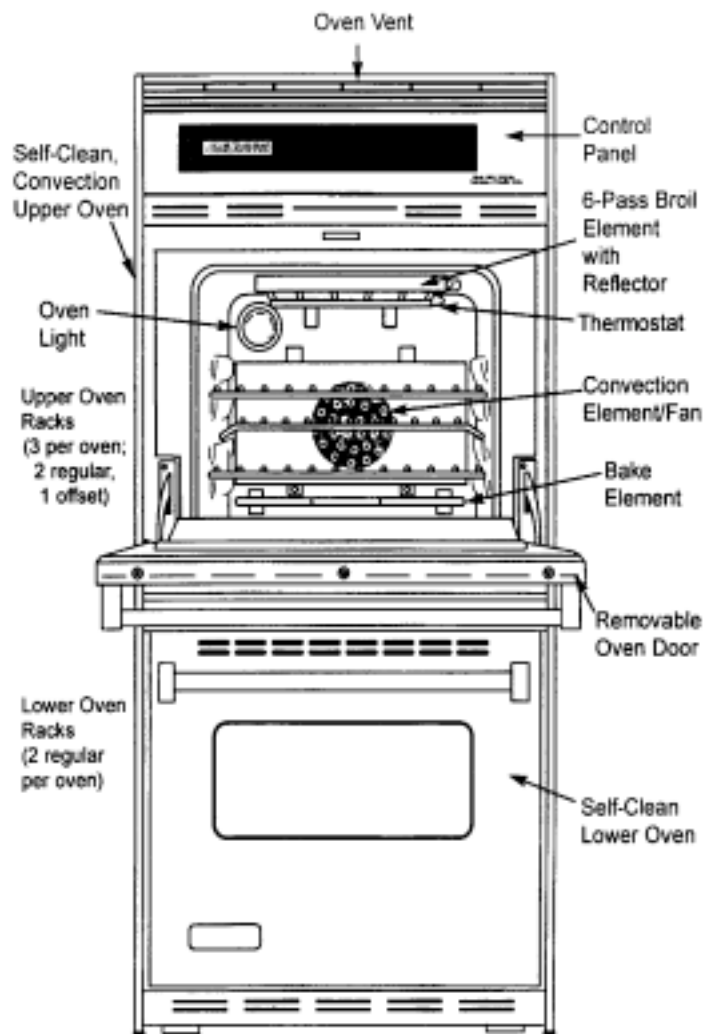


**SERVICE NOTEBOOK**  
ELECTRIC WALL OVEN  
VEDO 273



**VIKING RANGE CORPORATION** <sup>®</sup>



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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 and TECHNICAL SHEETS BEFORE BEGINNING REPAIRS.**

### Important Notice for Consumers and Services

## WARNING



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

## CAUTION



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

To locate an authorized servicer, consult the dealer from whom you purchased this product. For further assistance, call:

Viking Preferred Service  
Phone # 601-451-4133

**Address your written correspondence to:** Viking Preferred Service  
111 Front Street  
P. O. Drawer 956  
Greenwood, MS. 38935-0956

### 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.

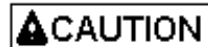
## Important Safety Information



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



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



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.

### ALL APPLIANCES

1. Proper installation - Be sure your appliance is properly installed and grounded by a qualified technician.
2. Never use 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 proper 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 oven.
7. Do not use water on grease fires - smother fires 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 potholders touch burners. Do not use a towel or other bulky cloth.

### SELF - CLEANING OVEN

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. See CLEANING section.
4. Before self-cleaning the oven, remove broiler pan, oven racks, and other utensils.

### Oven

1. Use care when opening door, let hot air or steam escape before removing or replacing food.
2. Do not heat unopened food containers, build-up of pressure may cause container to burst and result in injury.
3. Keep oven vent ducts unobstructed.
4. Placement of oven racks. Always place racks in desired location while oven is cool. If rack is removed while oven is hot, do not let potholder contact hot oven.

### 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:

### Oven Fires

1. If you see smoke from 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.
6. If smoke and fire persist, call fire department.
7. If there is any damage to components, call repair service before using oven.

### Precautions

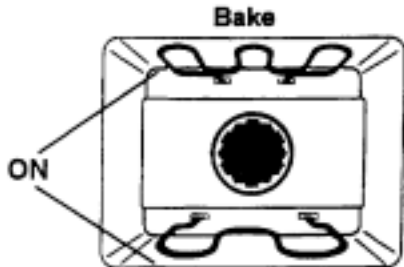
- Do not mix household cleaning products. Chemical mixtures may interact with objectionable or even hazardous results.
- Do not put plastic items on warm cooking areas. They may stick and melt.
- Do not use damp sponge or dishcloth to clean oven when oven is hot. Steam from sponge or dishcloth can burn.
- Do not leave fat heating unless you remain nearby. Fat can ignite if overheated by spilling onto hot surfaces.

## GENERAL INFORMATION

**Oven Operation** - (not all models are convection equipped)

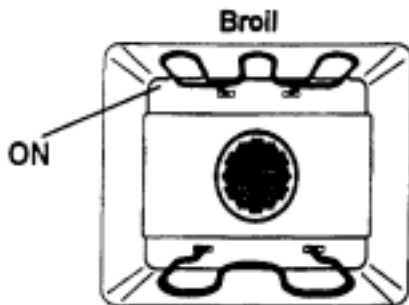
### Bake

Top and bottom elements operate during bake. Bake can be used to cook foods which are normally baked. Oven must be preheated.



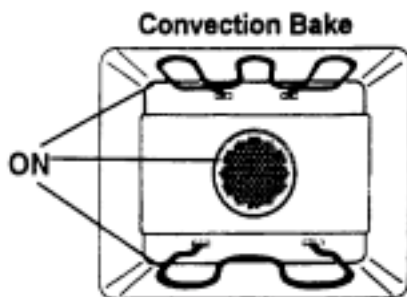
### Broil

Top element operates during broil. Broil can be used to cook foods which are normally broiled. Preheating is not required when using broil. All foods should be turned at least once except fish, which does not need to be turned.



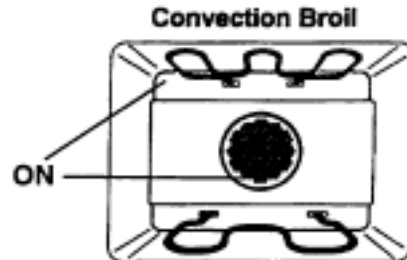
### Convection Bake

Upper element, lower element, and fan operate during convection bake. Convection bake should be used for cooking casseroles and roasting meats. Oven should be preheated for best results when using convection bake. Pans do not need to be staggered. Cooks approximately 25% quicker than bake.



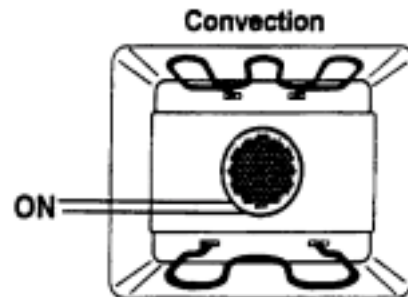
### Convection Broil

Top elements and fan operate when using convection broil. Convection broil can be used to cook foods that are normally broiled. Oven does not require preheating when using convection broil. Food does not need to be turned during broiling. Cooks approximately 25% quicker than broil.



### Convection

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



### Baking Guide

Refer to owners manual, for following 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.

### Prepare to Bake

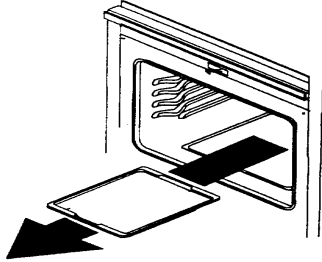


To reduce risk of food poisoning due to bacterial growth and production of toxins, never hold meat, milk, fish or eggs for more than 2 hours before baking.

## GENERAL INFORMATION

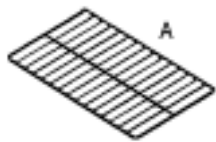
### Remove Items Stored in Oven

Remove any pans and other cooking utensils stored in oven.

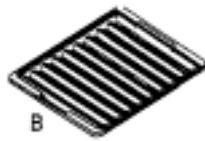


### Oven Racks

Use Standard rack for normal baking and broiling.



A—Standard Rack



B—Amilino Pan and Grid

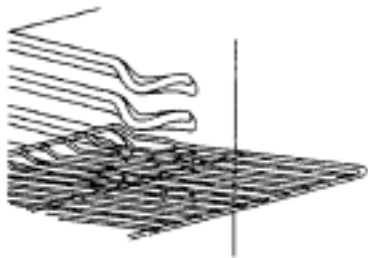
### Oven Rack Placement

Position oven rack before turning oven on.

#### **⚠ WARNING**

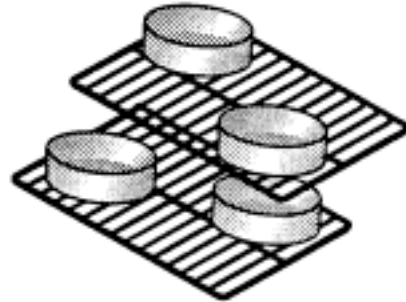
To avoid damaging oven liner or creating fire, do not line oven bottom or racks with foil.

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.



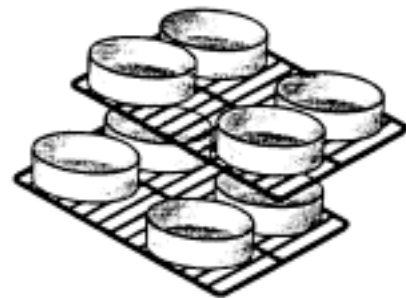
### Bake Pan Placement

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



### Convection Pan Placement

Baking pans and cookie sheets should not touch side or rear walls of oven. If pans are placed on different racks, they can be placed directly over each other. Convection baking circulates air around oven providing even browning on all rack positions. When using convection, oven can be loaded on all racks with excellent baking results.



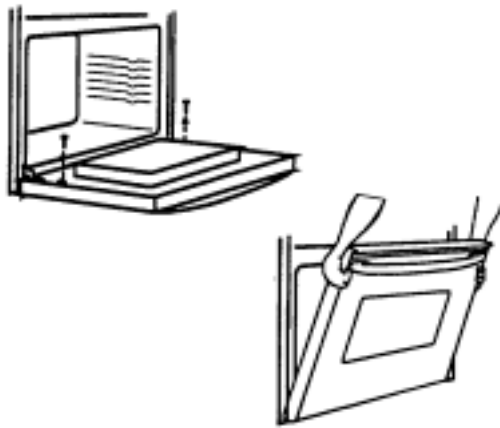
## GENERAL INFORMATION

### 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.
- Do not lift door by handle.

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



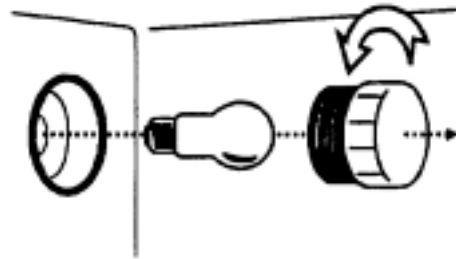
### Replacing Oven light

**WARNING**

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

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

1. Disconnect electrical supply.
2. Remove oven door if desired.
3. Unscrew light bulb cover (counterclockwise) located in rear of oven cavity. Then turn light bulb counterclockwise to remove.
4. Replace light bulb with 120 volt, 40 watt appliance bulb.
  - Do not over tighten bulb or cover. They may be difficult to remove later.
5. Replace light bulb cover and oven door before use.
6. Reconnect power supply.















## CARE AND CLEANING

### Cleaning Oven Parts

Part	Material to Use	General Directions
Heating elements		Do not clean. Any food on element will burn off.
Broiler pan and grid	Soap and a non-abrasive plastic scouring pad.	Drain fat, cool pan and grid slightly. (Do not let soiled pan and grid stand in oven to cool.) Sprinkle with soap. Fill the pan with warm water. Let pan and grid stand for a few minutes. Wash or scour if necessary. Rinse and dry. The broiler pan and grid may also be cleaned in the dishwasher.
Inside oven door	Soap and water	Clean the outside of the door and the window area with warm soapy water. <u>Oven Door Gasket</u> Do not clean the braided oven door gasket. Gasket should not be moved while cleaning. Avoid getting any cleaning material on gasket.
Outside finish	Soap and water	Wash all glass with cloth dampened in soapy water. Rinse and polish with a dry cloth.
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. Clean excess spills before self - cleaning.
Control panel	Soap and water	Wash with cloth dampened in soapy water. Rinse and polish with a dry cloth.
Oven racks	Soap and water	For heavy soil, clean by hand and rinse racks thoroughly for ease in cleaning. Be sure racks are dry before replacing.

## COMPONENT TESTING INFORMATION

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

Illustration	Component	Test Procedure	Results
	Oven light socket	Test continuity of receptacle terminals. Measure voltage at oven light.	Indicates continuity with bulb screwed in. 120 VAC, see wiring diagram for terminal identification. If no voltage is present at oven light, check wiring.
	Bake element	Disconnect wire terminals and test voltage to terminals. Test continuity of element.	240 VAC Indicates continuity.
	Broil element	Disconnect wire terminals and test voltage to terminals. Test continuity of element.	240 VAC Indicates continuity.
	Convection element	Disconnect wire terminals and test voltage to terminals. Test continuity of element	240 VAC Indicates continuity
	Convection motor fan	Verify supply voltage. Disconnect wiring and check continuity of motor at the terminals, and verify terminals are not shorted to chassis.	120 VAC Continuity at wire terminals. No continuity from wire terminals to chassis.
	Blower motor	Verify supply voltage. Disconnect wiring and check continuity of motor at the terminals, and verify terminals are not shorted to chassis.	120 VAC Continuity at terminals. No continuity from wire terminals to chassis.
	Heraeus sensor	Measure resistance	Approximately 1100Ω at room temperature 75°F.
	Hinge	Carefully open the hinge fully, and insert a wooden dowel or screwdriver bit into opening. Remove top and bottom screws securing hinge. Slide hinge top toward rear of unit and guide hinge out through frame opening or storage drawer.	<b>CAUTION</b> Do not place hands in hinge area when oven door is removed. Hinge can snap closed and pinch hands or fingers.
	Door lock switch or light switch	Switch connection in following position Unlocked Locked / Actuated	COM-NO=Open, COM-NC=Closed COM-NO=Closed COM-NC=Open
	Controls if equipped with:	Verify proper operation. 042045 Control limit upper oven 042056 Fan switch 042066 Limit switch 31852801 Control limit lower oven	Normally Open Open at 220°F, Closes at 170°F Open at 120°F, Closes at 150°F Open at 90°F, Closes at 100°F Open at 240°F, Closes at 210°F

## TESTING PROCEDURES



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

### Upper and Lower Limit Control, Limit, Fan Switch

	Open	Close
Upper limit control	200°F	170°F
Lower limit control	120°F	150°F
Limit switch	90°F	100°F
Fan switch	240°F	210°F

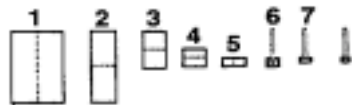


1. Turn off power to range.
2. Remove oven from wall cutout.
3. Remove screws securing cabinet top shield to outer cabinet wrapper shield.
4. Disconnect wires from switch terminal connections.
5. Attach ohmmeter leads to switch terminals. At ambient room temperature (70°F.) continuity should be indicated.

### Oven Temperature Test

The following procedures should be used to verify oven temperature calibration.

- Verify oven door is adjusted and sealing properly.
  - Do not cover the oven racks or oven bottom with foil.
1. Acquire a 8 1/2x 11 inch piece of aluminum foil.
  2. Fold the aluminum foil five times, doubling the thickness with each fold.
  3. After the fifth fold, place the thermocouple tip into the center of the foil and fold over the thermocouple. Fold the ends of the foil sides to



attach foil to thermocouple.

4. Place the oven rack in the center of the oven cavity. Position thermocouple on the center of the rack.
5. Turn oven to 350°F and allow to cycle for 25 to 30 minutes. Oven should cycle between 330°F to 370°F.

### Oven Temperature Sensor

Detail testing can be accomplished as follows: The oven temperature sensor is mounted in the oven cavity and electrically connected to the Electronic Range

Control.

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.

1. Disconnect power to oven.
2. Disconnect sensor harness plug from ERC.
3. Connect meter leads into harness connector plug, resistance should be approximately 1100 ohms at room temperature 75°F.
  - If a higher resistance is indicated remove sensor from oven. Disconnect sensor from harness at the plug, recheck sensor resistance to assure the problem is in the sensor and not in the interconnecting harness, or due to a bad connection.

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

### Blower Motor

Fan may come on at any time to cool components.

1. Turn off power to oven.
2. Remove oven from wall cutout.
3. Remove screws securing outer cabinet top shield to outer cabinet wrapper shield.
4. Disconnect wires from motor terminal connectors.
5. Attach ohmmeter leads to terminal tabs on motor.
6. A resistance of 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

## TESTING PROCEDURES

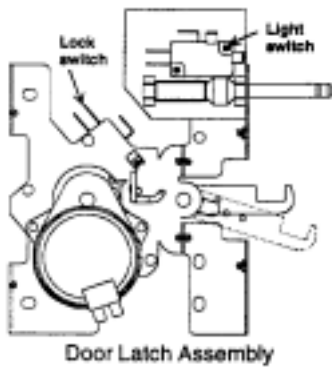


To avoid risk of electrical shock, personal injury, or death, disconnect power to unit before servicing, unless testing requires it.

### Auto Latch Motor

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

1. Disconnect power.
2. Slide oven from wall cutout approximately 6 inches to gain access to control panel screws.
3. Remove screws securing control panel to unit, and pull control panel out of unit to gain access to latch assembly.
4. Disconnect lead wires from latch motor.
5. Connect jumper cord leads to latch motor.
6. Connect jumper cord to 120 AC power source.
7. Replace if latch motor fails to operate.

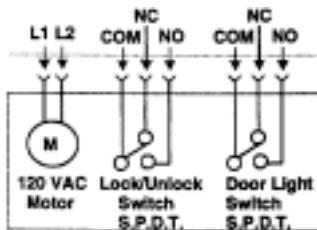


8. Reverse procedure to reconnect.

### Auto Latch Switches

Both unlock and lock door latch switches may be replaced.

1. Perform steps 1 through 3, from “Auto Latch Motor”.
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.



Double Switch

7. Use the same procedure to test the door latch switch (lock).

### Convection Fan Motor

1. Turn off power to oven.
2. Remove oven from wall cutout.
3. Remove access fan plate to gain access to convection fan motor.
4. Disconnect wires from motor terminal connectors.
5. Attach ohmmeter leads to terminal tabs on motor.
6. 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.

### Convection Element Testing

1. Disconnect power to oven.
2. Remove screws securing oven door to hinges and remove door.
3. Remove screws securing fan cover to gain access to convection element.
4. Remove screws securing convection element, and pull gently outward to gain access to wire terminals.
5. Remove wire connector from element.
6. Attach ohmmeter leads to each of the element terminals. Set ohmmeter to Rx1 or Rx10 scale.
7. Low ohms or continuity should be indicated.

### Broil Element Testing

1. Disconnect power to oven.
2. Remove screws securing oven door to hinges and remove door.
3. Remove screws securing broil element reflector.
4. Gently pull downward and out to gain access to wire terminals.
5. Remove wire connector from element.
6. Attach ohmmeter leads to each of the element terminals. Set ohmmeter to Rx1 or Rx10 scale.
7. Low ohms or continuity should be indicated.

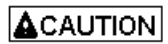
### Bake Element Testing

1. Disconnect power.
2. Remove oven from wall cutout.
3. Remove screws securing element panel.
4. Remove screws securing element access plate.
5. Remove wire connector from element.
6. Attach ohmmeter leads to each of the element terminals. Set ohmmeter to Rx1 or Rx10 scale.
7. Low ohms or continuity should be indicated.

## DISASSEMBLY PROCEDURES



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



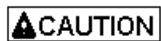
To avoid risk of personal injury or property damage this unit requires a two person lift when lifting unit in or out of cutout.

### Removing and Replacing Oven

1. Turn off power to the oven at the circuit breaker.
2. Open oven door and remove screws securing unit to the wall.
3. Pull oven forward out of the cabinet opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Replace the oven using the installation instructions.

### Control Panel Assembly

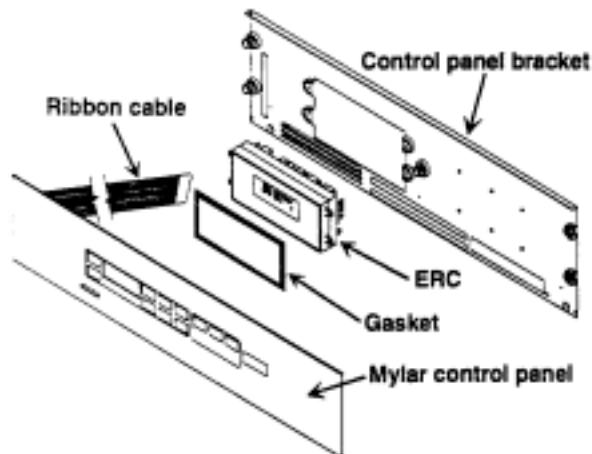
1. Turn off power to unit.
  2. Remove screws securing top trim piece to the unit.
  3. Mylar control panel is loose, but the ribbon cable does not allow complete removal.
- NOTE:** Mylar control panel needs to be supported to remove the rest of the assembly.
4. Remove screws securing bottom trim piece under mylar glass panel.
  5. Remove screws securing control panel bracket.
  6. Lean control panel bracket forward to disconnect



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

wire terminals and ribbon cable.

7. Gently pull control panel up and forward to remove



complete assembly.

### Electronic Range Control

1. Turn off power to unit.
2. Remove screws securing top trim piece to the unit.
3. Mylar control panel is loose, but the ribbon cable does not allow complete removal.

**NOTE:** Mylar control panel needs to be supported to remove the rest of the assembly.

4. Remove screws securing ERC to control panel bracket.
5. Gently pull ERC forward to gain access to wire



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

terminals.

6. Disconnect all electrical connections from ERC and remove.
7. Reverse procedure to reinstall.

### Mylar Control Panel

1. Turn off power to unit.
2. Remove screws securing top trim piece to the unit.
3. Mylar control panel is loose, but the ribbon cable does not allow complete removal.

**NOTE:** Mylar control panel needs to be supported to remove the rest of the assembly.

4. Remove screws securing ERC to control panel bracket.
5. Gently pull ERC forward to gain access to ribbon



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

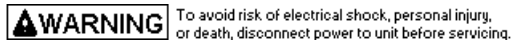
cable.

6. Disconnect ribbon cable from ERC and remove mylar control panel.
7. Reverse procedure to reinstall.

### Transformer / Relay Board(s)

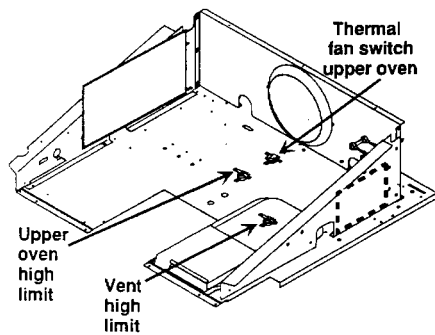
1. Turn off power to unit.
2. See "Control Panel Assembly" for removal.
3. Some unit p.c. boards are located on the back of the control panel bracket. Other units p.c. board is mounted to the chassis side walls behind the control panel assembly.
4. Disconnect and label wire terminals.
5. Release plastic tabs securing circuit board.
6. Reverse procedure to reinstall.

## DISASSEMBLY PROCEDURES



### Upper and Single Oven High Limit, Thermal Fan, and Vent High Limit Switches

1. Turn power off to unit.
2. See "Control Panel Assembly" for removal.
3. Remove screws securing limit switch needing to be replaced.

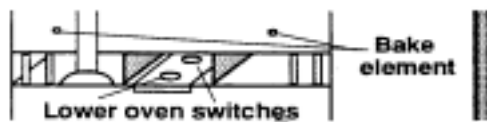


4. Disconnect wire terminals from limit switch being replaced.
5. Reverse procedure to reinstall.

### Lower Oven High Limit and Thermal Fan Limit Switch

1. Turn power off to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Remove screws securing lower back outer wrapper to outer wrapper cover.
6. Remove screw securing limit switch bracket.
7. Slide bracket out to gain access to switches.

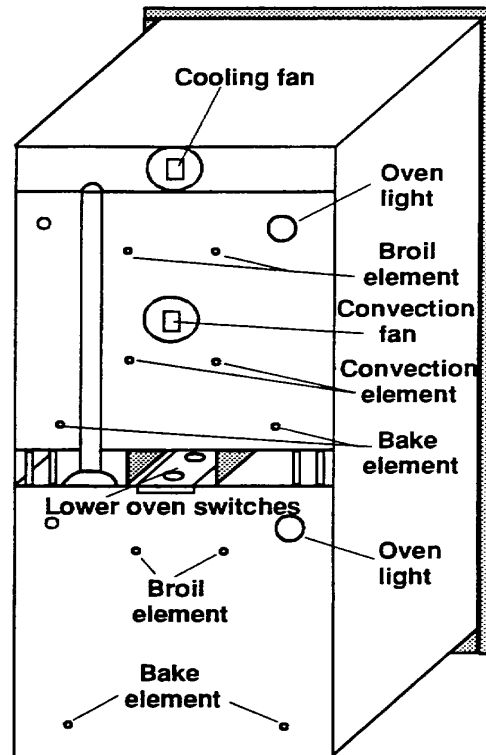
- NOTE:** Limit switch located in back on the bracket closes to the front, does not have wires located on one of the terminals.
8. Remove wire terminal with two black wires on front limit switch to allow bracket to slide out far enough to gain access to the switches.



9. Remove screws securing limit switch needing to be replaced.
10. Reverse procedure to reinstall.

### Oven Sensor

1. Turn off power to unit.
2. Open oven door or remove oven door, see "Door Removal".
3. Remove screws securing sensor to top right rear corner of oven cavity.
4. Pull sensor forward, maneuver wires through insulation to disconnect wire plug connector.
5. Reverse procedure to reinstall sensor.



### Bake Element

1. Turn off power to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Remove screws securing access element panel.
6. Remove screws securing element panel.
7. Disconnect wire terminals from bake element.
8. Remove screws securing element support bracket.
9. Gently pull element support bracket out..
10. Remove screws securing bake element to support element bracket.
11. Reverse procedure to reinstall bake element.

## DISASSEMBLY PROCEDURES

**WARNING** To avoid risk of electrical shock, personal injury, or death, disconnect power to unit before servicing.

### Broil Element / Broil Element Reflector

1. Turn off power to unit.
2. Open oven door or remove oven door, see “Door Removal”.
3. Remove screws securing broil element reflector to top of oven cavity.
4. Pull front of broil element reflector down and forward to allow disconnection of terminals on each element leg.
5. Remove rivets securing broil element bracket to broil element reflector.
6. Reverse procedure to reinstall broil element.

**NOTE:** Use rivets to fasten broil element brackets to broil element reflector.

### Convection Heating Element

1. Turn off power to unit.
2. Open oven door or remove oven door, see “Door Removal”.
3. Remove screws securing fan cover to rear of oven cavity.
4. Remove screws securing convection heating element to rear wall of oven cavity.
5. Pull element forward to expose wire connections for disconnection.
6. Reverse procedure to reinstall convection heating element.

### Convection Fan Blade

1. Turn off power to unit.
2. Open oven door or remove door, see “Door Removal”.
3. Remove screws securing fan cover to rear of oven cavity.
4. Using an adjustable wrench, and **turning clockwise**, remove the nut in center of convection fan blade. (Nut is left hand thread.)
5. 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.)

### Convection Fan Motor

1. Turn off power to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.

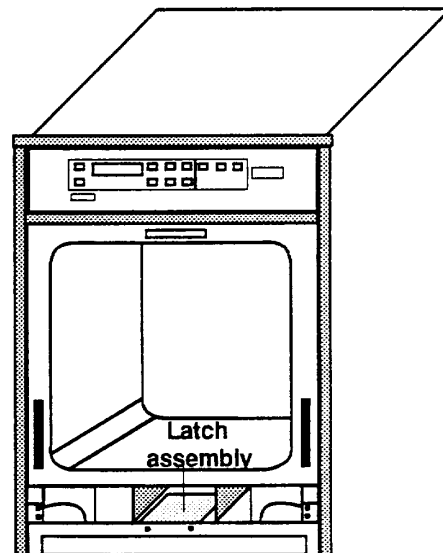
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
5. Remove convection fan blade and spacer washer, see “Convection Fan Blade” procedure.
6. Remove access fan panel from rear top outer wrapper cover.
7. Disconnect and label wires from convection fan motor.
8. Remove screws securing convection fan motor assembly to convection motor mounting bracket.
9. Reverse procedure to reinstall.

### Upper / Single Oven Door Latch / Door Plunger Light Switch Assembly

1. Turn off power to unit.
2. See “Control Panel Assembly” for removal.
3. Remove screws securing latch assembly to chassis.
4. Disconnect and label wire terminals.
5. Remove latch assembly from chassis.
6. Reverse procedure to reinstall door latch assembly.

### Lower Oven Door Latch / Door Plunger Light Switch Assembly

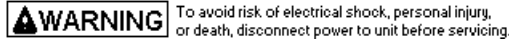
1. Turn off power to unit.
2. Remove top oven door, see “Oven Door” procedure.
3. Remove screws securing middle trim piece between oven doors.
4. Remove screws securing latch assembly to chassis.
5. Remove latch assembly from chassis.
6. Disconnect and label wire terminals.



7. Reverse procedure to reinstall door latch assembly.



## DISASSEMBLY PROCEDURES



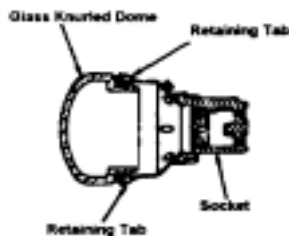
### Oven Light Bulb / Oven Light Socket

1. Turn off power to unit.
2. Open oven door to gain access to oven light.
3. Unscrew (counterclockwise) glass knurled dome.
4. Using a glove, unscrew (counterclockwise) oven light bulb.

**NOTE:** Proceed with the following steps for oven light socket removal.

5. Remove screws securing unit to the wall.
6. Remove oven from cutout opening.
7. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.
8. Remove screws securing outer wrapper top cover and remove.
9. Carefully displace fiberglass insulation away from rear of light socket.
10. Push inner assembly of light socket towards rear of oven, or twist out, depending on style of base.
11. Disconnect wires from light socket.
12. Reverse procedure to reinstall light socket. Reposition insulation around lamp socket. Do not over tighten.

**NOTE:** Reposition fiberglass insulation around oven light socket to eliminate possibility of heat related problems.



### Oven Tank Removal

**NOTE:** Unit should be run through at least one clean cycle to set insulation.

1. Turn off power to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from unit to fuse box or junction box depending on unit.

5. Remove broil reflector / element, convection fan cover, convection element, convection fan blade, oven light cover, light bulb, oven light socket, heat sensing element, smoke eliminator screws, and disconnect ground wire from oven light bracket.
6. Remove screws securing outer wrapper top cover, and outer wrapper cover.
7. Remove screws securing chip cover and remove chip cover.
8. Remove screws securing tank hooks, located on the outside rear of the unit.
9. Using both hands from front, press upward in the back of oven cavity to release tank hooks.
10. Grasp either the right or left corner of oven cavity to maneuver cavity outward. If problems arise getting cavity started outward, use a small thin plastic or wood prying device in the corners of the cavity to start cavity moving outward.
11. Transfer oven light bracket to replacement tank.
12. Reverse procedure to assemble.

### Oven Door Removal

1. Open oven door and remove screws securing door to hinge assembly.
2. Place oven door in first stop position, then grasp both sides and lift up off the hinges.  
**NOTE:** Door hinges are spring loaded and will snap closed if bumped. Avoid pinching fingers by closing hinges completely until ready to mount door back on the unit.
3. Reverse procedure to assemble.

### Door Disassembly

1. Remove oven door, see "Door Removal".
2. Remove screws on right, left, top and bottom of oven door.
3. Remove door liner from door assembly.
4. Remove screws securing inner glass support securing glass and door handle.
5. Remove glass mounting bracket and glass window.
6. Remove screws securing heat door liner shield and remove.
7. Reverse procedure to reassemble.

**NOTE:** When reassembling door, verify HB 11 marking on the glass is facing towards the heat.(in side of the oven).

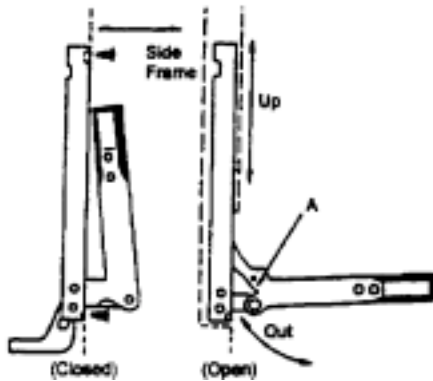


## DISASSEMBLY PROCEDURES

**WARNING** To avoid risk of electrical shock, personal injury, or death, disconnect power to unit before servicing.

### Oven Door Hinge

1. Turn off power to unit.
2. Remove oven door, see "Door Removal".
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 oven. Withdraw hinge assembly through the frame opening.
6. Reverse procedure to reinstall oven door hinge assembly.



### Blower Motor

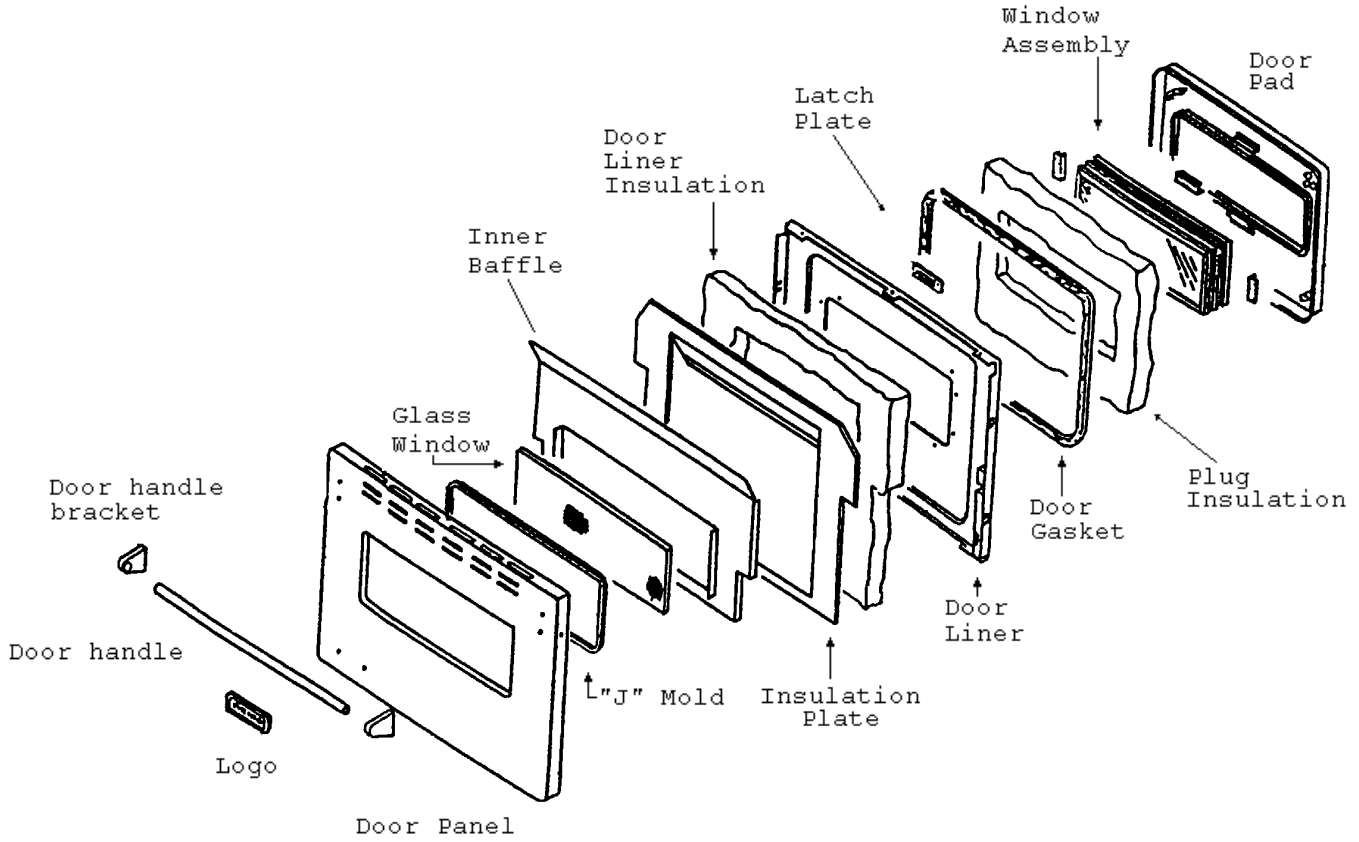
1. Turn power off to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from unit to fuse or junction box depending on unit.
5. Remove screws securing top outer wrapper from the unit.
6. Disconnect and label wire terminals connected to blower motor.
7. Remove screws securing blower motor assembly to vent assembly.
8. Reverse procedure to reinstall.

### Vent Assembly / Smoke Eliminator

1. Turn off power to unit.
2. Open oven door and remove screws securing unit to the wall.
3. Remove oven from cutout opening.
4. Disconnect or unplug the power cord leading from the fuse box or junction box depending on unit.
5. Remove screws securing top and back outer wrapper from the unit.
6. Remove screws securing vent assembly to outer cabinet top wrapper.
7. Raise back of vent assembly and slowly maneuver vent assembly away from unit.
8. Remove screws securing smoke eliminator, located inside oven on top of oven cavity.
9. Reverse procedure to reinstall.

## DISASSEMBLY PROCEDURES

**WARNING** To avoid risk of electrical shock, personal injury, or death, disconnect power to unit before servicing.



Door Assembly

## INSTALLATION INSTRUCTIONS

### Packing Material

Remove protective packing material from oven. Tape residue can be cleaned with a soft cloth and alcohol. Lean oven to each side and remove shipping base.

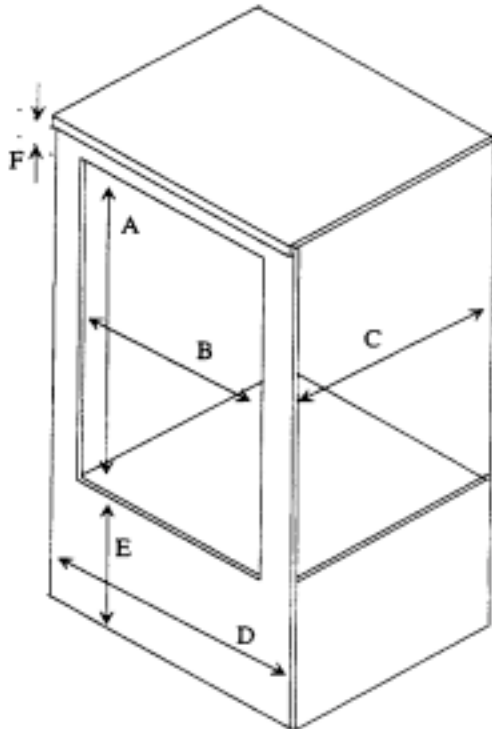
### Oven Location

Choose a location on the following factors.

- Make sure there is adequate space for proper installation.
- Carefully read all instructions before beginning installation.
- Make sure cabinet base is level.

### Cabinet Opening Double Wall Oven

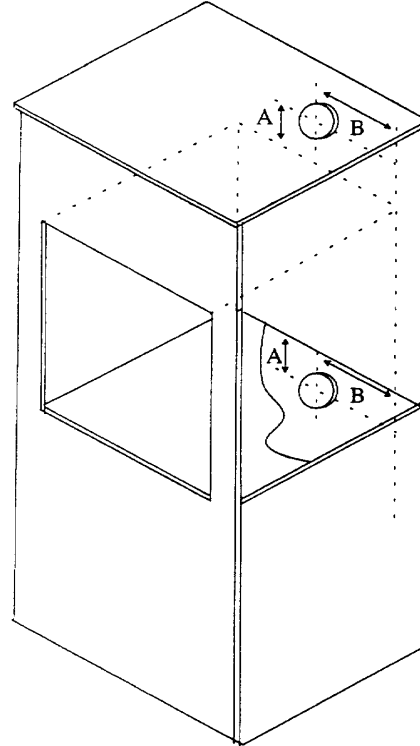
Prepare the cabinet for wall oven.



- A---52 3/8 inches
- B---25 inches
- C---24 inches
- D---27 inches
- E---12 1/2 inches
- F---3 inches

### Electrical Supply Location

Electrical supply must be located in the area shown.



### Electrical Connection for Double Wall Oven

- A---5 inches
- B---16 inches

### Electrical Connection Requirements

Line voltage must not exceed rated voltage. Line voltage less than rated voltage will result in slow heating. Wiring system must conform to U.L. Standards and National Electrical Code. Installation must conform to all local, municipal and state building codes, and local utility regulations. Oven must be connected only to a supplied circuit as specified on rating plate.

This oven requires 3 wires, 115/230-120/240 volts, 60 Hertz AC. Unit is equipped with a No. 10 ground wire in conduit. Oven should be fused separately from other appliances on a 40 amp circuit minimum. Verify electric power is off from fuse box to junction box until oven is installed and ready to operate.

## Electrical Connection

### **⚠ WARNING**

To avoid risk of personal injury or electrical shock, do not ground through neutral wire if installation is in a mobile home or if local codes do not permit grounding through a neutral.

Improper connections of aluminum house wiring to copper lead can result in property damage, personal injury or fire. Use only connectors designed for joining copper to aluminum and follow manufacturers recommended procedure closely.

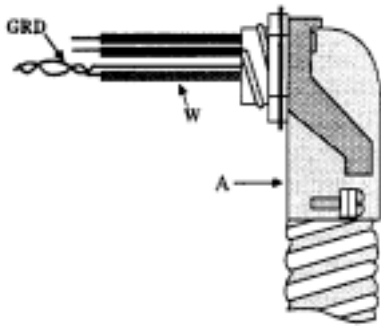
1. With oven positioned in front of cabinet opening, connect wire leads extending from conduit to junction box. Verify neutral (white) wire is connected to appropriate terminal. Check local code to see which option should be used in grounding unit.

#### **Option 1**

Attach oven ground wire (green or bare) to junction box (if grounded) or a suitable ground.

#### **Option 2**

Connect oven ground wire (green or bare) to house ground feed wire (green, bare, or white). If grounding through white wire, observe above warning.



A---Conduit  
W---White neutral wire  
GND---Bare ground wire

If oven is used in a mobile home or if local codes do not permit grounding through neutral, open connection and use grounding lead to ground unit in accordance with local codes. Connect neutral lead to branch circuit neutral conductor in usual manner.

2. Connect red and black wires to appropriate house

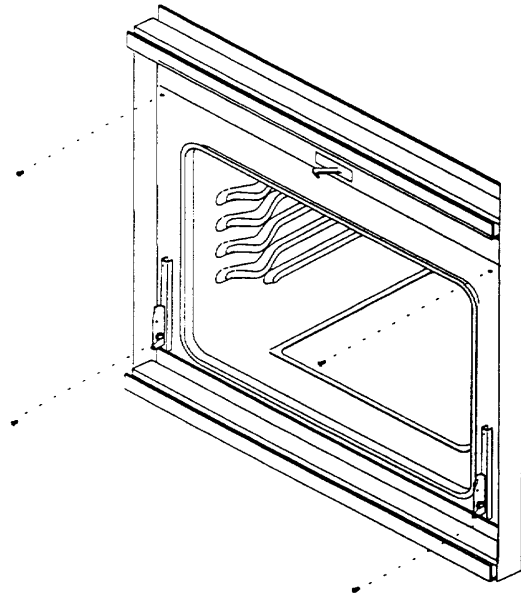
electrical wiring.

3. Verify wiring by connecting electrical power at fuse box and checking for proper operation of unit.
  - Some interior parts are finished with a protective coating of oil. When heated for first time oil will burn off and there will be some odor and smoke.

#### **Place Oven In Wall**

This procedure should be performed by 2 people.

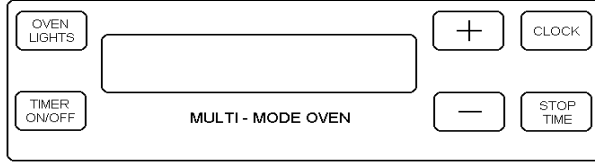
1. Seal openings in wall behind the oven or on floor under oven. Holes must be sealed before sliding oven into position.
2. Lift wall oven and slide into cutout.
3. Secure wall oven to cabinet with 4 screws.



#### **Removal and Replacement of Oven**

1. Disconnect power to oven at circuit breaker or fuse panel.
2. Remove screws securing oven to wall.
3. Remove oven and place oven aside.
4. Disconnect electrical conduit.
5. To reinstall oven, follow instructions in **Installation** section of this manual.

## PROGRAMMING INSTRUCTIONS --ERC 5800



### Electronic Oven Control Options

**OVEN LIGHTS**--Use to turn oven lights on or off in both ovens. Light will automatically turn on when oven door is opened.

**TIMER ON/OFF**--Use to time any kitchen activity or cancel timer. Does not control the oven functions.

**STOP TIME**--Use to set delayed bake and delayed self-clean.

**CLOCK**--Use to set time of day.

**OFF CANCEL**--Cancel any baking or cleaning function.

**BAKE TIME**--Use to set timed or delayed baking.

**BAKE**--Use to set Bake.

**BROIL**--Use to set broil.

**CONV / BAKE**--Use to set convection bake.

**CONV / COOK**--Use to set convection.

**CONV / BROIL**--Use to set convection broil.

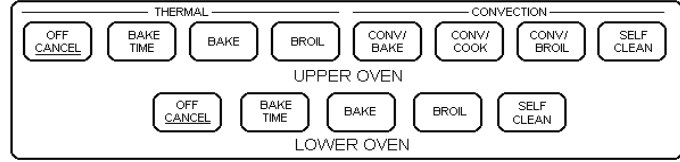
**SELF-CLEAN**--Use to set self-clean.

**+ or --**Use to select temperature or time.

### Special Oven Control Functions

#### Preheat Signal

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



### End of Cycle Signal

When a timed cycle is complete, three long signals will sound. End of cycle signal will continue to sound until CANCEL is touched. If TIMER ON/OFF end of cycle signal is sounding, touch TIMER ON/OFF.

### Child Lockout

This is a safety feature used to prevent children from accidentally programming oven. It disables electronic oven control. Touch and hold BAKE and BAKE TIME for 5 seconds. "OFF" will display when the temperature normally appears. To reactivate control, touch and hold BAKE and BAKE TIME for 5 seconds. Child lockout feature 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.

### Timer Signal

When time elapses, timer beeps 3 times then once every 10 seconds until canceled.

### Increasing + or - Pad Speed

When setting time and temperature, hold pad to accelerate rate at which 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--ERC5800

### Quick Reference Instructions

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

- Oven display will blink once per second after disconnection of power or initial start up until clock is programmed.
- Oven cooling fan will come on when an oven function is selected.

### Setting Clock

1. Press CLOCK pad.
2. Press + or - until correct time of day "AM" or "PM" appears in display.

### Setting Minute Timer

1. Press TIMER ON/OFF pad.
2. Press + until desired amount of time appears in display. Timer can be set from 5 seconds to 11 hours and 50 minutes.

### Canceling Minute Timer

- Press TIMER ON/OFF pad and using slew pads decrease time back to zero.
- Press and hold TIMER ON/OFF pad for approximately 5 seconds.
- When canceling Minute Timer do not touch OVEN CANCEL. Pressing OVEN CANCEL pad will cancel baking function.

### Baking, Convection, or Convection Baking

1. Press BAKE, CONV, or CONV BAKE pad.
2. Press + or - pad until desired temperature is displayed.
3. Press OFF CANCEL pad when finished.

### Timed Baking, Convection, Convection Baking,

1. Place food in oven.
2. Press BAKE TIME pad.
3. Press + or - pad until baking time is displayed.
4. Press BAKE, CONV, or CONV BAKE pad.
5. Press + or - pad until desired temperature is displayed.

### Delayed Baking, Convection, Convection Baking

1. Place food in oven.
2. Press BAKE, CONV, or CONV BAKE pad.
3. Press + or - pad until desired temperature is displayed.

4. Press STOP TIME pad.
5. Press + or - pad until desired stop time displays.
6. Press BAKE TIME pad.
7. Press + or - pad until desired baking time displays.

### To Cancel Remaining Baking Time

Press OFF CANCEL pad

### Broil or Convection Broil

1. Center food on broiling grid and pan, and place on rack in oven.
2. Push BROIL or CONV BROIL pad.
3. Press + pad to set HI and - to set lower broil temperature.
4. Press OFF CANCEL pad when finished.

### Self-Cleaning

1. Prepare oven for self-cleaning.
2. Press CLEAN pad.
3. Press + or - pad to adjust desired amount of cleaning time.

### Delayed Self-Clean Cycle

1. Prepare oven for self-cleaning.
2. Press CLEAN pad.
3. Press + or - pad to adjust desired amount of cleaning time.
4. Press STOP TIME pad.
5. Press + or - pad until desired stopping time appears in display.

### Interrupt Self-Clean Cycle

1. Press OFF CANCEL pad.
2. After oven has cooled to a safe temperature, door can be opened.

### Hold

1. Press BAKE pad.
2. Press - pad until 170°, then HLD is displayed.
3. Press OFF CANCEL pad when finished or hold will cancel automatically in 1 hour.

### Defrost (Upper Oven)

1. Press CONV BAKE pad.
2. Press - until 170°, then DEF appears in display.

### Dehydration (Upper Oven)

1. Press CONV BAKE pad.
2. Press - until 170°. Then DEF and DEH appears in

## PROGRAMMING INSTRUCTIONS--ERC5800

### Flashing Display

When power is connected to oven display flashes. Press CANCEL pad to stop flashing display.

### Setting Electronic Clock

When power is connected or restored, display flashes until a pad is pressed.

1. Press CLOCK pad.
  - Press + or - pad until correct time of day displays. Time increases in larger increments the longer slew pads are held.
  - Clock saves time of day approximately 5 to 10 seconds after time is entered.

### Setting Electronic Timer

The 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 50 minutes. Up to 1 hour, timer displays minutes and seconds. After 1 hour, timer displays hours and minutes.

1. Press TIMER ON/OFF pad.
2. Press + or - pad until correct time displays.
  - Time increases in larger increments the longer + or - pad is held.
  - Timer begins counting down automatically after time is entered.
3. Press TIMER ON/OFF pad to cancel timer signal.
  - After time elapses, timer beeps 3 times, and then approximately once every 6-8 seconds until TIMER ON/OFF pad is pressed.

### Resetting and Canceling Timer

To reset the time when remaining time is displayed, press TIME ON/OFF pad, then + or - pad until new time displays.

To cancel timer, press and hold TIMER ON/OFF pad for approximately 5 seconds.

Also, to cancel timer, press TIMER ON/OFF pad, then press + or - pad until timer displays "00".

### Baking, Convection, or Convection Baking

Open oven door to confirm nothing is stored in oven cavity and set racks to proper height before baking. For delicate baking, preheat approximately 15-20 minutes before placing food inside oven.

1. Press BAKE, CONV, or CONV BAKE pad.

2. Press + or - pad until desired temperature is displayed.
  - Temperature can be set from 170°F to 550°F in 5° increments.
  - Temperature starts at 170°F and increases in 5° increments until reaching set temperature. Some minor smoking is normal when using oven for first time.
  - When bake temperature is reached oven signal sounds for approximately 1 second.
3. Press OFF CANCEL pad when finished.
  - Remove food from oven when baking time has elapsed. Food left in oven can overcook.

### Timed Baking, Convection, or Convection Baking

Set oven to bake for desired amount of time. Oven automatically stops heating after time lapses.

1. Place food in oven.
2. Press BAKE TIME pad.
3. Press + or - pad until baking time is displayed.
  - Bake time can be set up to 11 hours and 50 minutes.
  - 10 minutes minimum baking time.
4. Press BAKE, CONV, or CONV BAKE pad.
5. Press + or - pad until desired temperature is displayed.
  - Temperature can be set from 170°F to 550°F in 5° increments.
  - Temperature display increases in 5°F increments starting at 100°F until reaching set temperature. Some minor smoking is normal when using oven for first time. When bake temperature is reached oven signals.
  - To view bake time, press and hold BAKE TIME pad.
  - When baking 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 OFF CANCEL pad is pressed.
6. Press OFF CANCEL pad when finished.
  - Remove food from oven when baking time has elapsed. Food left in oven can overcook.

### To Cancel Remaining Baking Time

Press OFF CANCEL pad.

## PROGRAMMING INSTRUCTIONS--ERC5800

### Delayed Baking, Convection, or Convection Baking

Set oven to begin and end baking at later time. Oven control automatically calculates starting time.

1. Place food in oven
2. Press STOP TIME pad.
  - Current time of day appears in display.
3. Press + or - pad until desired stop time displays.
  - Stop time can be set 11 hours 50 minutes ahead of current time of day.
4. Press BAKE TIME pad .
5. Press + or - pad until desired baking time displays.
  - 10 minutes minimum baking time.
6. Press BAKE, CONV, or CONV BAKE pad.
7. Press + or - pad until desired temperature is displayed.
  - Temperature can be set from 170°F to 550°F in 5° increments.
  - Electronic oven control calculates start time.
  - When start time is reached “Delay” no longer displays and “ON” displays.
  - To view bake time, press and hold BAKE TIME pad.
  - To view stop time, press and hold STOP TIME pad.
  - When baking 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 OFF CANCEL pad is pressed.

### To Cancel Remaining Baking Time

Press OFF CANCEL pad.

### Prepare for Broiling



**WARNING** To avoid risk of fire, do not line the broiler grid with foil. \*\*Foil may trap grease on top of grid, close to heating element 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 baking using suggested rack levels in Broiling Guide section to test broiler results. If food is not brown enough, bake on a higher rack position. If food is too brown, bake on a lower rack position.

### Broiling or Convection Broiling

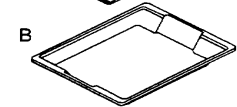
Broiling system generates immediate, intense heat using a special reflector. This reflector focuses heat directly on the food; searing in natural juices and providing restaurant quality, charbroiled flavor.

1. Center food on broiler grid and pan, and place on rack in oven.
  - Oven door should be closed.

A--Broiler Grid



B--Broiler Pan



2. Push BROIL or CONV BROIL pad.
3. Press + pad to set HI broil or - pad to set Lower broil temperature .
  - Temperature sets to HI or from 170°F to 545°F.

### Broil Setting Use

Broil Setting	Use
HI	Broiling red meats
545	Broiling pork
525	Broiling poultry
475	Broiling seafood
425	Broiling fruits and vegetables
400 and below	Toasting and warming breads

4. Press OFF CANCEL pad when finished.

### Hold

The hold feature holds the oven at a low temperature (Approx. 150°F) for 1 hour to keep food warm.

1. Press BAKE pad.
2. Press - pad until 170°, then HLD is displayed.
3. Press OFF CANCEL pad when finished.
  - Remove food from oven when baking time has elapsed. Food left in oven can overcook.



**PROGRAMMING INSTRUCTIONS--ERC5800**

**Delayed Slow Baking**



To 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

1. Place food in oven.
2. Press STOP TIME pad.
  - Current time of day appears in display.
3. Press + or - pad until desired stop time displays.
  - Stop time can be set 11 hours 50 minutes ahead of current time of day.
4. Press BAKE TIME pad.
5. Press + or - pad until desired baking time displays.
  - 10 minutes minimum baking time.
6. Press BAKE pad.
7. Press - pad until 170°, then HLD, and then SLO is displayed.
  - Electronic oven control calculates start time.
  - When start time is reached “Delay” no longer displayed and “ON” displays.
  - To view bake time, press and hold BAKE TIME pad.
  - To view stop time, press and hold STOP TIME pad.
  - When baking 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 every 3 seconds for 5 minutes or until OFF CANCEL pad is pressed.

**To Cancel Remaining Baking Time**

Press OFF CANCEL pad.

**Defrost**

The defrost feature is an excellent way to thaw large food items like a turkey or ham.. Oven does not heat during defrost.

1. Place food on dish or cookie sheet in middle of oven.
2. Open door to first stop position.
3. Press CONV BAKE pad.
4. Press - until 170°, then dEF appears in display.
  - Oven is equipped with a 12 hour automatic cancel feature. If defrost time is longer than 12 hours, control will need to be reset.
5. When finished press OFF CANCEL pad.

**Dehydration**

Dehydration is an excellent way to preserve fresh foods. The best way to become familiar with dehydration is using fruits, vegetables, herbs and spices.

1. Place food on dehydration rack or cookie sheet in middle of oven.
2. Open door to first stop position.
3. Press CONV BAKE pad.
4. Press - until 170°, then dEF (defrost) and dEH (dehydration) appears in display.
  - Convection fan operates along with oven bake and broil elements at 170°F.
  - 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 press OFF CANCEL pad.

**Dehydration Tips**

Fruits

- Always start with fresh fruit.
- Cut fruit in equal pieces approximately 1/8" thick. Thinner pieces will dry quicker.
- Fruits need to be dipped into an antioxidant, a color-keeping preservative, or two parts water and one part lemon juice. Testing fruit with an antioxidant will help it retain vitamins, color and flavor.

Vegetables

Most vegetables require blanching to inactivate enzymes.

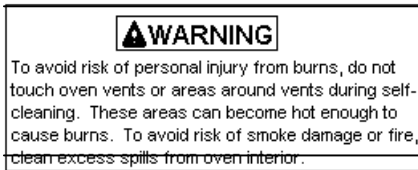
Herbs and Spices

- Herbs and spices dry quickly.
- Check every 30 minutes to avoid over drying.
- When drying herbs, leaf clusters should be separated from stems.

Food	Drying Time	Results
Fruits		
Apples	4-6 hours	Leathery, Soft
Bananas	16-20 hours	Leathery
Vegetables		
Mushrooms (No blanching)	3-4 hours	Leathery, Soft
Carrots	3-7 hours	Dry, Brittle
Herbs and Spices		
Parsley	45-90 minutes	Dry, Crumbly
Orange/ Lemon Peel	3-7 hours	Hard, Tough

## PROGRAMMING INSTRUCTIONS--ERC5800

### Prepare for Self-Clean and Delayed 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.
- Do not use cleaning cycle if oven light cover is not properly in place.
- Remove oven racks and all cooking utensils from oven.

#### Self-Cleaning

Self-clean feature uses high oven temperature to clean oven interior.

1. Prepare oven for self-cleaning.
2. Press CLEAN pad.
3. Press + or - pad to adjust desired amount of cleaning time.
  - Increase or decrease cleaning time by 5 minutes increments.
  - Clean can be set from 2 to 4 hours. Minimum recommended cleaning time is 3 hours.
  - “LOCK” flashes while oven door is locking and remains in display while door is locked.
  - Oven begins to clean automatically.
  - After oven has cooled to a safe temperature, “LOCK” no longer displays and door is unlocked.

#### Delayed Self-Clean Cycle

Self-clean features uses high oven temperature to clean oven interior. Set oven to begin and end cleaning at later time. Control calculates back from end time to determine starting time.

1. Prepare oven for self-cleaning.
2. Press CLEAN pad.
3. Press + or - pad to adjust desired amount of cleaning time.
  - 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.
4. Press STOP TIME pad.
5. Press + or - pad until desired stopping time appears in display.

- Starting time is automatically calculated back based on amount of cleaning time and stop time. Oven begins to clean automatically.
  - “LOCK” flashes while oven door is locking and remains in display while door is locked.
  - To view remaining cleaning time, press and hold CLEAN pad.
  - To view calculated stop time, press and hold STOP TIME pad.
  - After oven has cooled to a safe temperature, “LOCK” no longer displays and door is unlocked.

#### Interrupt Self-Clean Cycle

1. Press OFF CANCEL pad.
2. After oven has cooled to a safe temperature, door can be opened.

#### Adjusting Oven 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 + 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 - until negative numbers appear. Oven can be set from -05° to -35° lower. To avoid over adjusting oven move temperature -05° each time.
5. To increase oven temperature (for warmer oven) press + until positive numbers appear. Oven can be set from 05° to 35° higher. To avoid over adjusting oven, move temperature 5° each time.
6. Press OFF 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.
  - See, **Digit Failure Display** in “ERC Warnings and Failure Codes” section.
2. Disconnect electrical supply.
  - Pressing OFF CANCEL pad or disconnecting electrical supply may eliminate “F-code”. If failure continues, contact and authorized servicer to check oven.



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

## TESTING PROCEDURES

### Service Information

The ERC operates in conjunction with a transformer/relay board 1, relay board 2, and oven temperature sensor(s) to control all bake, broil, convection and self clean functions.

**The ERC** is connected to a mylar control to control minute timer, clock, stop time, oven light, cancel, bake, bake time, broil, and clean. Slew pads are used to set times and temperatures.

The mylar control panel provides input to the **ERC** to control all functions.

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

The transformer/relay board for upper oven consists of convection fan, oven light, convection element, bake, broil, door lock, and double line break relays 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 relay board for lower oven consists of bake, broil, door lock, and double line break relays controlled by the **ERC**.

Oven temperature sensor 1 is mounted in the upper oven cavity and connected to the J4 connector on the rear of the **ERC**. Oven temperature sensor 2 is mounted in the lower oven cavity and connected to the J6 connector on the rear of the **ERC**. As the oven temperature increases

the sensor resistance also increases. The **ERC** converts this resistance to a corresponding temperature readout and cycles 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** is serviced as a separate part. However, each component and related wire harness must be tested prior to replacing an individual component.

### Quick Test Procedure

#### “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.

**NOTE:** To enter Quick Test Mode, this **must** be the first key pad entered after power is applied.

1. Apply power to oven **press and hold** BAKE TIME (Upper Oven) pad for 5 seconds.
2. Display will read the following:

<u>Pad</u>	<u>Response</u>
CLEAN	Double Line Break (DLB) on
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	Beeper on
BAKE TIME	Displays manufacturer code and sensor readings “000”=open sensor
TIMER	Displays dashes
CLOCK	All display segments illuminated
OVEN LIGHT	Oven light on
CANCEL	Exit Quick Test
SLEW	Sequences through display segments

### ERC Warning 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 Quick Test mode by touching clean pad, as shown below:

1. Unlock switch closed
2. Lock switch closed

### Digit Failure Display

- F1 Control malfunction - Replace ERC
- F2 Oven over temperature - Check sensor wiring, sensor, and temperature limiter.
- F3 Open sensor or sensor circuit - Check sensor resistance and wiring.
- F4 Shorted sensor or sensor circuit - Check sensor resistance and wiring.
- F7 Shorted input key - Verify control panel to P.C. board connection, test control panel continuity - Replace Control Panel.
- F9 Failure of door lock switch sensing with door locked - Check latch switch, door motor, check plunger switch, and wiring.
- FF Failure of door lock switch sensing with door unlocked - Check latch switch, door motor,



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

## TESTING PROCEDURES

### Temperature Calibration Offset

The ERC incorporates  $\pm 35^{\circ}\text{F}$  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 BAKE pad.
2. Press + until an oven temperature greater than  $500^{\circ}\text{F}$  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 - until negative numbers appear. Oven can be adjusted from  $-05^{\circ}$  to  $-35^{\circ}$  lower. To avoid over adjusting oven move temperature  $-5^{\circ}$  each time.
5. To increase oven temperature (for a warmer oven) press + until positive number appears. Oven can be set from  $05^{\circ}$  to  $35^{\circ}$  higher.. To avoid over adjusting oven, move temperature  $5^{\circ}$  each time.
6. Press OFF CANCEL pad. Temperature adjustment will be retained even through a power failure.

### 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 mode, it is generally operative.

### Transformer/Relay Board 1

The relays for oven light, bake, broil, convection element, convection fan and double line break are controlled by approximately 24VDC signal from the ERC. Input voltage is 102 - 132 VAC.

Testing of 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 ( $24\text{VDC}\pm$ ) indicated at J1 connector Pins 1 and 3.

1. Turn off power to oven.
2. Attach voltmeter lead to E1 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 120VAC 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 and 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.

### Broil Relay -- K5

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

1. Turn off power to oven.
2. Attach voltmeter lead to E18 connector on relay board.
3. Attach voltmeter lead to E12 (BR) connection 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 Pin 3 and 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 and 7.

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



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## TESTING PROCECURES

### Oven Light Relay -- K10

Drive voltage at J1 connector Pins 1 and 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.

### Door Lock Relay --K3

Double line break relay okay. Drive voltage at J1 connector Pins 1 and 9.

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.

### Display (Filament) Voltage

1. Turn on power, turn meter to VAC scale.
2. Touch meter lead to J1-1 terminal.
3. Touch meter lead to J1-14 terminal.
4. Meter should indicate 3.2VAC.

### Relay Board 2

The relays for oven light, bake, broil, convection element, convection fan and double line break are controlled be approximately 24VDC signal from the ERC. Input voltage is 102 - 132 VAC.

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

### Double Line Break -- K1

Drive voltage (24VDC±) indicated at J1 connector Pins 5 and 7.

1. Turn off power to oven.

2. Attach voltmeter lead to E1 connector on relay board.
3. Attach voltmeter lead to E18 connector on relay board.
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 relay board.

### Bake Relay --K2

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

1. Turn off power to oven.
2. Attach voltmeter lead to gray wire connection on double line break relay.
3. Attach voltmeter lead to E3 (BA) connector on relay module.
4. Turn on power and touch the bake pad.
5. If 240 VAC is indicated bake relay is operating.

### Broil Relay -- K3

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

1. Turn off power to oven.
2. Attach voltmeter lead to gray wire connection on double line break relay.
3. Attach voltmeter lead to E6 (BR) connector on relay module.
4. Turn on power and touch broil pad.
5. If 240 VAC is indicated broil relay is operating.

### Door Lock Relay -- K4

Double line break relay okay. Drive voltage at J1 connector Pins 1 and 7.

1. Turn off power to oven.
2. Attach voltmeter lead to E3 (neutral) connector on transformer/relay board 1.
3. Attach voltmeter lead to E2 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.

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

**COMPONENT TESTING INFORMATION**

**ERC Mylar touch system -- ERC5800**

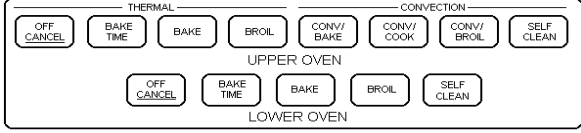
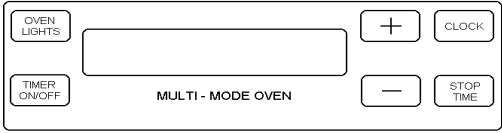
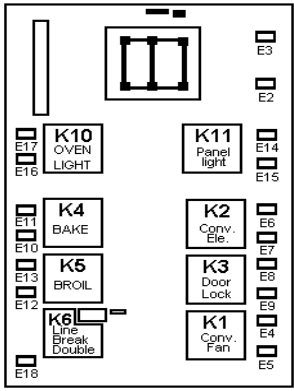
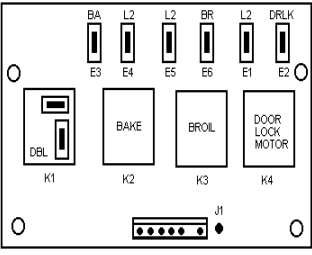


Illustration	Component	Test Procedure	Results
See illustrations above.	Mylar touch system ERC5800	<p>F1 - Control malfunction.            F2 - Oven over temperature.</p> <p>F3 - Open sensor or sensor circuit            F4 - Shorted sensor or sensor circuit            F7 - Shorted input key.</p> <p>F9 - Door lock or door lock circuitry malfunction (door unlocked)            FF - Door lock or door lock circuitry malfunction (door locked)  <b>DOOR</b> - lock status is not sensed within 90 seconds of energizing door lock relay.</p>	<p>Test mylar touch pad.            Check sensor wiring, sensor, and temperature limiter.            Check sensor resistance and wiring.            Check sensor resistance and wiring.            Verify mylar switch connections, replace mylar touch pad.            Check latch switch.</p> <p>Check latch switch.</p> <p>Verify operation of door latch switches.</p>
ERC5800 Control	Oven temperature adjustment.	<p>Press BAKE            Press + slew pad until an oven temperature greater than 500° shows on display. Immediately press and hold BAKE until "00" appears in display, approximately 5 seconds.            To decrease oven temperature (for a cooler oven), press - slew pad until negative numbers appear. Oven can be adjusted from -5 to -35 degrees lower.            To avoid over adjusting oven move temperature -5 degrees each time.            To increase oven temperature (for warmer oven), press + slew pad until positive numbers appear. Oven can be adjusted 5 to 35 degrees higher.            To avoid over adjusting oven move temperature 5 degrees each time.            Press OFF CANCEL. Temperature Adjustment will be retained even through a power failure.</p>	While increasing or decreasing oven temperature, this does not affect self-cleaning temperature.
ERC5800	Twelve hour off	Control will automatically cancel any baking operation and remove all relay drives 12 hours after the last pad touched.	
ERC5800 Control	Child lock out	This is a safety feature that can be used to prevent children from accidentally programming the oven. It disables the electronic oven control. Press and hold BAKE and BAKE TIME for 5 seconds. "OFF" will display where the temperature normally appears. To reactivate the control press and hold BAKE and BAKE TIME for 5 seconds. Child lockout feature must be reset after a power failure.	

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

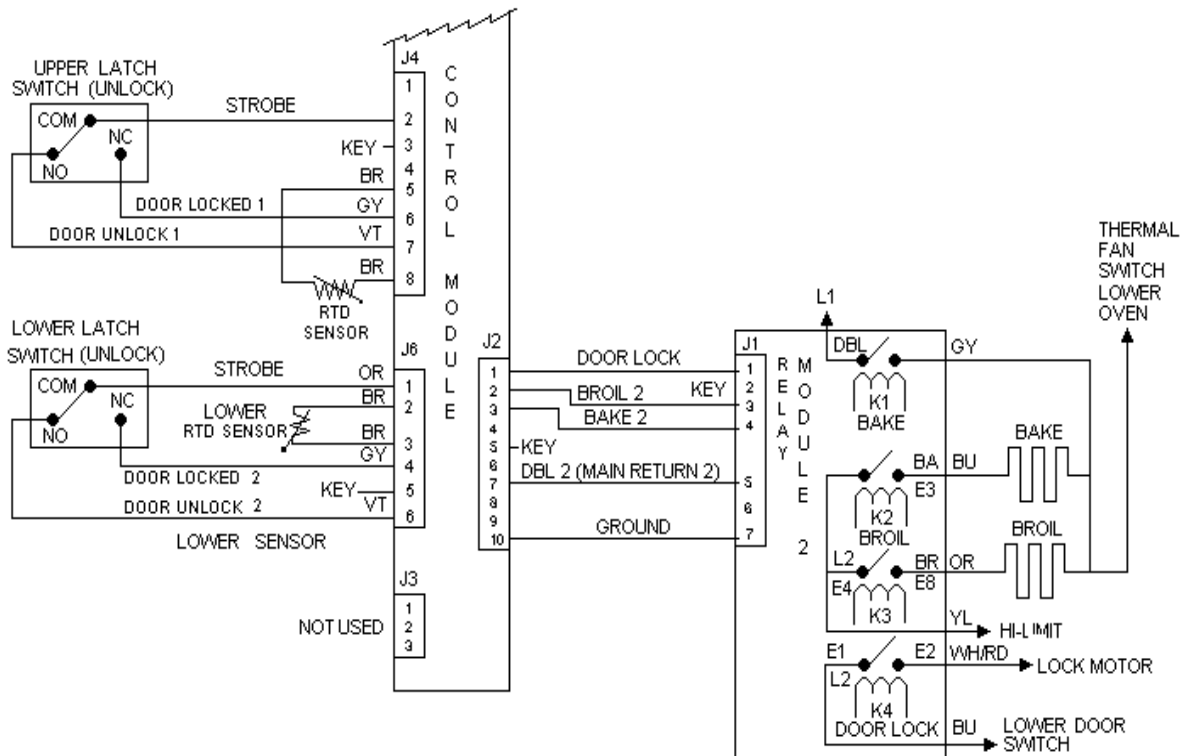
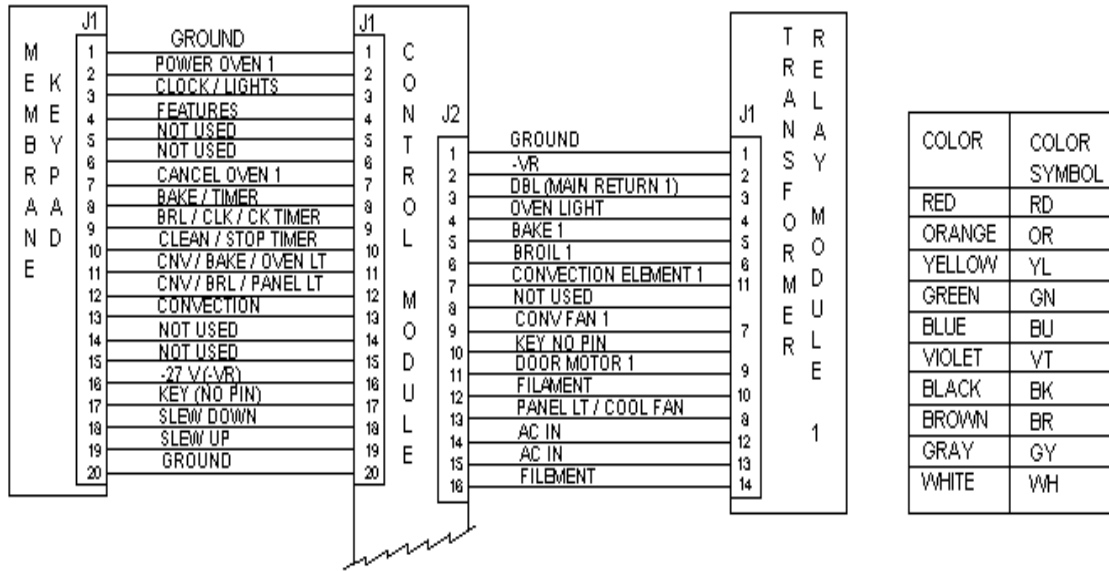
**COMPONENT TESTING INFORMATION**

Illustration	Component	Test Procedure	Result
<p>ERC4800</p>	<p>Quick test mode</p>	<p>Press and hold BAKE TIME pad for 5 seconds within the first 5 minutes of power up. (This must be the first pad touched.) Pressing each pad will force a response from the control, releasing the pad ends the response. Entries on control pad must be within 32 seconds of each other or control will exit mode. Mode can be exited by pressing OFF CANCEL</p>	<p>Clean Double line break (DLB) on            Bake DLB and bake on            Conv Bake DLB, bake and conv.fan on.            Convection DLB, conv. elem.and fan on.            Broil DLB, and broil on            Conv Broil DLB, broil and conv fan on            Stop Time Panel light and beeper on            Bake Time Displays checksum and sensor reading            Timer Displays dashes            Clock Display on full            Oven Light Oven light on            Panel Light Panel light and beeper on            Cancel Exits quick test mode            Slew pads Sequences through display segments.</p>
	<p>Relay board            does not actuate, verify power to            Verify input and output power</p>	<p>Listen for relay to actuate            If relay            relay board (120VAC).</p>	
	<p>Relay board            does not actuate, verify power to            Verify input and output power.</p>	<p>Listen for relay to actuate.            If relay            relay board (120VAC).</p>	



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

## COMPONENT TESTING INFORMATION (BLOCK DIAGRAM)

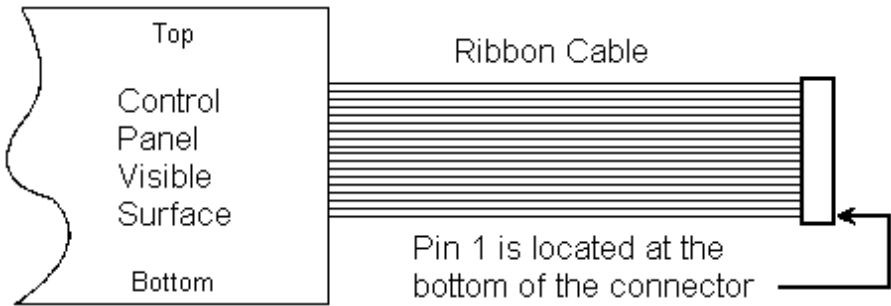
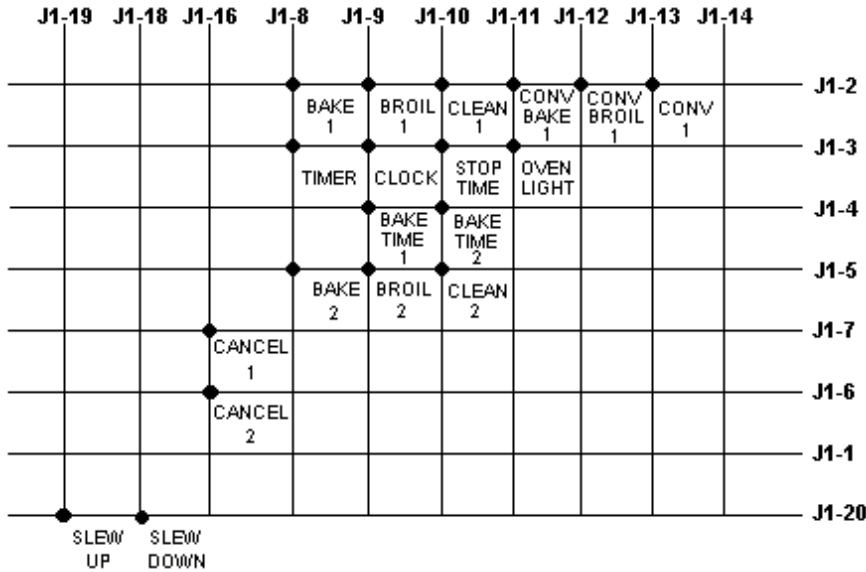




**WARNING** To avoid risk of electrical shock, personal injury or death, disconnect power before servicing, unless testing requires it.

**COMPONENT TESTING INFORMATION**

Continuity is indicated as 100Ω and below. Each pad must be press to perform the following test.



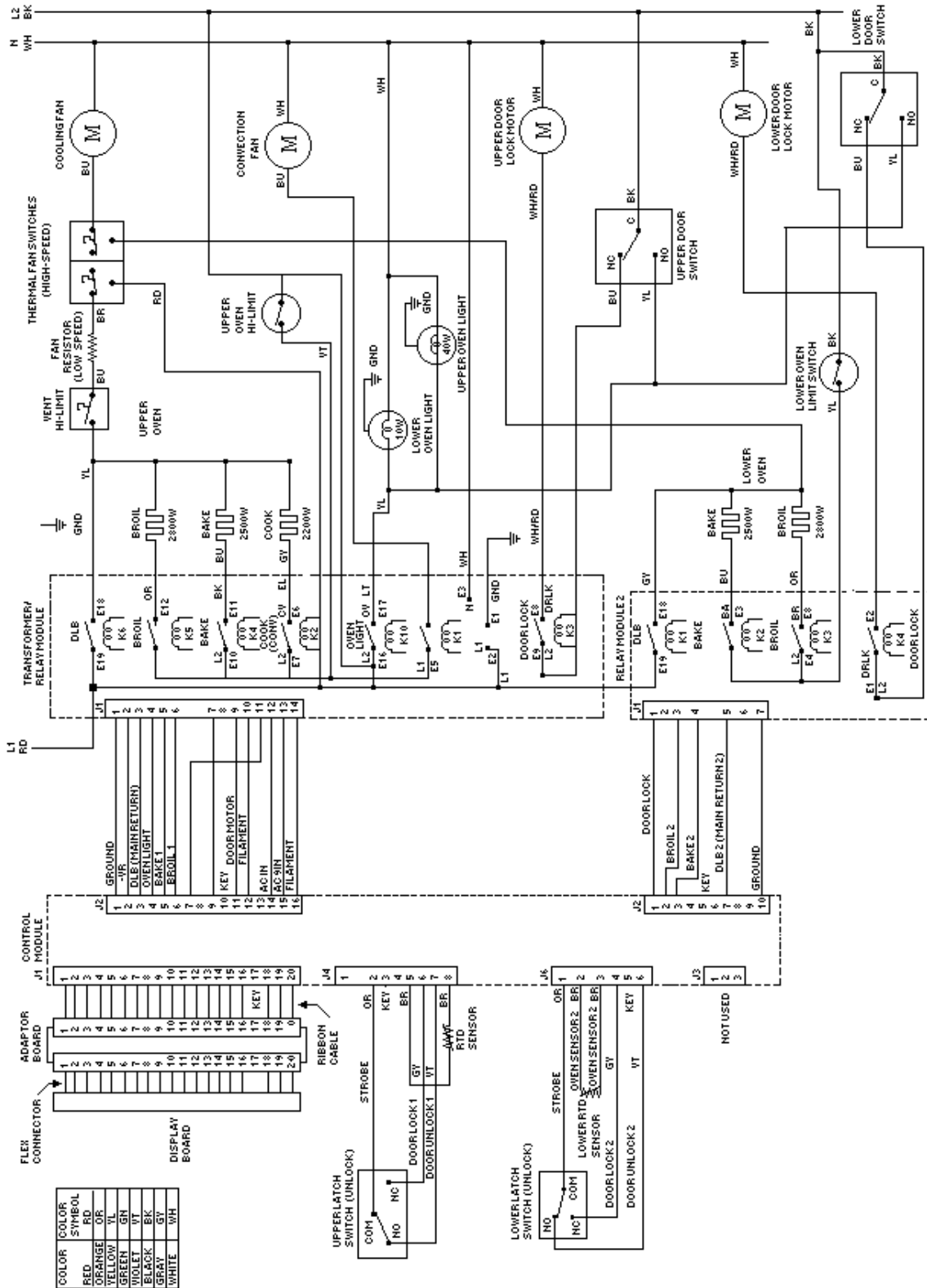
**Element Cycle**

Relay drive requirements are as a percentage of on time based on a 60 second cycle.

- Bake First rise = 100% bake, 50% broil, then 100% bake, 25% broil.
- Broil 0% bake, 100% broil
- Clean Stage 1 - 100% broil, 0% bake, for 15 minutes.  
Stage 2 - 25% broil, 100% bake.
- Convection First rise = 100% bake, 50% broil, then 100% convection element and 100% convection fan\*.
- Convection bake Same as bake plus 100% convection fan\*.
- Convection broil Same as broil plus 100% convection fan\*.

\*- Convection fan is de-energized when the oven door is opened.

# WIRING DIAGRAM (SCHEMATIC) BUILT-IN ELECTRIC 27" DOUBLE OVEN VEDO273





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