30" RADIANT SLIDE-IN CONVECTION RANGE

IMPORTANT SAFETY NOTICE: This information is intended for use by individuals possessing adequate backgrounds of electrical, electronic and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. Neither the manufacturer nor the seller can be responsible for the interpretation of this information or assume any liability in connection with its use.

DISCONNECT POWER BEFORE SERVICING

IMPORTANT: RECONNECT ALL GROUNDING DEVICES. All parts of this appliance capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

GROUNDING SPECIFICATIONS

Ground Path Resistance	0.10Ω Max.
Insulation Resistance	250KΩ Min.

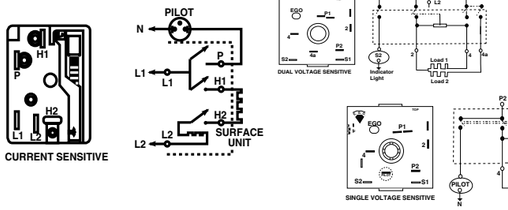
INSTALLATION REQUIREMENTS

Power Supply: This appliance must be supplied with proper voltage and frequency, and connected to an individual, properly grounded branch circuit, protected by a circuit breaker or time-delay fuse, as noted on rating plate. Wiring must conform to the National Electrical Codes. The rating plate is located on the lower front frame above the storage drawer.

Overcurrent Protection Ranges

NEC Rating	Maximum Kilowatt Rating		
	208V	236V	240V
35 Amp	___	12.4	12.4
40 Amp	12.4	15.4	16.0
50 Amp	17.4	21.4	22.0

SURFACE UNIT SWITCHES



CONTROL PANEL ASSEMBLY

Removing Faceplate

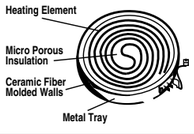
1. Turn the power off to the unit.
2. Remove all knobs.
3. Unscrew all faceplate retainers while holding the faceplate against the control trim. The retainers must only be hand-tightened.
4. Move the faceplate 3 inches away from the control panel and unplug the harness from the panel.
5. Repeat steps in reverse order to reassemble the unit.

Replacing Infinite Switches

1. Remove the two screws holding the infinite switch.
2. Remove steel control panel insert by removing 4 screws.
3. From the rear of the control panel assembly, unplug wires and remove infinite switch.
4. Repeat steps in reverse order to reassemble the unit.

RADIANT HEATING ELEMENT SYSTEMS

Heating Elements: The radiant heating element consists of a resistance ribbon attached to microporous insulation with molded ceramic fiber walls in a corrosion-protected metal tray.



The Heating Elements come in four sizes:
- **6″ – 240 Volt, 1500 Watts**
- **9″ – 240 Volt, 2500 Watts (Dual Unit 6″ & 9″)**
- **Bridge – 240 Volt, 2600 Watts**
- **6″ – 240 Volt, 120 Watts**

HOT SURFACE INDICATOR LIGHT

When glass temperature reaches 150°F, the hot surface indicator light is activated to alert consumer that glass surface is too hot to touch. The hot surface indicator light is turned on by an additional set of contacts within the temperature limiter.

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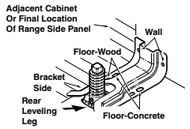
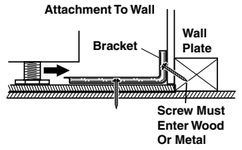
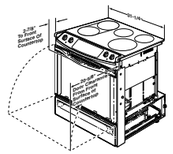
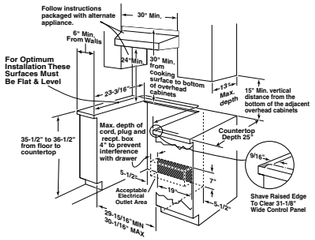
NOTE: Installation information for reference only. See Installation Instructions shipped with product for complete details and before attempting to install. Anti-tip bracket must be attached to the floor or wall to hold either right or left rear leg leveler. Make sure leg leveler reengages the bracket when range is moved for any reason.





MINIMUM CLEARANCES





Temperature Limit/Hot Light Switch

The Temperature Limit/Hot Light Switch performs two functions:

1. Turns on **HOT LIGHT** as soon as glass temperature reaches 150°F. The **HOT LIGHT** will remain on until the glass surface above the heating unit has cooled below 150°F (even after surface unit switch has been turned off).
2. Detects when glass temperature above a unit has exceeded its limit of approximately 1031°F and disconnects power to that unit. When glass temperature cools below 1031°F, the unit will turn back on.

The Temperature Limit/Hot Light Switch cannot be calibrated.

DUAL CIRCUIT CONTROL

The left-front and right-front elements have two cooking zones:

- To use the large 9″ cooking area or bridge, push to turn the control knob clockwise to desired setting.
- To use the small 6″ or 8″ cooking area, push to turn the control knob counterclockwise to desired setting.

When a cooking zone is activated, coils beneath the zone radiate heat through the glass cooktop to the utensil. The red glow of the coils will be visible through the glass. It will take the cooking zone on the glass surface a few moments to heat up. The coil cycles on and off to maintain your selected control setting.

REMOVABLE OVEN DOOR

COMPONENT COMPARTMENT AIRFLOW

The oven uses a fan for cooling the components. Air is pulled in by the fan blades and circulated in the component compartment. The air is exhausted through louvers below the control panel and out the slots above the door.

DOOR ASSEMBLIES:

The doors can be separated into two assemblies: (1) Outer assembly which consists of handle, vent trim, outer glass, bottom trim and frame; (2) Inner assembly which consists of inner panel, gasket, glass panels and insulation. The assemblies are held together by 2 screws on each side, along with 4 screws across the bottom.

CAUTION: Care must be taken when mounting door handle not to overtighten handle screws. Overtightening screws can damage handle. Hand-tighten screws (do not use electric driver). Make sure handle fits snuggly to door panel.

SELF-CLEAN DOOR GASKET: The door gasket is attached to the inner door panel by a chain of spring clips.

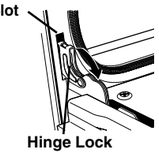
1. Locate spring clip at center of gasket and insert in hole on inner door panel near top.
2. Install gasket by bending at 90° beside clip and rocking into hole.
3. Tuck loose ends into slot at the bottom of inner panel.

REMOVABLE OVEN DOOR

The door is very heavy. Be careful when removing and lifting the door. Do not lift the door by the handle.

To Remove:

1. Fully open the door.
2. Push the hinge locks down toward the door frame, to the unlocked position. A tool, such as a small flat-blade screwdriver, may be required.
3. Firmly grasp both sides of the door at the top.



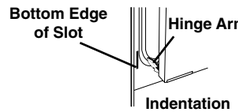
Pull hinge locks down to unlock

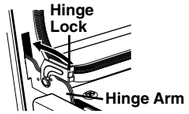
Removal position

4. Close door to the door removal position, which is halfway between the broil stop position and fully closed.
5. Lift door up until the hinge arm is clear of the slot.

To Replace:

1. Firmly grasp both sides of the door at the top.
2. With the door at the same angle as the removal position, seat the indentation of the hinge arm into the bottom edge of the hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.





3. Fully open the door. If the door will not fully open, the indentation is not seated correctly in the bottom edge of the slot.
4. Push the hinge locks up against the front frame of the oven cavity, to the locked position.
5. Close the oven door.

CONTROL PANEL REMOVAL

The control panel contains the ERC and infinite switches.

To service:

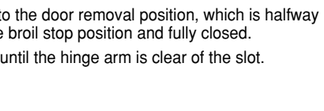
1. Remove faceplate (reference section on control panel assembly).
2. Remove screws (from bottom) securing control panel to vent trim.
3. Remove steel control panel insert by removing 4 screws.
4. Detach from main harness by unplugging the 15-pin and 9-pin connector blocks.
5. Remove 5 screws securing the control panel to the maintop assembly.
6. Control panel can now be removed.

COOKTOP REMOVAL

Before removing the cooktop, the control panel must first be removed (reference section on control panel removal). The cooktop is fastened to the body side extensions with two (2) screws. Remove the 2 screws and slide the cooktop assembly forward. Lift the cooktop off.

KEY PANEL

The electronic range control system consists of the control, key panel, oven sensor and door lock assembly.



The key panel (control panel) and electronic control are separate components but must be tested together.

Key Panel Test

Press each pad on the key panel followed by the pad. If the key panel is functioning properly, the following should occur:

- **Bake, Broil, Convection Bake, Convection Roast, Clean, Timer, Clock, Stop Time and Cook Time Modes – Audible tone plus display showing mode of operation selected.**
- **Clear/Off – Audible tone and display shows time of day.**
- **Probe – Audible tone and response if meat probe is plugged in.**
- **Numerical Pads – Audible tone. Can only be used after another function has been selected.**

Glass Touch Models ONLY – Lock Reference Command

When the control panel is accessed, the signals used by glass touch control may be adversely affected. To compensate for this change in signals, the following procedure must be followed every time the control panel is accessed.

1. **Make sure power to the wall oven is turned off.**
2. **Completely close the wall oven control panel and return the wall oven to its normal installation.**
3. **Apply power to the wall oven.**

Accessing the control panel area but not replacing the control:

4. **Enter Special Functions mode by pressing the Bake and Broil keys at the same time.**
5. **Reset the control by pressing the 9 and 0 or the Hour Down and Minute Down keys for 3 seconds at the same time.**
6. Approximately 20 seconds after the time of day is displayed, press the **1** and **5** or the **TEMP UP** and **MINUTE UP** keys. The control should briefly go blank, briefly display all segments, briefly display **"LOC REF**," display all segments for 30 seconds, and then display **"LOC REF**."
7. Acknowledge the **"LOC REF"** command by pressing the **6** and **8** or the **HOUR DOWN** and **MINUTE UP** keys at the same time. The control should then display the time of day.
8. The oven should be ready for normal operation.
9. **Test the functionality of the glass touch control, especially the CLEAR/OFF and/or CANCEL key(s).**

KEY PANEL (cont.)

Steps to Follow if the Control is NOT Replaced			
Step	**Key presses (Digi-pad)**	**Key presses (Slew-pad)**	**Action**
4	Bake & Broil	Bake & Broil	Enter SF
5	9 & 0	Hour Down & Minute Down	Reset control
6	1 & 5	Temp Up & Minute Up	Reset LOCK REF
7	6 & 8	Hour Down & Minute Up	Acknowledge LOCK REF

Accessing the control panel area and replacing the control:

4. After power is applied to the wall oven, the control will briefly display all segments, briefly display **"LOC REF**," display all segments for 30 seconds, and then display **"LOC REF**."
5. Acknowledge the **"LOC REF"** command by pressing the **6** and **8** or the **HOUR DOWN** and **MINUTE UP** keys at the same time. The control should then display the time of day.
6. The oven should be ready for normal operation.
7. **If steps 4–6 do not occur as described, repeat the process or follow steps 1–9 in the section above.**
8. **Test the functionality of the glass touch control, especially the CLEAR/OFF and/or CANCEL key(s).**

Steps to Follow if the Control IS Replaced			
Step	**Key presses (Digi-pad)**	**Key presses (Slew-pad)**	**Action**
5	6 & 8	Hour Down & Minute Up	Acknowledge LOCK REF

CONTROL VOLTAGE

TERMINALS	VOLTAGE
L1-N	120 VAC ALL THE TIME.
COM to N	120 VAC ALL THE TIME.
L1-BA L1-BR L1-CONV	240 VOLTS when oven is not calling for heat (BAKE, CONV. and BROIL relay contacts open).
*Light-L1	120 VOLTS when light is on.
COM to MDL	120 VOLTS not locking or unlocking, door closed.
L1 to CF	120 VOLTS when oven door is closed and Conv. Bake and Conv. Roast not operating.

CIRCUIT	TERMINALS	OHMS
Oven sensor Temp.	6 to 8	1100Ω @ Rm 2650Ω @ 865°F
Door Unlatched	3 to 5	0Ω
	4 to 5	open
Door Latched	4 to 5	0Ω
	3 to 5	open

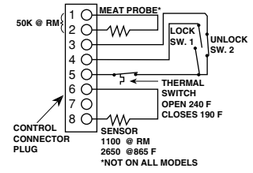
***If oven light is not working, make the following checks:**

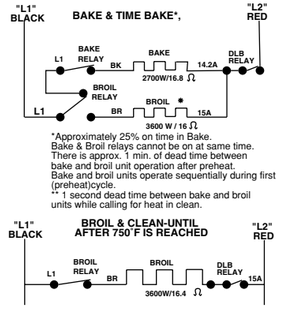
- **Check oven light bulb.**
- **Light is to come on when door is opened—check voltage across light socket terminals. It should read 120 VAC. If 0 volts, check jamb switch and wiring.**
- **Light is to come on when control light pad is pressed. RLY105 should click. Check voltage from P104-7 to L1. It should read 120 VAC. If 0 volts, check oven light keypad using ohmmeter test. If keypad is good, replace the control.**

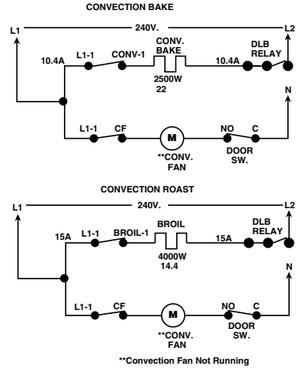
OVEN SENSOR AND DOOR SWITCH OHMMETER TEST

(See "Motorized Door Lock Operation" for door switch function explanation.) Remove power from oven. Make resistance measurement from side of sensor and lock switch connector, with exposed terminals disconnected from control.

OVEN SENSOR AND LOCK SWITCH CONNECTOR







**Convection Fan Not Running

****If convection fan is not working, make the following checks:**

- **Check the voltage from terminal CF to N on control—it should read 120V in Conv Bake or Roast mode. If not, replace the control.**
- **If voltage is OK, check the convection fan motor. It reads approximately 15–20Ω at room temperature. Check to make sure the fan shaft is not rubbing on the oven liner.**

SPECIAL FUNCTIONS

The control has a section that can be entered to change how the control will work. To enter this section:
Press and hold **BAKE** and **BROIL** pads for 2 (two) seconds and **"SF"** appears in the display. Select the area to change. When the change has been made, press **START** to return to Time of Day.

- **End-of-Cycle Tone** – Press **TIMER** pad. Display shows **"Con Beep"** when control is set for continuous **End-of-Cycle Tone** or **"Beep"** when set for noncontinuous.
- **°F or °C** – Press **BROIL** pad. Display will show either **"F°"** or **"C°."** Press **BROIL** pad again to change.
- **12-Hour, 24-Hour, or blank out Time-of-Day Clock** – Press **CLOCK** pad. Display will show **"12 hr," "24 hr," "OFF"** for blank clock. Press again to change.
- **12-Hour Shutdown** comes set to shut down after 12 hours of continuous operation; this can be eliminated—press **DELAY START** pad. Display will show **"No Shdn."** To turn back on, press **DELAY START** pad again and display will show **"12 Shdn."**
- **Sales Mode** (special feature for sales floor demonstration) – Press **CLOCK** and **TIMER** pads at the same time. Display will start to cycle through the different modes of operation.
- **Sabbath Mode** – This feature disables all but Bake and Timed Bake, overrides 12-Hour Shutdown, disables beeps, and puts symbols in the display during Bake. Access by pressing **DELAY START** pad until display shows **"SabbAtH."** Exit by pressing **DELAY START** until **"No Shdn"** or **"12 Shdn"** shows.

THERMAL SWITCH

The thermal switch is located on the floor of the component compartment in front of the fan motor. The thermal switch is wired in series with the lock motor switches. The limit switch opens at 240°F and closes when temperatures cool below 190°F. If the thermal switch opens during:

1. **Oven Temperature Below 600°F, program is cancelled when thermal switch opens. Lock motor will run and the words "LOCK" and "DOOR" will be flashing in the display.**
2. **Oven Temperature Above 600°F, any mode of operation control will go to -F2- failure code. When this condition exists, check the fan operation (look for obstructions), inspect oven installation (make sure grille areas are not blocked), oven insulation and lock circuit.**

BAKE THERMAL SWITCH

The bake thermal switch is wired in series with the lock motor switches. The limit switch opens at 162°F and closes at 140°F. If the thermal switch opens during Bake, the program is cancelled and the lock motor will run. The words "LOCK DOOR" will flash in the display.

ERC FAILURE CODES

The oven may stop operating but not give an F code on the display immediately. F codes are stored in nonvolatile eeprom memory until the same fault occurs twice consecutively. After that, the F code will be displayed. F codes can be recalled by pressing together TIMER, CLOCK, MIN DOWN or 9. While F codes are displayed, pressing MIN UP or 8 and HR DOWN or 6 together will clear them. A fault must exist continuously for 5 minutes before an F code is recorded (F2 and F8 are sooner).

FAILURE CODE	MEANING	CORRECTION
-F0-	Shorted OFF key	Determine if problem is with key panel or control by disconnecting ribbon cable and measuring flat cable pins 13 to 14. Should be open. Should be 100–150 ohms while pressing OFF key.
-F2-	Over temperature 1. Inside oven cavity as measured by sensor over 650°F unlatched or 915°F latched or 2. Cooling fan stalls while oven above 650°F—open thermal switch in yellow leads	• Welded relay contacts • Cooling fan stalled or blocked • Airflow to rear of unit • High resistance in oven sensor leads/connectors (especially at sensor in rear)
-F3-	Open oven sensor (under 950 ohms)	• Disconnect power. Disconnect sensor harness from control. Measure sensor resistance (white leads) to be ~1080 ohms at room temperature with 2 ohms per degree change. • Look for damaged harness terminals if not a bad sensor.
-F4-	Shorted oven sensor (over 2900 ohms)	• Disconnect power. Disconnect sensor harness from control. Measure sensor resistance (white leads) to be ~1080 ohms at room temperature with 2 ohms per degree change. • Separate sensor from harness to determine fault.
-F7-	Shorted matrix or START key	Determine if problem is with key panel or control by disconnecting ribbon cable and measuring flat cable using pinout chart. Allow up to 1000 ohms when pressing a key.
-F8-	EEPROM data shift failure	If repeated, replace control.
-F9-	Cooling fan stalls while above 650°F; open thermal switch in yellow leads	Cooling fan or airflow to control area.
-FF-	Loss of latch motor safety circuit	Replace control.

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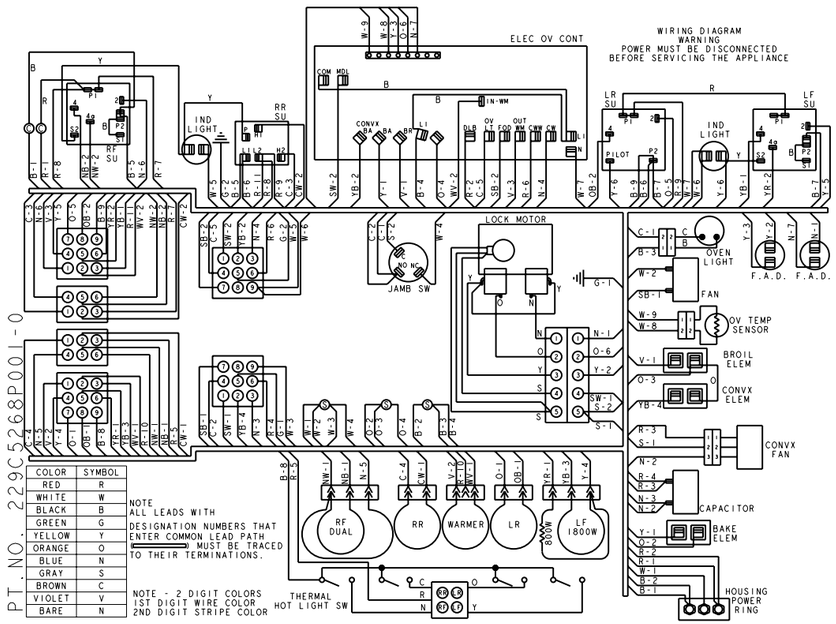
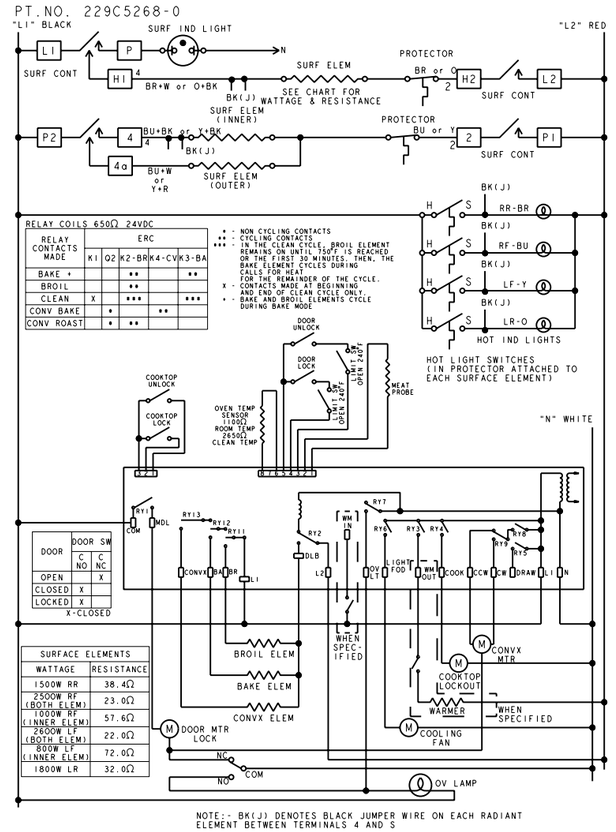


LAST WIRE NUMBER USED:
R-11
W-9
B-9
G-2
Y-6
O-6
N-7
S-2
C-5
V-3
YR-2
WV-2
NW-2
CW-2
NB-2
YB-4
OB-2
SB-2
SW-2

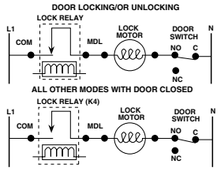


MOTORIZED DOOR LOCK

The motorized door lock assembly is located above the oven. The assembly consists of a lock motor cam and switch assembly, lock hook and mounting plate.

MOTORIZED DOOR LOCK OPERATION

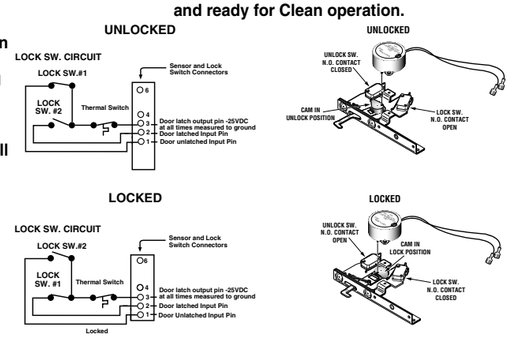
The lock motor is energized when the control is set for Clean and Clean Time is selected. The K4 Relay contacts will close and complete the circuit that supplies the voltage to the lock motor.



NOTE: Control display will flash "LOCK DOOR" if the door switch is in the "C" to "NC" position (door open).

- **The words "LOCK DOOR" will flash on and off in the display while the lock motor is in motion. When the door is locked, the words "LOCKED DOOR" remain illuminated in the display.**
- **CAM – The cam on the motor performs two functions:**
  1. **Positions the lock hook in the door to prevent opening during clean operation.**
  2. **Operates the lock switches which tell the control if the door is unlocked or locked and ready for Clean operation.**

NOTE: When door is either being locked or unlocked, both lock switches will be in the open position.



CONVECTION BAKE ELEMENT AND FAN ASSEMBLY

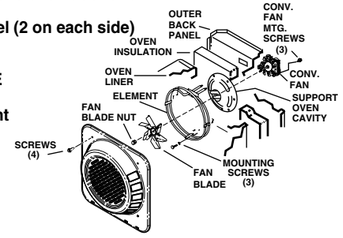
The convection bake element and fan assembly are located on the back wall of the oven liner behind the panel with the screen in the center.

TO ACCESS CONVECTION BAKE ELEMENT:

1. **Disconnect power to range; remove oven door and oven racks.**
2. **Remove 4 screws mounting panel (2 on each side) and pull forward.**

TO REMOVE CONVECTION BAKE ELEMENT:
Remove 3 screws mounting element to back wall and pull forward and disconnect wires.

TO SERVICE FAN:
Fan blade can be replaced from inside oven. Oven must be removed from installation to access convection fan motor.



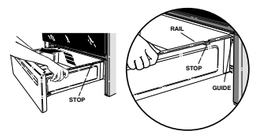
STORAGE DRAWER REMOVAL

To Remove:

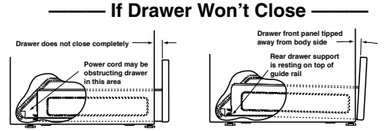
1. **Pull the drawer out until it stops.**
2. **Lift the front of the drawer until the stops clear the guides.**
3. **Remove the drawer.**

To Replace:

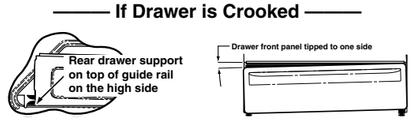
1. **Place the drawer rail on the guides.**
2. **Push the drawer in until it stops.**
3. **Lift the front of the drawer and push in until the stops clear the guides.**
4. **Lower the front of the drawer and push in until it closes.**



If Drawer Won't Close



If Drawer is Crooked



MODEL NUMBERS
JS968
JCS968

IMPORTANT
SERVICE INFORMATION
DO NOT DISCARD

Pub No. 31-14152 06-03 JR

229C4048G487