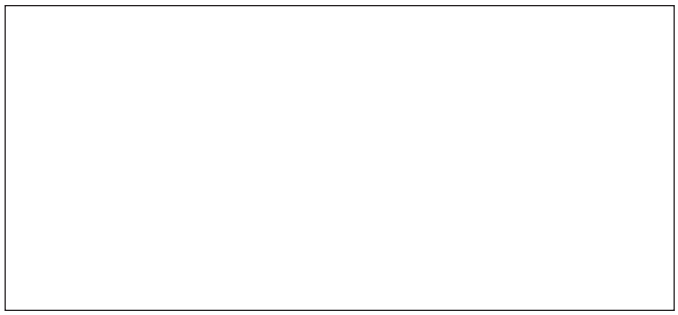
1. Remove oven racks and all utensils from oven and range top. Clean excess spills from oven.
2. Press *CLEAN* pad.
3. Press appropriate *SLEW* pad ▲ or ▼ to adjust clean time. Clean can be set from 2 to 4 hours.
4. Oven begins cleaning automatically.

Canceling Self-Cleaning Cycle

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

Baking

Bottom element operates during bake. Upper element operates 10% of the time to provide additional browning and to lower preheat times. Bake can be used to cook foods which are normally baked. 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. Pans must be staggered for even browning.



1. Press *BAKE* pad.
   - “BAKE” and “---°” appears in display.
2. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - Time of day, oven temperature, “BAKE”, and “ON” appear in the display.
   - Temperature begins at 350°F and can be set from 170°F to 550°F in 5° increments.
   - 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.
   - "TIME", "BAKE", and "--:--" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ 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 59 minutes.
   - 5 minutes minimum cooking time.
   - If cook time is entered and temperature not entered "BAKE" flashes and oven signals.
4. Press *BAKE* pad.
   - "BAKE" and "---°" appears in display.
5. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - "TIME", "BAKE", "ON", and "HR" appears in display. "HR" does not display if less than an hour of time is set.
   - Cooking time begins to count down.
   - Temperature begins at 350°F and can be set from 170°F to 550°F in 5° increments.
   - Temperature display increases in 5° 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.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Delayed Baking

1. Place food in oven.
2. Press *BAKE* pad.
   - "BAKE" and "---°" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - Time of day, oven temperature, "BAKE", and "ON" appears in display.
   - Temperature begins at 350°F and can be set from 170°F to 550°F in 5° increments.
4. Press *STOP TIME* pad.
   - Current time of day, "BAKE", "STOP", "TIME", "BAKE", appears in display.
5. Press appropriate *SLEW* pad ▲ or ▼ until desired stop time displays.
   - Stop time can be set up to 11 hours 59 minutes ahead of current time of day.
6. Press *COOK TIME* pad.
   - "BAKE", "TIME", and "BAKE" appears in display.
   - To view cook time, press and hold *COOK TIME* pad.
7. Press appropriate *SLEW* pad ▲ or ▼ until desired time cooking displays.
   - Maximum cooking time, "DELAY", "BAKE", "STOP", "TIME", "DELAY", and "BAKE" appears in display. When start time is reached "DELAY" no longer displays and "ON" appears in the display.
   - 10 minutes minimum cooking time.
   - Electronic range control calculates start time.
   - To view cook time, press and hold *COOK TIME* pad.
   - When cooking time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Broiling

Top element operates during broil. Broil can be used to cook foods which are normally broiled. 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.

- 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 "---" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ to set from "HI", "5" thru "2", or "LO".
   - Oven begins to broil automatically. "BROIL", "ON" and "HI", "5" thru "2", or "LO" will appear in display.

Broiler Setting	Use
HI	Cooking red meats
5	Cooking pork
4	Cooking poultry
3	Cooking seafood
2	Cooking fruits and vegetables
LO	Toasting breads

4. Press *OVEN CANCEL* pad when finished.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Convection

Rear element and fan operate during convection. Use convection for cooking pastries, souffles, yeast bread, cakes and cookies. Preheat oven for best results when using convection. Pans do not need to be staggered. Cooks approximately 25% quicker than bake.

1. Press *CONV.* pad.
   - "CONV" and "---°" appears in display.
2. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - Time of day, oven temperature, "CONV", and "ON" appears in display.
   - Temperature begins at 350°F and can be set from 170°F to 550°F in 5° increments.
   - 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.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Timed Convection

1. Place food in oven.
2. Press *COOK TIME* pad.
   - "TIME", "CONV", and "--:--" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ until cooking time is displayed.
   - "TIME", "CONV", and "HR" display. "HR" does not display if less than a hour of time is set.
   - Cook time can be set up to 11 hours and 59 minutes.
   - 5 minutes minimum cooking time.
   - If cook time is entered and temperature not entered "BAKE" flashes and oven signals.
4. Press *CONV.* pad.
   - "CONV" and "---°" appears in display.
5. Press appropriate *SLEW* pad ▲ or ▼ until desired temperature is displayed.
   - "TIME", "CONV", "ON", and "HR" appears in display. "HR" does not display if less than a hour of time is set.
   - Cooking time begins to count down.
   - Temperature begins at 350°F and can be set from 170°F to 550°F in 5° increments.
   - Temperature display increases in 5° 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.

To Cancel Remaining Cooking Time
Press *OVEN CANCEL* pad.

Programming Instructions

Delayed Convection

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

To Cancel Remaining Cooking Time

Press *OVEN CANCEL* pad.

Self-Cleaning

- Small amount of smoke is normal when cleaning. Excessive smoke may indicate a failed 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 fire, clean excess spills from oven interior.

⚠ 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.
   - "CLN", "TIME", and "--:--" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ 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", "CLN, "TIME", "CLEAN", "LOCKED", and "ON" appears in display. "LOCKED" flashes in display while automatic door latch is locking.
   - When cleaning time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day. End of cycle signal sounds.
4. Press *OVEN CANCEL* pad when finished.
   - When oven has cooled to a safe temperature, door latch opens and "LOCKED" light flashes while opening. When oven has cooled enough to open door "LOCKED" 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.

Delayed Self-Cleaning

- 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 fire, clean excess spills from oven interior.

⚠ 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.

Programming Instructions

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.
   - "CLN", "TIME", and "--:--" appears in display.
3. Press appropriate *SLEW* pad ▲ or ▼ 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 appropriate *SLEW* pad ▲ or ▼ until desired stopping time appears in display.
   - Starting time is automatically calculated based on amount of cleaning time and stop time.
   - "DELAY", "CLN, "STOP", "TIME", :DELAY", "CLEAN", and "LOCKED" appears in display. "LOCKED" flashes in display while automatic door latch is locking.
   - To view remaining cleaning time, press and hold *CLEAN* pad.
   - To view calculated stop time, press and hold *STOP TIME* pad.
   - When cleaning time has elapsed, end of cycle signal sounds, oven automatically turns off and display returns to time of day.
6. Press *OVEN CANCEL* pad when finished.
   - When oven has cooled to a safe temperature, door latch opens and "LOCKED" light flashes while opening. When oven has cooled enough to open door "LOCKED" 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 will heat when child lock out is on.

1. Press and hold *BAKE* and *CLOCK* pads simultaneously.
   - "OFF" appears in display.
2. Repeat step 1 to cancel child lock.

Adjusting Oven Thermostat Temperature

Oven temperature has been factory calibrated and tested. In unlikely event that oven consistently overcooks or undercooks food, oven temperature can be adjusted.

1. Press *BAKE* pad.
2. Press *SLEW* pad ▲ until an oven temperature greater than 500°F shows in display.
3. Immediately Press and hold *BAKE* pad until "00" appears in display, approximately 5 seconds.
4. To decrease oven temperature (for cooler oven), press *SLEW* pad ▼ until negative numbers appear.
   - Oven can be adjusted from -05° to -35°F lower. To avoid over adjusting oven move temperature -5° each time.
5. To increase oven temperature (for a warmer oven) press *SLEW* pad ▲ until positive number appear. Oven can be set from 05° to 35°F higher. To avoid over adjusting oven, move temperature 5° each time.
6. Press *OVEN CANCEL* pad. Temperature adjustment will be retained even through a power failure.

Service Tones and Codes

Electronic range control has a self-diagnostic system.

Self-diagnostic system sounds a series of short, rapid beeps and shows an "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—Shorted input pad/button.
   - F2—Oven cavity over temperature.
   - F3—Open circuit in oven temperature sensor circuit.
   - F4—Shorted circuit in oven temperature sensor circuit.
   - F5—Failed component in the ERC.
   - F9—Failure of door lock switch door jamb switch circuitry.
2. Disconnect electrical supply.
   - Pressing *CANCEL* pad or disconnecting electrical supply may eliminate "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 ERC3 differs from previously-used ERC units in operation, failure codes, sensor resistance and appearance. The ERC3 has a label identifying service part number, manufacturer's part number (i.e., 100-546-01 with the last two digits representing revision number), cooking temperature/clean temperature limits and manufacturer's date of manufacture.

The electronic range control is designed to monitor and control cooking/cleaning temperatures and functions of a range, utilizing input from a temperature sensor for operation. Circuitry is housed in a black plastic enclosure for protection, mounting and retention of actuator buttons. Refer to operation section for functional descriptions.

The remote relay circuit board consists of the convection element relay, convection fan relay, cooling fan relay, oven light relay, and optional double line brake relay.

The oven temperature sensor is mounted in oven cavity and connected to the J1 connector of the ERC. Sensor resistance increases proportionally with oven temperature. The ERC converts resistance to a corresponding temperature readout and control function to cycle bake/broil relays and maintain desired temperature setting.

The ERC is capable of sensing failure conditions in itself, temperature sensor, and self-clean latch switches. If a failure is detected by the ERC, power is removed from the bake/broil relays, an alarm sounds and a failure code is displayed. Each component of the ERC system is serviced as a separate part. However, each component and related wiring must be tested before replacing an individual component.

Testing Procedures

"Quick Test" Mode for Electronic Range Control

Follow procedure below to use 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** *STOP TIME* pad for 5 seconds within the first 5 minutes of power up. (This must be the first pad/button pressed).
2. Display will read the following upon entering test mode, "---" appears representing 60 Hz or "555" representing 50 Hz power source.
3. Pressing the following pad/button forces a response from the control. Releasing the pad/button ends the response from control.

Pad	Response
BAKE	Energizes bake element.
BROIL	Energizes broil element.
CONVECTION	Energizes convection element and convection fan.
OVEN LIGHT	Energizes oven light and cooling fan. Blue digits shows number of days controller has been in use and red digits shows last failure mode.
STOP TIME	Beeper on and micro ID number.
TIMER	No Amana production use (Engineering Calibration).
CLOCK	All display segments illuminated.
COOK TIME	Displays manufactures code and sensor readings
SLEW PADS	No action.
CANCEL	Exit quick test mode.
CLEAN	See following chart for clean pad/button.

Displayed Code	Lock Status	Door Position	Door jamb switch contacts NO (J1-7) to COM (J1-6)	Lock switch contacts NO (J1-4) to COM (J1-6)	Lock switch contacts NC (J1-5 to COM (J1-6)
0	Invalid	Not Applicable	Open	Open	Open
1	Invalid	Open, Locked	Open	Open	Closed
2	OK	Open, Unlocked	Open	Closed	Open
3	Invalid	Not Applicable	Open	Closed	Closed
4	Invalid	Not Applicable	Closed	Open	Open
5	OK	Closed, Locked	Closed	Open	Closed
6	OK	Closed, Unlocked	Closed	Closed	Open
7	Invalid	Not Applicable	Closed	Closed	Closed

4. Exiting the test mode can only be acommplished by pressing *CANCEL*.

Testing Procedures

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

ERC3 Warnings and Failure Codes

The Electronic Range Control is capable of detecting certain failures within the ERC.

The warnings and failure codes which may appear on the display:

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- A failed component in the ERC.
Check all components and wiring prior to replacing the ERC.

F9- Failure of door lock switch or door jamb switch circuitry.
Check latch switch, door motor, and wiring.

Special Mode Selection

Program a convection mode over 500°, then immediately press and hold the convection pad/button for 4 seconds.

There are 5 levels displayed in the temperature digits. Follow procedures below.

1. To toggal through the levels press the convection pad/button.
2. Each level except 0 may be toggled between two choices by pressing the slew pad/buttons. Choice selected becomes effective when the CANCEL pad/button is pressed.

NOTE: Only one entry can be changed at a time. If multiple changes are required, user must exit and reenter to make additional changes.

3. The 0 level is used to exit or escape without making any changes.

Level	Toggle Chocies		Comments
0	ESC		Escapes special mode with no changes.
1	F *	C	Selects between Fahrenheit and Centigrade for temperature display.
2	USE *	SALE	Allows sales person to select a sales demo with no relays being energized except for oven light and the display functions normally.
3	12 *	9999	Overrides 12 hour shutoff if 999 is chosen.
4	tOD *	OFF	Blanks clock display if OFF is chosen.

* — Factory programmed settings.

Adjusting Thermostat Temperature Calibration Function

Oven temperature has been factory calibrated and tested. In unlikely event that oven consistently overcooks or undercooks food, make following adjustment.

1. Push *BAKE* pad.
2. Push ▲ or ▼ until an oven temperature greater than 500°F displays.
3. Immediately push and hold *BAKE* pad until “00” displays, approximately 5 seconds.
4. To decrease oven temperature (for a cooler oven), Push ▲ or ▼ until negative numbers appear. Oven can be adjusted from -05° to -35° lower. To avoid over adjusting oven move temperature -5° each time.
5. To increase oven temperature (for a warmer oven), Push ▲ or ▼ until positive numbers appear. Oven can be adjusted from 5° to 35° higher. To avoid over adjusting oven move temperature 5° each time.
6. Push *OVEN CANCEL* button. Temperature adjustment will be retained even through a power failure.

If oven temperature testing indicates a temperature offset in excess of plus or minus 35 degrees, oven temperature sensor, sensor wire harness, and wire harness/sensor connections must be checked before replacing the ERC. A resistive connection in the sensor harness will affect oven temperature calibration.

Temperature Sensor

Sensor resistance may be checked by removing the sensor interconnect plug from the ERC J1 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 1100 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.

Temperature	Approximate Sensor Resistance
75 degrees F	1100 ohms
350 degrees F	1650 ohms
550 degrees F	2050 ohms
880 degrees F	2700 ohms

Replace sensor if it does not meet these specifications.

Testing Procedures

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

Function Switch Connection Check Procedure

The Quick-Test mode can be used to verify relay operation on the transformer/relay board. If the relay engages (clicks) during Quick-Test it is generally operative.

Relay Module

The relays for oven light, convection element, convection fan, cooling fan, and double line break are controlled by approximately 24 VDC signal from the ERC.

Testing of the relays is with voltage applied to oven **after** attaching voltmeter leads to appropriate terminals.

NOTE: If convection element does not work the first test would be the relay for double line break.

Double Line Break - K5

1. Turn off power to oven.
2. Attach voltmeter lead to J2-5 connector on relay board.
3. Attach voltmeter lead to E3 connector on relay module.
4. Turn on power and touch bake, broil, or convection.
5. If 240 VAC is indicated the double line break relay is closing. Otherwise, replace the transformer/relay board.

Convection Element Relay - K4

Double line break relay okay.

1. Turn off power to oven.
2. Attach voltmeter lead to E3 connector on relay board.
3. Attach voltmeter lead to E5 connector on relay module.
4. Turn on power and touch convection pad.
5. If 240 VAC is indicated convection element relay is operating.

Convection Fan Relay - K2

1. Turn off power to oven.
2. Attach volt meter lead to E1 (neutral) connector on relay module.
3. Attach volt meter lead to J2-6 connector on relay module.
4. Turn on power and touch convection pad.
5. If 120VAC is indicated convection fan relay is operating.

Cooking Fan Relay - K1

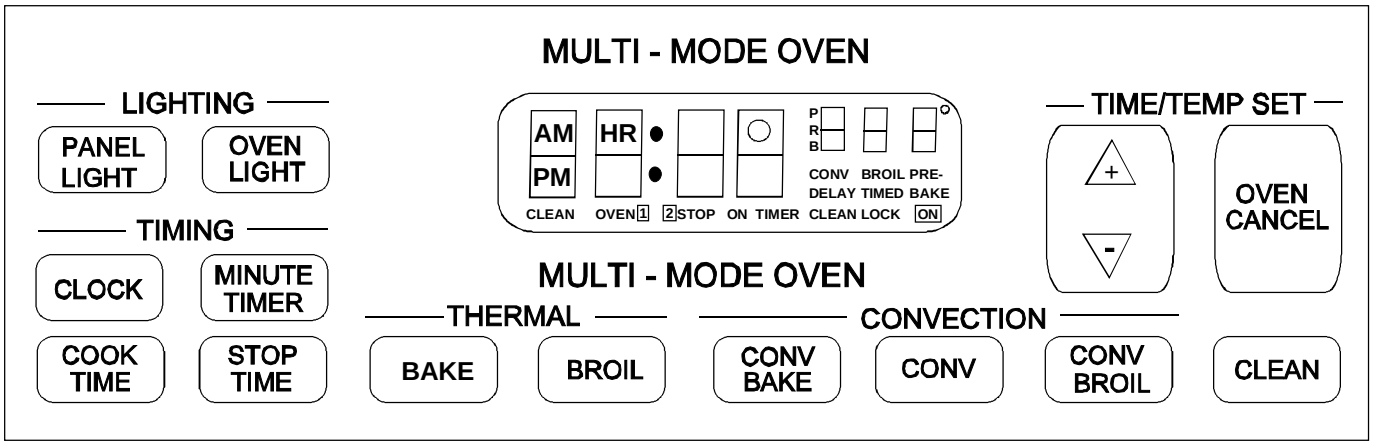
Double line break relay okay.

1. Turn off power to oven.
2. Attach voltmeter lead to E1 (neutral) connector on relay board.
3. Attach voltmeter lead to J2-2 connector on relay module.
4. Turn on power and touch the bake pad.
5. If 120 VAC is indicated cooking fan relay is operating.

Oven Light Relay - K10

1. Turn off power to oven.
2. Attach voltmeter lead to E1 (neutral) connector on relay module.
3. Attach voltmeter lead to J2-1 connector on relay module.
4. Turn on power and touch oven light pad.
5. If 120 VAC is indicated oven light relay is operating.

Glass Touch System ERC4800—316739



Electronic Oven Control Options

PANEL LIGHT

- Used to turn on light in range control panel.

OVEN LIGHT

- Used to turn on light inside oven.

CLOCK

- Used to set time of day or change display to Time of Day

MINUTE TIMER

- Used to time any kitchen function or cancel timer.

COOK TIME

- Used to set timed bake or view remaining cooking time.

STOP TIME

- Used to set delay bake and self clean.

BAKE

- Used to select bake.

BROIL

- Used to select broil.

CONV BAKE

- Used to select convection bake.

CONV

- Used to select convection.

CONV BROIL

- Used to select convection broil.

CLEAN — Use to select self-clean cycle.

SLEW ⊿ or ▽

- Used to set temperature or time.

OVEN CANCEL

- Cancels any cooking or cleaning function.

Special Oven Control Functions

Timer Signal

Preheat Signal

After setting the oven to bake and selecting a temperature, the oven will preheat. When the oven reaches the set temperature, a 1 second signal will sound.

End of Cycle Signal

When a timed cooking cycle is completed, three long signals will sound. The end of cycle signal will continue to sound until ***Oven Cancel*** is touched.

Child Lockout

This is a safety feature that can be used to prevent children from accidently programming the oven. It disables the electronic oven control. Touch and hold ***Bake*** and ***Cook Time*** for 10 seconds. **"OFF"** will display where the temperature normally appears.

To reactivate the control, touch and hold ***Bake*** and ***Cook Time*** for 10 seconds. Child lockout features must be reset after a power failure.

12 Hour Automatic Cancel

This is a safety feature that prevents the 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 the oven control being touched this feature turns the oven off. Any time an option is touched, the 12 hour automatic cancel is reset.

Increasing Slew 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 question, see detailed sections of this manual.

Setting the Clock

1. Touch *CLOCK pad.*
2. Touch appropriate *SLEW* pad ▲+ or ▽- until the correct time of day AM or PM appears in the display.

Setting the Minute Timer

1. Touch *MINUTE TIMER pad.*
2. Touch appropriate *SLEW* pad ▲+ or ▽- until the desired amount of time appears in display. The timer can be set from 1 second to 11 hours and 50 minutes.

Canceling the Minute Timer

Touch *MINUTE TIMER* pad for 5 seconds.

NOTE: When canceling the minute timer do not touch *OVEN CANCEL pad*. Touching *OVEN CANCEL* pad will cancel the cooking function.

Bake, Convection Bake, Convection, Broil or Convection Broil

1. Touch the desired function pad. (ex. BAKE)
2. Touch appropriate *SLEW* pad ▲+ or ▽- until the desired temperature is displayed or HI for broil and convection broil.
3. The oven will begin heating within 5 seconds.

Canceling Bake, Convection Bake, Convection, Broil or Convection Broil

Touch *OVEN CANCEL* pad.

Self-Cleaning

1. Remove oven racks and all utensils from oven.
2. Touch *CLEAN* pad.
3. Touch appropriate *SLEW* pad ▲+ or ▽- until the desired cleaning time is displayed. Clean can be set from 2 to 4 hours.
4. The oven door will automatically lock and cleaning cycle will begin within 5 seconds.

Canceling Self-Cleaning Cycle

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

Bake and Convection Bake

1. Touch *BAKE* or *CONV BAKE* pad, 350° will appear in display.
2. Touch appropriate *SLEW* pad ▲+ or ▽- until desired temperature appears in display. Temperature can be set from 170° to 550°F.

Oven will begin heating in approximately 5 seconds. "PRE-BAKE" or "CONV PRE-BAKE" will light on display. Preheat 10 minutes or until preheat signal is heard and "PRE" disappears from the display before placing food inside. Temperature display will increase in 5° increments starting at 170°F until reaching set temperature.

3. When finished touch *OVEN CANCEL* pad.

Timed Bake

1. Touch *COOK TIME* pad.
2. Touch appropriate *SLEW* pad ▲+ or ▽- until the desired cooking time appears in display.
3. Touch *BAKE* or *CONV BAKE* pad, 350° will appear in display.
4. Touch appropriate *SLEW* pad ▲+ or ▽- until desired temperature appears in display. Temperature can be set from 170° to 550°F.

Oven will begin heating in approximately 5 seconds. "PRE-BAKE" or "CONV PRE-BAKE" will light on display. Preheat 10 minutes or until preheat signal is heard and "PRE" disappears from the display before placing food inside. Temperature display will increase in 5° increments starting at 170°F until reaching set temperature.

"TIMED BAKE" or "CONV TIMED BAKE" will light in display. Oven will begin to Bake/Conv Bake at present time and "ON" will light in display. When cooking time has elapsed, and end of cycle signal will sound 3 times and oven will automatically turn off. End of cycle signal will continue to sound every 7 seconds until *OVEN CANCEL* pad is touched.

5. When finished touch *OVEN CANCEL* pad.
   - To cancel remaining cooking time touch *OVEN CANCEL* pad.

Programming Instructions

Automatic Bake or Convection Bake

Oven can be used for automatic bake/convection bake depending on cook time and stop time chosen.

1. Place food in oven.

⚠ CAUTION

Reduce risk of food poisoning due to bacterial growth and production of toxins, never hold meat, milk, fish or eggs for more than 2 hours before cooking.

2. Touch *COOK TIME* pad.
3. Touch appropriate *SLEW* pad ▲ or ▽ until the desired cooking time appears in display. Time can be set up to 11 hours and 50 minutes.
4. Touch *STOP TIME* pad.
5. Touch appropriate *SLEW* pad ▲ or ▽ until desired stop time appears in display.
   - Electronic oven control will calculate start time.
6. Touch *BAKE* or *CONV BAKE* pad, 350° will appear in display.
7. Touch appropriate *SLEW* pad ▲ or ▽ until desired temperature appears in display. Temperature can be set from 170° to 550°F.

DELAY, TIMED, BAKE or *CONV BAKE* will light in display. When start time is reached “DELAY” no longer displays and "ON" will light in Display. When cooking time has elapsed, an end of cycle signal will sound 3 times and oven will automatically turn off. End of cycle signal will continue to sound every 7 seconds until *OVEN CANCEL* pad is touched.

- Food should be removed from oven when cooking time has elapsed. Food left in oven may over cook.

8. When finished touch *OVEN CANCEL* pad.
   - To cancel remaining cooking time touch *OVEN CANCEL* pad.

Convection

1. Touch *CONV*. pad, 350° will appear in display.
2. Touch appropriate *SLEW* pad ▲ or ▽ until desired temperature appears in display. Temperature can be set from 170° to 550°F.
3. Preheat approximately 10 minutes or until preheat signal is heard before placing food inside.
   - Temperature display will increase in 5° increments starting at 170°F until reaching set temperature. Some minor smoking is normal when using oven for first time.
4. When finished touch *OVEN CANCEL* pad.

Delayed Convection

1. Place food in oven.

⚠ CAUTION

Reduce risk of food poisoning due to bacterial growth and production of toxins, never hold meat, milk, fish or eggs for more than 2 hours before cooking.

2. Touch *COOK TIME* pad.
3. Touch appropriate *SLEW* pad ▲ or ▽ until desired cooking time appears in display.
   - Time can be set up to 11 hours and 50 minutes.
4. Touch appropriate *SLEW* pad ▲ or ▽ until desired stop time appears on display.
5. Touch *CONV* pad, 350° will appear in display.
6. Touch appropriate *SLEW* pad ▲ or ▽ until desired temperature appears in display. Temperature can be set 170° to 550°F.
   - *CONV, DELAY*, and *TIMED* will light in display. When start time is reached “DELAY” no longer displays and "ON" will light in display. When cooking time has elapsed, an end of cycle signal will sound 3 times and oven will automatically turn off. End of cycle signal will continue to sound every 7 seconds until *OVEN CANCEL* pad is touched.
7. When finished touch *OVEN CANCEL*.
   - To cancel remaining cooking time touch *OVEN CANCEL.*
   - Food should be removed from oven when cooking time has elapsed. Food left in oven may overcook.

Programming Instructions

Broil and Convection 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 burner causing a fire.

Never leave oven unattended while broiling. Overcooking may result in a fire.

- 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 will stick.
- Fish should be broiled with skin side down. When using *BROIL*, all food except fish should be turned at least one time. If is not necessary to turn food when using *CONV BROIL*.
- Season the meat after it has browned.
- Broiling does not require preheating.
- Begin cooking using suggested rack levels on broiling chart (see page 22) to test broiler results. If food is not browned enough, cook on a higher position. If food is too browned, cook on a lower position.

1. Center food on broiling grid and pan. Place food in oven.
   - When using convection broil, place food on convection broil rack.
2. Oven door can be closed or open to the first stop position.
3. Touch *BROIL* or *CONV BROIL* pad, "HI" will appear in display.
4. Touch appropriate *SLEW* pad + or - until desired setting is displayed. Broil can be set from 170°F to HI.
   - Oven will begin to broil in approximately 5 seconds. "ON", "BROIL" or "CONV BROIL" and selected setting will be displayed.
5. When finished touch *OVEN CANCEL* pad.

Convection Dehydration

Convection dehydration is an excellent way to preserve fresh food. Best way to become familiar with dehydration is using fruits, vegetables, herbs and spices.

- Always start with fresh fruit.
- Cut fruit in equal pieces approximately 1/8” thick. Thinner pieces will dry quicker.
- Fruits need to be dipped in an antioxidant, a color keeping preservative, or two parts water and one part lemon juice.
- Treating fruit with an antioxidant will help it retain vitamins, color and flavor.
- Most vegetables require blanching to inactivate enzymes.
- Herbs and spices dry quickly.
- Check every 30 minutes to avoid over-drying.
- When drying herbs, leaf cluster should be separated from stems.

Dehydration

1. Place food on dehydration rack or cookie sheet in middle of oven.
2. Open door to first stop position.
3. Touch *CONV*. pad.
4. Touch appropriate *SLEW* pad + or - until 170°F appears in display.
   - Oven is equipped with a 12 hour automatic cancel feature. If dehydration time is longer than 12 hours control will need to be reset.
5. When finished touch *OVEN CANCEL* pad.

Programming Instructions

Self-Clean

⚠ 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 too much food residue has been left in oven or a faulty gasket.
- 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.
- Oven light will not work during clean cycle.

1. Remove oven racks and all cooking utensils from oven. Clean excess spills from oven interior. Items should not be stored on rangetop or backguard. These areas can become hot during self cleaning cycle.

⚠ WARNING

To avoid the risk of fire, clean excess spills from oven interior.

2. Touch *CLEAN* pad.
3. Touch appropriate *SLEW* pad ▲ or ▽ until desired cleaning time is displayed. Clean can be set from 2 to 4 hours.

- Oven will begin to clean in approximately 1 minute. "CLEAN", "LOCK", and "ON" will light in display. As oven door locks and unlocks "LOCK" will flash in display. When door is locked, "LOCK" will remain in display. When cleaning cycle has elapsed, oven will automatically turn off. An end of cycle signal will not sound.
- When oven has cooled to a safe temperature, "LOCK" will disappear from display and door can be opened. To avoid risk of damage to automatic locking system, do not try to force oven door open when "LOCK" is flashing in display.
- To interrupt self-clean cycle touch *OVEN CANCEL* pad. When oven has cooled to a safe temperature, "LOCK" will disappear from display and door can be opened.

Delayed Self-Clean

⚠ 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. Remove oven racks and all cooking utensils from oven. Clean excess spills from oven interior. Items should not be stored on rangetop or backguard. These areas can become hot during self-cleaning cycle.

⚠ WARNING

To avoid the risk of fire, clean excess spills from oven interior.

2. Touch *CLEAN* pad.
3. Touch appropriate *SLEW* pad ▲ or ▽ until desired cleaning time is displayed.
4. Touch *STOP TIME* pad.
5. Touch appropriate *SLEW* pad ▲ or ▽ until desired stopping time is displayed. A starting time will automatically be calculated based on amount of cleaning time and stop time.

- "DELAY", "CLEAN", and "LOCK" will light in display. When start time is reached “DELAY” no longer displays and "ON" will light in display. As oven door locks and unlocks "LOCK" will flash in display.
- Oven will begin to clean at preset time and on will light in display. When cycle is complete oven will automatically turn off.
- When oven has cooled to a safe temperature, "LOCK" will disappear from display and oven door can be opened.
- To cancel self-clean cycle touch *OVEN CANCEL* pad. When oven has cooled to a safe temperature, "LOCK" will disappear from display and door can be opened.
- Avoid risk of damage to automatic locking system, do not try to force oven door open when "LOCK" is flashing in display.

Programming Instructions

Adjusting Oven Thermostat Temperature

Oven temperature has been factory calibrated and tested. In unlikely event that oven consistently overcooks or undercooks food, make following adjustment:

1. Touch BAKE
2. Touch ⨁ until an oven temperature greater than 500° shows on display.
3. Immediately touch and hold BAKE until “00” appears in display, approximately 5 seconds.
4. To decrease oven temperature (for a cooler oven), ▽ until negative numbers appear.
   - Oven can be adjusted from -5 to -35 degrees lower. To avoid overadjusting oven move temperature -5 degrees each time.
5. To increase oven temperature (for warmer oven), touch ⨁ until positive numbers appear. Oven can be adjusted 5 to 35 degrees higher. To avoid overadjusting oven move temperature 5 degrees each time.
6. Touch OVEN CANCEL. Temperature adjustment will be retained even though power failure.

Service Tones

Electronic range control has a self-diagnostic system.

Self-diagnostic system sounds a series of short, rapid beeps and shows an “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.
   - F0—Loss of safety signal.
   - F1—Whatchdog circuit problem.
   - F2—Oven cavity over temeprature.
   - F3—Open sensor or sensor circuit.
   - F4—Shorted sensor or sensor circuit.
   - F7—Shorted key.
   - F9—Motorized door lock error.
   - F0—Door motor supervision problem.
2. Disconnect electrical supply.
   - Pressing *OVEN CANCEL* pad or disconnecting electrical supply may eliminate “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 operates in conjunction with a separate relay/ power supply circuit board, adaptor board and oven temperature sensor(s) to control all bake, broil, convection, and self clean functions.

The ERC is connected through an adaptor board to a glass touch function panel to control minute timer, clock, stop time, oven light, panel light, cancel, bake, cook time, broil, convection bake, convection, convection broil, and clean. Slew pads are used to set times and temperatures.

The adaptor board serves as an interface between the ERC and the glass control panel. A strobe pulse is sent to the adaptor board where it activates an interrupt routine in the adaptor board micro. The interrupt causes the micro to look for a "touch" on the glass. If there is a touch, the strobe pulse is duplicated and sent out on a sense line to the ERC. A touch is determined by a change of voltage at the pads on the glass created by the body impedance bleeding off some of the charge on the pad.

The ERC display consists of two digital readouts which displays all timing functions, and all temperature functions.

The separate relay/power supply circuit board consists of eight relays for convection fan, oven light, panel light, convection element, bake, broil, door lock, and double line break operations controlled by the ERC, and a step down transformer with two secondary windings which convert 120 VAC input to filament voltage to power the ERC display.

The oven temperature sensor is mounted in the oven cavity and connected to the J4 connector 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 relay(s) to maintain the desired temperature setting.

The ERC is also capable of sensing certain failure conditions which can occur in the oven temperature sensor(s), the self clean latch switch(es) the adaptor board or the ERC itself. If the ERC senses a failure, power will be removed from the relays, an alarm will sound and a failure code will be displayed.

Each major component of the Electronic Range Control system is serviced as a separate part. However, each component and related wire harness must be tested prior to replacing an individual component.

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 oven, and must be accessed within 5 minutes of powering up.

1. Apply power to oven **press and hold** *COOK TIME* pad for 5 seconds.
2. Display will read the following:

Pad	Response
CLEAN	Double Line Break (DLB) on and door lock status code displayed
BAKE	DLB and Bake on
CONV. BAKE	DLB, Bake and Conv Fan on
CONVECTION	DLB, Conv. Element and Fan on
BROIL	DLB and Broil on
CONV. BROIL	DLB, Broil and Conv. Fan on
STOP TIME	Panel light and beeper on; sensor temperature displayed
COOK TIME	Displays manufactures code and sensor readings
TIMER	Displays dashes
CLOCK	All display segments illuminated
OVEN LIGHT	Oven light on
PANEL LIGHT	Panel light and beeper on; sensor temperature display
CANCEL	Exit Quicktest
SLEW	Sequences through display segments with sensor temperature displayed

Testing Procedures

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

ERC Warnings and Failure Codes

The Electronic Range Control is capable of detecting certain failures within the ERC, along with oven temperature sensor and self clean door latch switch.

The warnings and failure codes which may appear on the display:

If **"d o o r"** flashes in display, switch positions can only be displayed in Quicktest mode by touching clean pad, as shown below:

0	both switches are open
1	unlock switch closed, lock switch open
2	lock switch closed, unlock switch open
3	both switches are closed

DIGIT	FAILURE DISPLAY
F0	loss of safety signal - **Verify glass to adaptor board connections, Replace Adaptor Board**
F1	watchdog circuit problem - **Replace ERC**
F2	oven cavity over temperature - **Ckeck Sensor Wiring, Sensor, and Temperature Limiter**
F3	open sensor or sensor circuit (>3000) - **Check Sensor Resistance and Wiring**
F4	shorted sensor or sensor circuit (<500) - **Check Sensor Resistance and Wiring**
F7	shorted key - **Verify glass to adaptor board connection, Replace Glass Panel**
F9	motorized door lock error - **Check Latch Switch**
FF	door motor supervision problem - **Check Latch Switch and Door Motor**

Temperature Calibration Offset

The ERC incorporates ± 35°F. calibration offset capabilities for the oven. This adjustment will not effect the cleaning cycle temperature and will remain in memory if power is interrupted. Follow the procedures as listed to calibrate oven.

1. Press the *BAKE* push pad.
2. Press apropriate *SLEW* pad until a temperature between 500° - 550° is displayed. Quickly, before the ERC initiates the bake function, press and hold the *BAKE* push pad. After approximately four seconds the display will show "00" or the offset temperature that was previously programmed into the ERC.
3. Press apropriate *SLEW* pad to show the desired offset temperature in the display up to ± 35°F. in 5° increments.
4. Press the *CANCEL* pad to enter desired offset temperature.

Function Switch Connection Check Procedure

The Quick-Test mode can be used to verify relay operation on the transformer/relay board. If the relay engages (clicks) during Quick-Test it is generally operative.

Transformer/Relay Module

The relays for oven light, bake, broil, convection element, convection fan and double line break are controlled by approximately 24 VDC signal from the ERC.

Testing of the relays is with voltage applied to oven **after** attaching voltmeter leads to appropriate terminals.

NOTE: If bake, broil, or convection do not work the first test would be the relay for double line break.

Double Line Break - K6

Drive voltage indicated at J1 connector Pins 1 - 3.

1. Turn off power to oven.
2. Attach voltmeter lead to E5 connector on relay board.
3. Attach voltmeter lead to E18 connector on relay module.
4. Turn on power and touch bake, broil, or convection.
5. If 240 VAC is indicated the double line break relay is closing. Otherwise, replace the transformer/relay board.

Bake Relay - K4

Double line break relay okay. Drive voltage at J1 connector Pins 3 - 5.

1. Turn off power to oven.
2. Attach voltmeter lead to E18 connector on relay board.
3. Attach voltmeter lead to E11 (BK) connector on relay module.
4. Turn on power and touch the bake pad.
5. If 240 VAC is indicated bake relay is operating.

Testing Procedures

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

Broil Relay - K5

Double line break relay okay. Drive voltage at J1 connector Pins 3 - 6.

1. Turn off power to oven.
2. Attach voltmeter lead to E18 connector on relay board.
3. Attach voltmeter lead to E12 (BR) connector on relay module.
4. Turn on power and touch broil pad.
5. If 240 VAC is indicated broil relay is operating.

Convection Element Relay - K2

Double line break relay okay. Drive voltage at J1 connector Pins 3 - 11.

1. Turn off power to oven.
2. Attach voltmeter lead to E18 connector on relay board.
3. Attach voltmeter lead to E6 (CV EL) connector on relay module.
4. Turn on power and touch convection pad.
5. If 240 VAC is indicated convection element relay is operating.

Convection Fan Relay - K1

Drive voltage at J1 connector Pins 1 - 7.

1. Turn off power to oven.
2. Attach volt meter lead to E3 (neutral) connector on relay module.
3. Attach volt meter lead to E4 (CVF) connector on relay module.
4. Turn on power and touch convection pad.
5. If 120VAC is indicated convection fan relay is operating.

Oven Light Relay - K10

Drive voltage at J1 connector Pins 1 - 4.

1. Turn off power to oven.
2. Attach voltmeter lead to E3 (neutral) connector on relay module.
3. Attach voltmeter lead to E17 connector on relay module.
4. Turn on power and touch oven light pad.
5. If 120 VAC is indicated oven light relay is operating.

Panel Light Relay - K11

Drive voltage indicated at J1 connector pins 1 - 8.

1. Turn off power to oven.
2. Attach voltmeter lead to E3 (neutral) connector on relay module.
3. Attach voltmeter lead to E14 (Panel LT) connector on relay module.
4. Turn on power and touch panel light pad.
5. If 120 VAC is indicated the panel light relay is operating.

Door Lock Relay - K3

Double line break relay okay. Drive voltage at J1 connector Pins 5 - 4.

1. Turn off power to oven.
2. Attach voltmeter lead to E3 (neutral) connector on relay module.
3. Attach voltmeter lead to E8 connector on relay module.
4. Turn on power and program cleaning cycle operation.
5. Two indications will be present during this test.
   a. 120 VAC will be present when the lock assembly is being engaged.
   b. 0 VAC is indicated when the door is locked and cleaning cycle is operational.

Testing Procedures

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

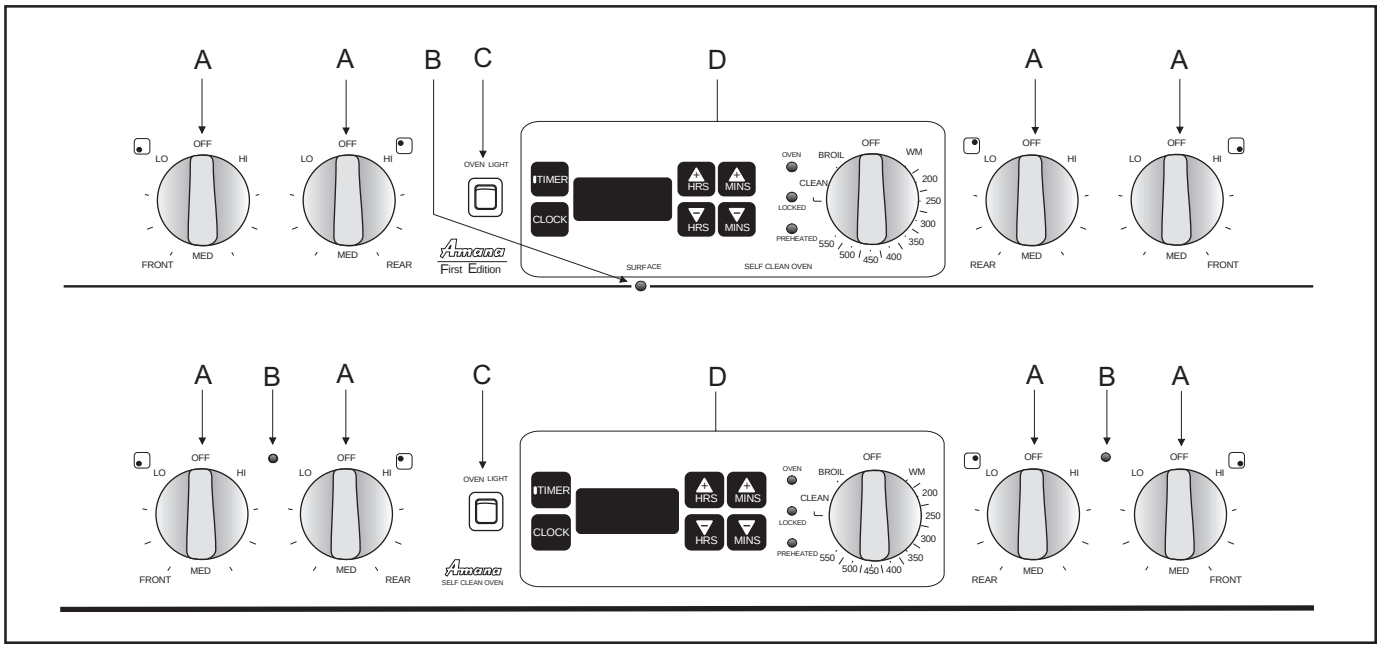
PROBLEMS	POSSIBLE CAUSE	CORRECTION
No Display	Power failure.	Restore power to unit.
	Failed component in power supply (circuit panel).	Replace failed fuse or restore the tripped circuit breaker.
	Improper wire connection to power supply.	Verify proper wire connection.
	Intermittant connection between ERC and transformer/relay board.	Clean and tighten loose connections or repair/replace failed wiring.
	Failed fuse in fuse box assembly. (Canadian models only).	Replace failed fuse in fuse box assembly.
Display flashes time-of-day.	Power failure or interruption.	This is a normal condition when power is interrupted. Press the clock pad and set time of day.
	Intermittant connection between ERC and relay/power supply module.	Clean and tighten loose connections or repair/replace defective wiring.
No Bake, Broil, or Convection element operation.	Double line break not being supplied with voltage from L1 side of line.	Refer to wiring diagram and repair L1 input to DLB relay.
	Double line break relay not being energized with drive voltage.	Check drive voltage from ERC. Replace ERC.
	Relay drive voltage present, but relay not closing.	Replace transformer/relay board.
No Bake operation NOTE: Check double line break operation before proceeding. Use "Quick Test" method.	Open bake element.	Check element for continuity. Replace if defective.
	Loose connection or broken wiring.	Make sure all connections are clean and tight.
	Failed component in ERC.	Check relay drive. Replace ERC.
	Relay not closing.	Check relay. Replace transformer/relay module.
	Failed touch control glass.	Replace if necessary.
No Broil operation NOTE: Check double line break operation before proceeding. Use "Quick Test" method.	Open broil element.	Check broil element for continuity. Replace as required.
	Loose connection or open wiring.	Make sure all connections are clean and tight.
	Failed component in ERC.	Check relay drive output. Replace ERC.
	Relay not closing.	Check relay. Replace transformer/relay module.
	Failed touch control glass.	Replace if necessary.

Testing Procedures

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

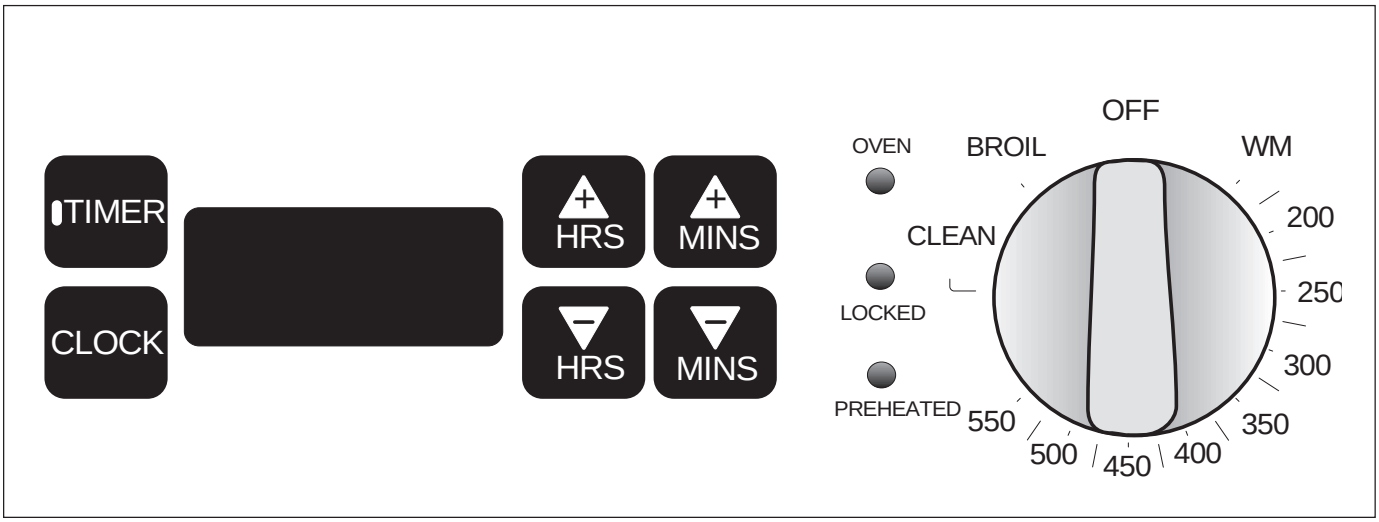
PROBLEMS	POSSIBLE CAUSE	CORRECTION
No heat when convection cook is programmed. NOTE: Check double line break operation before proceeding. Use "Quick Test" method.	Open convection element. Loose connections/broken wiring or miswire. Failed component in ERC. Relay not closing. Failed touch control glass.	Check convection element for continuity. Replace if defective. Refer to wiring diagram for correct wiring. Make sure all connections are clean and tight. Check relay drive output. Replace ERC. Check relay. Replace transformer/relay module. Replace if necessary.
No Display - ERC inoperative.	No power to oven.	Check house fuse or circuit breaker. Check for 120 VAC at transformer/relay module terminals (neutral) and (L1). If voltage is present check for filament voltage at ERC, then replace ERC.
Touch pad inoperative	Loose or broken wire connection.	Verify connection of glass panel to adaptor board. Verify connection of adaptor board to display control board (ribbon cable) and integrity of ribbon connector (continuity test of ribbon cable).
Display flashes F0, F1, F2, F3, F4, F5, F7, F9, and FF	Failed/shorted component in electrical circuit.	Refer to Technical Sheet for failure code description, then service and repair/replace component involved.
"d o o r" flashes in display when clean is programmed.	Door not fully closed. Failed door plunger switch. Lock/unlock switch failed. Door latch sensing switch stuck open/switch lever not being depressed by latch mechanism.	Verify door closes plunger switch. Check operation of plunger switch. Replace switch. Replace autolatch assembly, if motor does not run.
Oven does not heat or display any indications.	Failed fuse in fuse box or tripped circuit breaker.	Replace blown fuse or reset tripped circuit breaker in electrical box.

Eaton KRC with Mylar Overlay



A	Surface element control knob	Use to turn surface elements on and off. Settings: LO—Use to prepare food at less than boiling temperatures or to simmer. MED—Use to maintain boiling of larger amounts of food, low temperature frying and to maintain correct pressure in a pressure cooker. HI—Use to bring food to boiling temperatures. When food is boiling temperature setting should be reduced to MED through HI.
B	Surface element indicator light	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. Some ranges have one indicator under clock. When any element is on, indicator light glows. 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.
C	Oven light switch	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.
D	Range control	Used to control oven functions like baking, broiling, and self-clean. Also controls clock and minute timer.

Programming Instructions



Electronic Oven Control Pads and Lights

TIMER pad selects timer feature. Timer can be set up to 11 hour 59 minutes. 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 accidently 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.

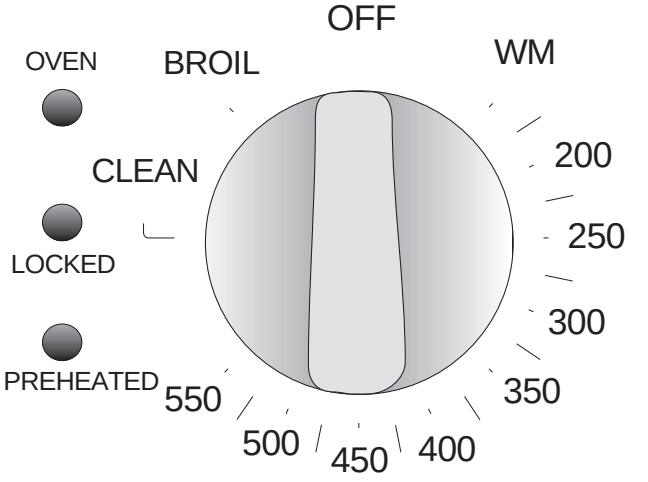
After Self-cleaning Cycle

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*.



Temperature Knob

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.

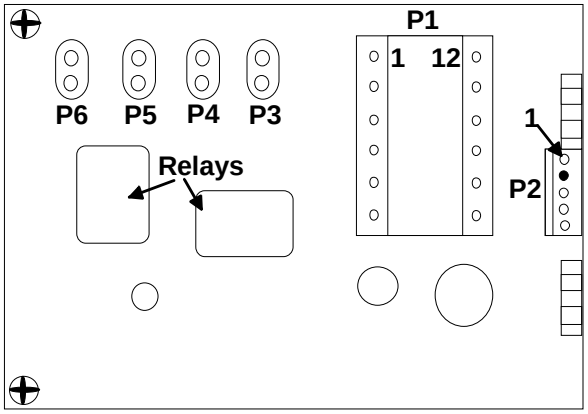
Service Information

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

70 seconds	bake element on
1 second	transition period
19 seconds	broil element on
1 second	transition period

Broil

100% broil element

Clean

Stage 1	Time controlled 15 minutes, 100% broil
Stage2	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.

Temperature	Approximate Sensor Resistance
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.