

608 CONVECTION OVEN

**CRISP, BROWN
AND HOT!**



Certified to ISO 9001, 1994

**WISCO'S SUPER CONVECTION OVEN
PREPARES FOOD PERFECTLY!**

WISCO INDUSTRIES, INC.

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LIMITED WARRANTY:

Manufacturer warrants this product to be free of defects in material and workmanship (except quartz lamps) for 90 days from date of purchase. If your product becomes defective within this time period, contact your Seller to arrange for repair or replacement as determined by Seller. **EXCEPT FOR THIS LIMITED WARRANTY, MANUFACTURER MAKES NO WARRANTIES EXPRESS OR IMPLIED AS TO THE PRODUCT, INCLUDING BUT NOT LIMITED TO ITS MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE.** Repair or replacement of a defective product shall be purchaser's sole and exclusive remedy against Manufacturer.

INTRODUCTION

Congratulations on your recent selection of the Wisco 608 series convection oven. Wisco Industries has a long tradition of producing top-quality dependable products designed to provide years of reliable service.

GENERAL

The compact size of the 608 convection oven offers convenient fast food preparation while meeting today's demand for performance with economy. The unique airflow prepares a wide range of bakery or fried products cooked evenly to a golden brown or crispy finish.

As a safety precaution, we recommend all instructions and safety tips appearing in this manual be reviewed prior to operation.

MODEL DESCRIPTION

CONSTRUCTION

Wisco's 608 series convection oven is equipped with a 22-gauge stainless steel outer enclosure. The front, back, and base are coated with a durable scratch resistant epoxy base paint.

SPECIFICATIONS

DIMENSIONS

Exterior (Housing) Width: 25" Height: 13" Depth: 17"

Interior (Cavity) Width: 13" Height: 9 1/2" Depth: 13"

ELECTRICAL

This unit is designed to operate on 120 volts AC, single phase. It is equipped with a 6-foot cord and plug. The 18 Amp unit requires a standard NEMA 5-20R receptacle rated 20 Amps.

ELECTRICAL RATING: 120 Volt AC, 60 Hz, 1720 Watt, 14.3 Amps: Model 608-1

120 Volt AC, 60 Hz, 2240 Watt, 18.6 Amps: Model 608

SHIPPING WEIGHT: 65 lbs. (boxed)

OPERATING INSTRUCTIONS

CAUTION: To prevent electrical shock, DO NOT apply power or try to operate the unit until the following preparation is completed.

PREPARATION

Prior to operation, the four legs must be attached to the base of the unit.

NOTE: A minimum clearance of 1 inch must be maintained between the oven and surrounding surfaces.

LOCATION AND FUNCTION OF CONTROLS

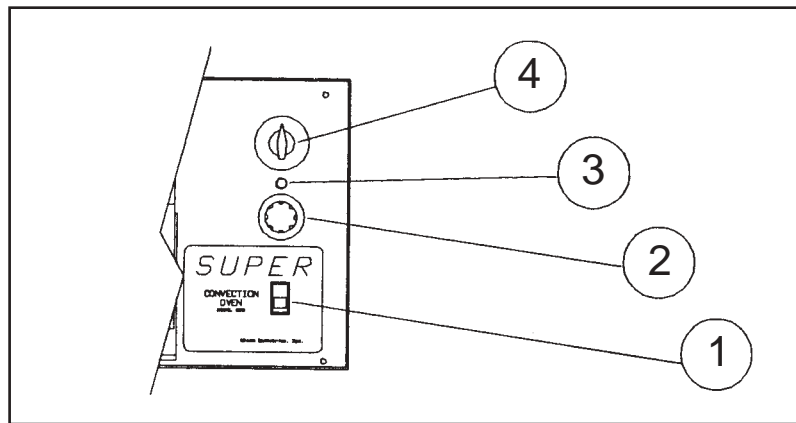


Figure 1. Control Panel

- 1) MAIN POWER SWITCH:** Provides access to the power main and actuates the blower motor directly. The red lamp within the switch indicates when the power is on.
- 2) REGULATING THERMOSTAT:** Regulates the desired internal temperatures, ranging from 65 to 500 degrees Fahrenheit.
- 3) INDICATOR LAMP:** Indicates when the desired temperature has been reached. The lamp illuminates when the heating element is in an active mode.
- 4) TIMER:** The mechanical timer ranges from 0–30 minutes. A single chime signals the completion of the baking cycle – **it does not shut off the oven**. When setting the timer, turn past the 5-minute mark and then to the desired time if less than 5 minutes (optional timer configurations may apply).

OPERATION *(Baking Hints)*

PREHEAT

Always preheat the oven before baking or roasting. Turn the power switch ON and set the thermostat to the desired temperature. The red indicator light will turn off when the selected temperature has been reached. For frozen products, the preheat cycle should be set 50°F–75°F above the suggested cooking temperatures, then reset to the suggested temperatures when the product is loaded.

TEMPERATURE

Most products require lower temperatures than suggested for deck or range ovens. A standard temperature reduction of 50°F is recommended as a starting point. Actual baking will vary pending product weight and consistency. If the edges of the product are done and the center is still raw, or if there is extensive color variation, reduce the thermostat setting by 15–25°F until the desired results are achieved. Excessive temperatures will not reduce baking time.

TIME

Convection ovens generally bake 25–40% faster than deck or range ovens, even though lower temperatures are used.

PRODUCT

Load the oven from the bottom up, centering the pans on the racks. To ensure even baking, equal amounts of the product should be used. Different amounts of the product in different pans causes uneven baking.

GENERAL MAINTENANCE

Wisco ovens are designed to be as trouble and maintenance free as possible. However, to maintain optimum performance, a regular cleaning schedule should be observed.

CLEANING OF OVEN

INTERIOR: The stainless steel can be easily cleaned with mild detergent and hot water on a daily basis. For heavier buildup, a standard “non” abrasive oven cleaner should be used.

EXTERIOR: The stainless steel and painted exterior should be cleaned with a mild detergent, glass cleaner, or substitute cleaner that is not abrasive. **DO NOT** allow grease or dust particles to accumulate in the louvers. Adequate airflow is essential for proper cooling of the internal components.

GLASS DOOR: Use only “non” abrasive cleaners and pads.

TROUBLESHOOTING GUIDE

When more than one possible cause is listed, check the components in the order provided. The list is arranged from most probable cause to least.

PROBLEM	CAUSE
No power to unit	Check outlet connection Check fuse at main circuit Main power switch Limiting thermostat
Uncontrollable temperature	Regulating thermostat
No heat	Regulating thermostat Heating element Limiting thermostat
Irregular time length	Timer
No internal airflow	Motor
Motor shuts down after running for short periods	Obstructing object near vent Air vents need cleaning

608 SERVICE/REPAIR GUIDE *(Service Technicians)*

NOTE: The service technician should brief him or herself with the instructions relating to the component in question prior to working on this unit.

The unit has been designed to allow access and replacement of most electrical components by simply removing the outer enclosure, with the exception of the regulating thermostat, heating element, and high limit thermostat.

CAUTION: ALWAYS UNPLUG THE UNIT PRIOR TO SERVICING.

OUTER ENCLOSURE REMOVAL

REQUIRED TOOLS: Phillips screwdriver

- 1) **REMOVE OUTER ENCLOSURE:** Extract the 8 screws on the bottom (4 per side), 13 screws on the back (not the 5 along the base), and loosen the 4 screws across the top of the front control panel. With the oven facing you, remove the outer enclosure by first lifting the left side out slightly and up, and then the right. Be sure to flex the right side enough to allow the internal shroud to clear the cooling fan.

IMPORTANT ENCLOSURE REASSEMBLY NOTE: Check that the entire front flange on the outer enclosure is between the primary and secondary front panels, not behind both of them (see Figure 3). When tightening the 4 screws across the front control panel, put pressure on the enclosure, keeping it flush against the panel.

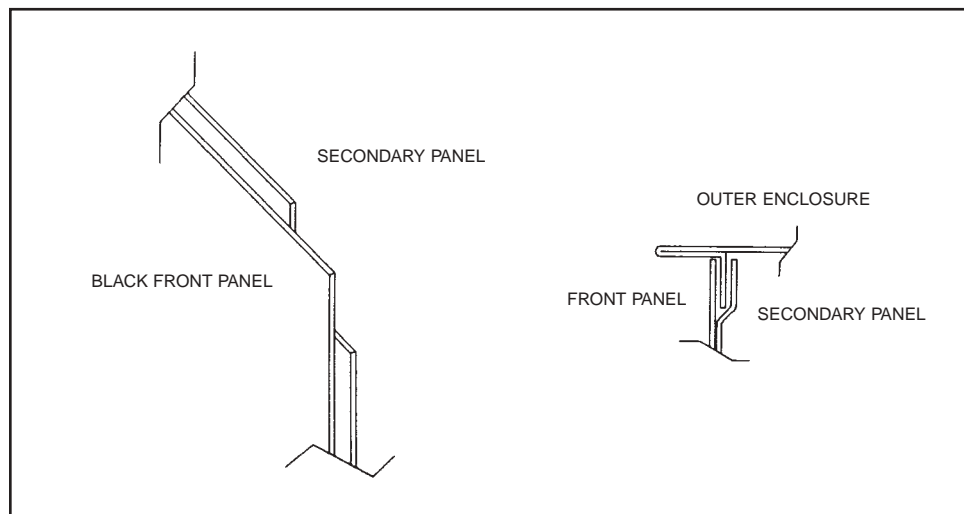


Figure 2. Enclosure Flange

TIMER

REQUIRED TOOLS: 1/2" wrench/driver
Phillips screwdriver

- 1) **REMOVE OUTER ENCLOSURE:** See Outer Enclosure Removal.
- 2) **REMOVE TIMER KNOB:** Knob is a push on/pull off press fit. Pull knob out straight away from control panel.
- 3) **REMOVE PAL NUT:** Use the 1/2" wrench to remove the pal nut, timer dial, and timer.

TIMER REPLACEMENT NOTE: The timer must be installed with the "TOP" stamp in the upright position to function properly.

Reverse steps 1–3 to install timer and reassemble oven.

POWER SWITCH

REQUIRED TOOLS: Phillips screwdriver

- 1) **Remove Outer Enclosure:** See Outer Enclosure Removal.
- 2) **REMOVE WIRES:** The three wires use quick connect terminals that simply push on/pull off. See Figure 4 for correct wiring of switch.
- 3) **REMOVE POWER SWITCH:** Panel mount style, depress finger tabs on top and bottom of switch and push switch through opening in control panel.

Reverse steps 1–3 to install power switch and reassemble oven.

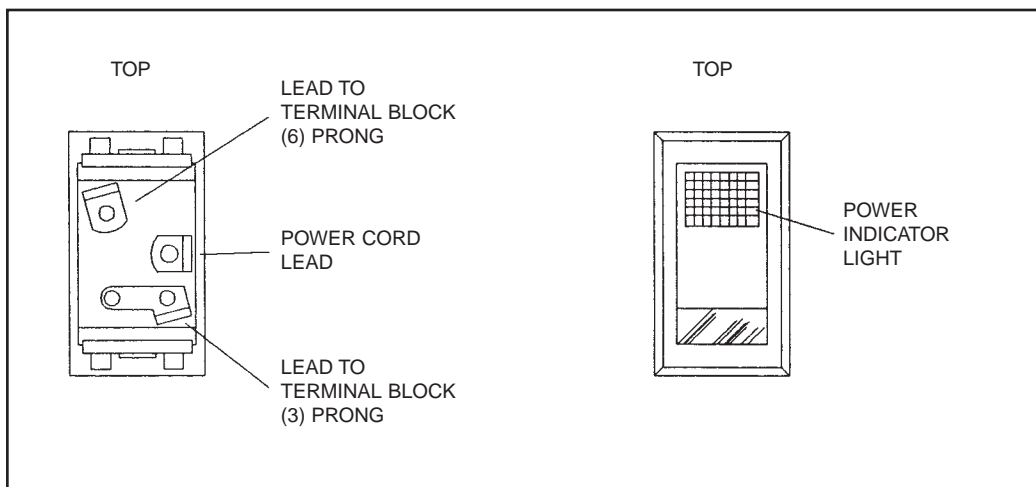


Figure 3. Power Switch

INDICATOR LAMP

REQUIRED TOOLS: Phillips screwdriver

- 1) **REMOVE OUTER ENCLOSURE:** See Outer Enclosure Removal.
- 2) **REMOVE WIRES:** The two wires use quick connect terminals that simply push on/pull off. These wires are interchangeable between the two terminals.
- 3) **REMOVE LAMP:** Panel mount style, depress finger tabs on each side of lamp body and push through opening in control panel.

Reverse steps 1–3 to install lamp and reassemble oven.

MOTOR

REQUIRED TOOLS: Phillips screwdriver
3/8" driver w/extension
1/8" Allen wrench
3/32" Allen wrench
5/64" Allen wrench

- 1) **REMOVE OUTER ENCLOSURE:** See Outer Enclosure Removal.
- 2) **REMOVE MOTOR MODULE ASSY:** Disconnect the 2 black motor leads from the terminal block. Use the 3/8" driver to remove the 8 hex nuts anchoring the motor module to the heat module and remove as a complete unit.
- 3) **REMOVE MOTOR FROM MOTOR MODULE IN THE FOLLOWING STEPS:**
 - A. **REMOVE BLOWER WHEEL:** Use the 1/8" Allen wrench to loosen the set screw in the blower wheel, then pull the wheel off the motor shaft. When replacing the blower wheel, there should be roughly 1/8" clearance between the back of the blower wheel and the shield. The set screw must be aligned on the flat of the motor shaft when tightened.
 - B. **REMOVE MOTOR:** Use the 3/8" driver to remove the 4 10-32 hex nuts holding motor to motor module.
 - C. **REMOVE COOLING FANS: Major:** Use the 3/32" Allen wrench to remove the fan. When reinstalling the fan, the hub should be flush with the motor shaft end, and the set screw aligned on the shaft should be flat when tightened. (Minor): Use the 5/64" Allen wrench to remove the fan. When reinstalling the fan, it should have 1/16"–1/8" clearance between the hub and the motor end case.

Reverse these steps to install the motor and reassemble the oven. Note: The motor is installed so that wires come out of the bottom between the fan shrouds.

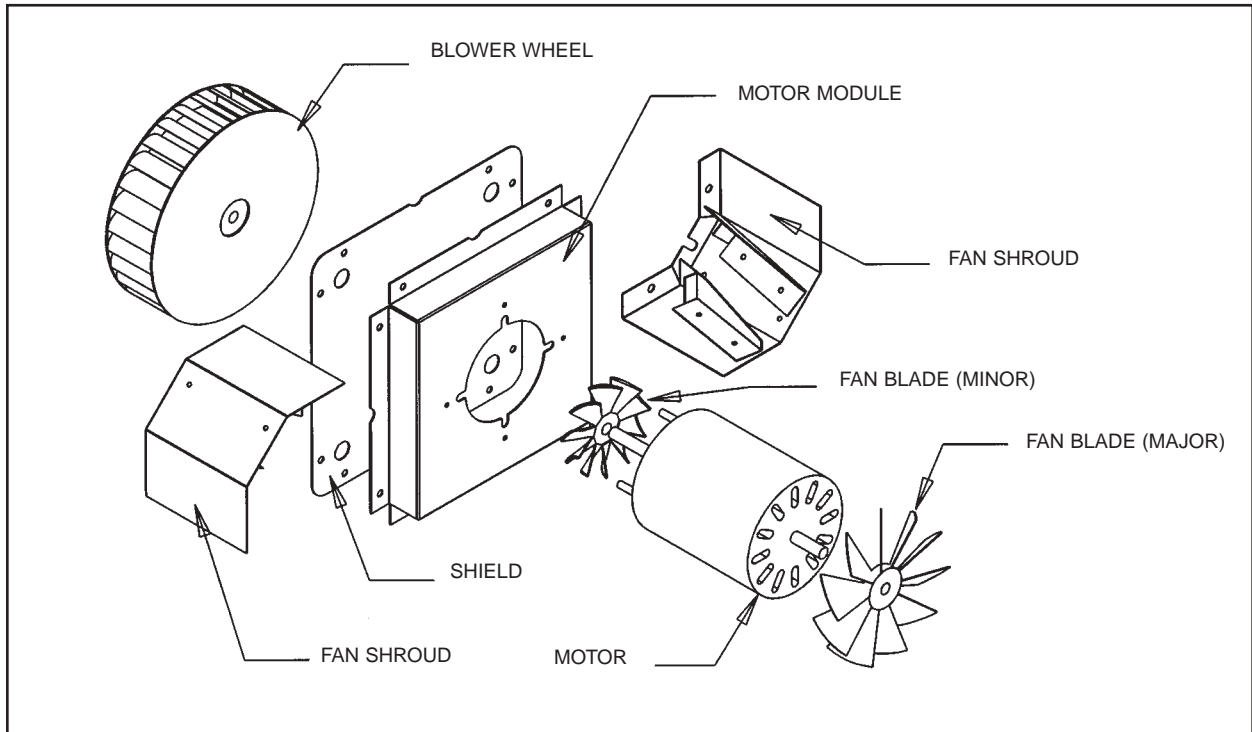


Figure 4. Motor Module Assembly

REGULATING THERMOSTAT

REQUIRED TOOLS: Phillips screwdriver
 medium screwdriver
 small screwdriver

- 1) REMOVE OUTER ENCLOSURE:** (See Outer Enclosure REmoval).
- 2) REMOVE SUPPORT RACK:** Remove the 2 finger screws right and left midway up the front of the inner cavity. Flex the support rack around the finger screw heads and bulb guard. Once the front of the rack has cleared the screws, gently flex the rack into a parallelogram with the right side back and pull straight out.
- 3) FREE CAPILLARY BULB:** Loosen the 2 finger screws holding the thermostat bulb guard in place just enough to free the capillary bulb.

REGULATING THERMOSTAT *(continued)*

- 4) **REMOVE BACK PANEL:** Extract the 2 screws located off-center near the top and bottom of the back panel, then extract the 5 screws along the base. This will allow access to pass the capillary line through the back of the inner cavity.
- 5) **REMOVE THERMOSTAT KNOB:** Use the small screwdriver to loosen the knob set screw and pull the knob straight off the thermostat shaft.
- 6) **REMOVE THERMOSTAT:** Use the medium screwdriver to extract the 2 screws anchoring the thermostat to the control panel. Once free, transfer the wires to the replacement thermostat. See Figure 5 for correct wiring.

Reverse steps 1–6 to install thermostat and reassemble oven.

IMPORTANT THERMOSTAT REASSEMBLY NOTE: Space the thermostat knob 1/8" off the front control panel. Rotate the knob to check for proper clearance, the knob should not bind against the control panel during the rotation. The set screw must be aligned with the flat on the thermostat shaft. Anchor the wires clear of the motor fan blades with wire ties.

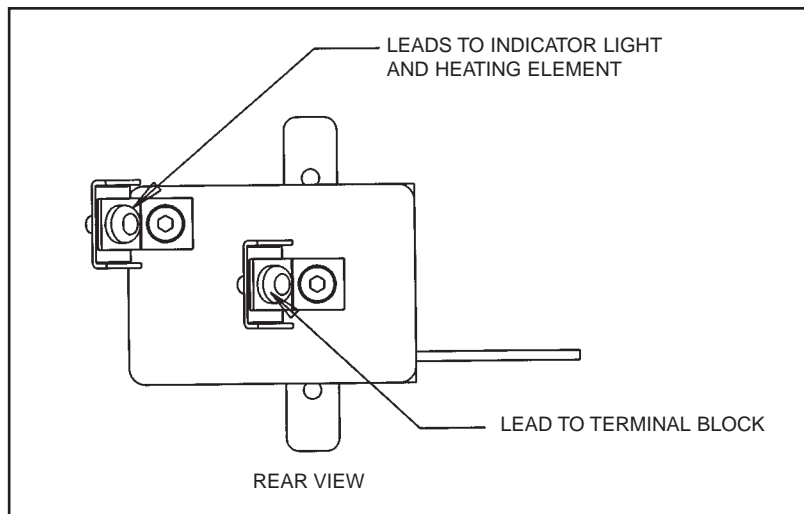


Figure 5. Thermostat Assembly

HEATING ELEMENT

REQUIRED TOOLS: Phillips screwdriver

- 1) **REMOVE OUTER ENCLOSURE:** See Outer Enclosure Removal.
- 2) **REMOVE SUPPORT RACK:** Remove the 2 finger screws right and left midway up the front of the inner cavity. Flex the support rack around the finger screw heads and bulb guard. Once the front of the rack has cleared the screws, gently flex the rack into a parallelogram with the right side back and pull straight out.
- 3) **REMOVE AIR VENT PANEL:** Remove the 2 finger screws. This will release the bulb guard, capillary bulb, and the deflector panel, allowing access to the heating element.
- 4) **REMOVE ELEMENT SUPPORTS:** Remove the element supports (3) and disconnect the wires to the element.
- 4) **REMOVE HEATING ELEMENT:** Remove the sheet metal screws attaching the heating element, and remove through the inner cavity.

Reverse steps to install the heating element and reassemble the oven.

DOOR HINGE & LATCH

REQUIRED TOOLS: Phillips screwdriver
small screwdriver

The door gasket should fit snugly against the front face of the control panel. The latch should catch and lock solidly onto the strike plate, sealing the door gasket snugly against the control panel.

HINGE ADJUSTMENT

- 1) **REMOVE COSMETIC HINGE COVER:** The hinge covers are a spring fit and remove by sliding directly away from the door. It may be necessary to use a small screwdriver to encourage them initially.
- 2) **ADJUST HINGES:** Loosen the 4 screws holding the hinges to the door just enough to allow repositioning of the ribbed channel locks and door. The door must be open during the adjustment process. The channel lock should be positioned evenly and equally on the upper and lower hinge to avoid putting a twist in the door. Use the number of visible ribs as your positioning guide. See Figure 6.
- 3) **REINSTATE HINGE COVER:** There is an offset on one side of the cover. That offset must face outward toward the front when installed.

DOOR HINGE & LATCH (continued)

LATCH ADJUSTMENT

The latch features a magnetic catch system. The magnetic catch is the primary lock. When properly aligned, the door will latch positively with minimal pressure, sealing the gasket snugly against the control panel.

ALL ADJUSTMENTS FOR THE LATCH ARE PERFORMED ON THE HANDLE.

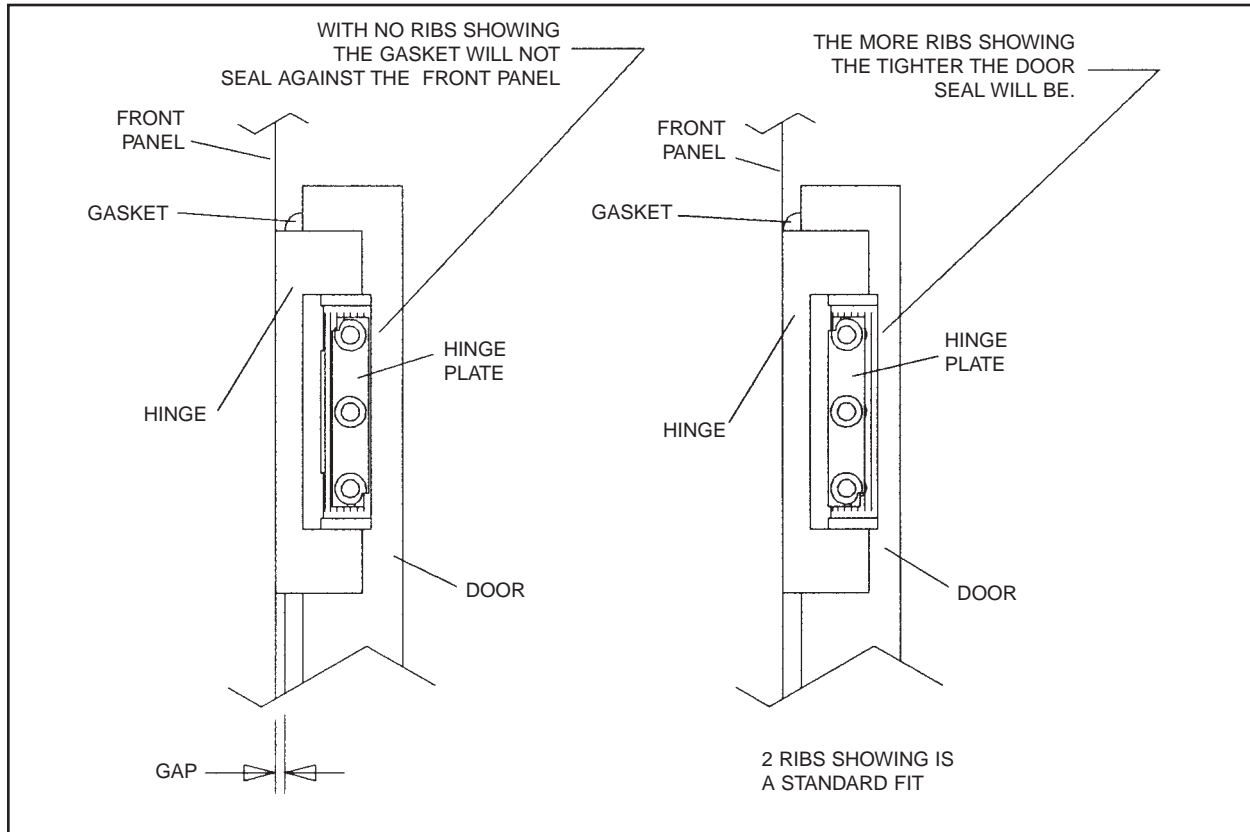
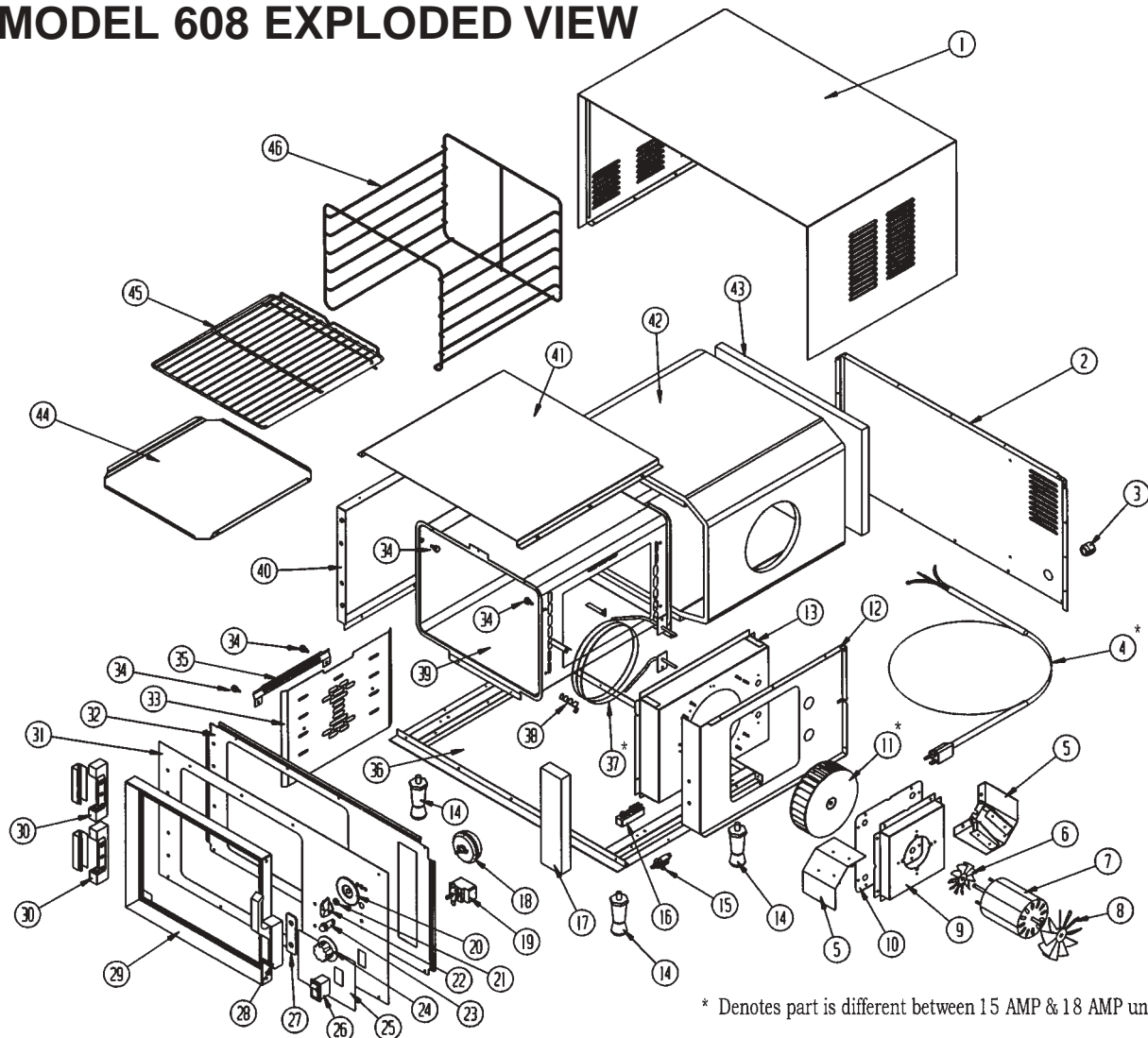


Figure 6. Hinge Channel Lock

MODEL 608 EXPLODED VIEW



* Denotes part is different between 15 AMP & 18 AMP units

No.	PART No.	DESCRIPTION	No.	PART No.	DESCRIPTION
1	0017802	Enclosure Assy.	25	1O13143	Decal "Super"
2	0017760S	Conv. Oven-Back Panel	26	0017761	Rocker Switch #8951K 161
3	0016024	Strain Relief Heyco SR-31-2	27	0017832	Strike Plate
4*	00448	Cordset 15amp (prt.# 008079 - 18amp)	28	0017834	Edgemount Latch R27-1010-X
5	0017788	Fan Shroud Weldment	29	0017789	Oven Door Assy
6	0017722	Fan Blade- Minor	30	0017756	Hinge
7	0018034	Blower Motor 7130-0039	31	0017738	Front Panel
8	0017749	Fan Blade AD4	32	0017758S	Secondary Front Panel
9	0017182	Motor Module	33	0017712S	Air Vent
10	0017183	Shield	34	0016428	10-32 X 3/8 Brass Thumbscrew
11*	0017736	Blower Wheel (prt.# 0017725 - 18amp)	35	0017718S	Bulb Guard
12	0017184	Inner Wall	36	0017780S	Base Weldment
13	0017181	Housing Heat Module	37*	0018025	Heating Element 1500W(prt.# 0017735-2000W,18amp)
14	0017702	Leg, adj. black plastic / Rubber Tip(prt.# 009103)	38	0017731	Element Support
15	0017706	Temperature Limiter Assy	39	0017783A	Inner Housing - Weldment
16	0017762	Terminal Block #ESB1-3-6	40	0017850	Stiffening Panel
17	0017773	Side Insulation 1 X 2 1/2 X 9	41	0017747R	Insulation Shield
18	0017726	Timer #20052 30 Min	42	0017771	Oven Wrap 1/2 X 15 X 96
19	0017785	Thermostat Assy.	43	0017772	Back Insulation 1X 10 X 16
20	1O13142	Dial #D546 30Min	44	0017840	Cookie Pan
21	00175	Timer Nut	45	0017745	Grill Shelf
22	00106	Timer Knob #K35B1	46	0017737C	Cookie Rack
23	009092	Pilot Light ID#1 051QA1	*	*	*
24	0017742	Thermostat Knob #1940-BM	*	*	*

WIRING DIAGRAM AND COMPONENTS LIST

NO.	PART NO.	DESCRIPTION	QTY
1	0017761	Switch (20 Amp)	1
2	0017723	Motor	1
3	0017743	Thermostat (525°F)	1
4	0017735	Heating Element	1
5	0017762	Terminal Block	1
6	009093	Lamp (Red)	1
7	008079	Cord (20 Amp)	1
8	00131	Strain Relief	1
9	009681	Wire Nuts	2
10	0017705	20" 12GA AWG White Wire	2
11	008212	Limiting Thermostat	1
12	0017707	8" 12GA AWG White Wire	2
13	009040	8" 12GA AWG White Wire	2
14	0021379	11" 12GA AWG White Wire	1
15	0017733	15" 12GA AWG White Wire	1
16	0017734	12" 12GA AWG White Wire	1
17	0010028	6" 18GA AWG White Wire	1

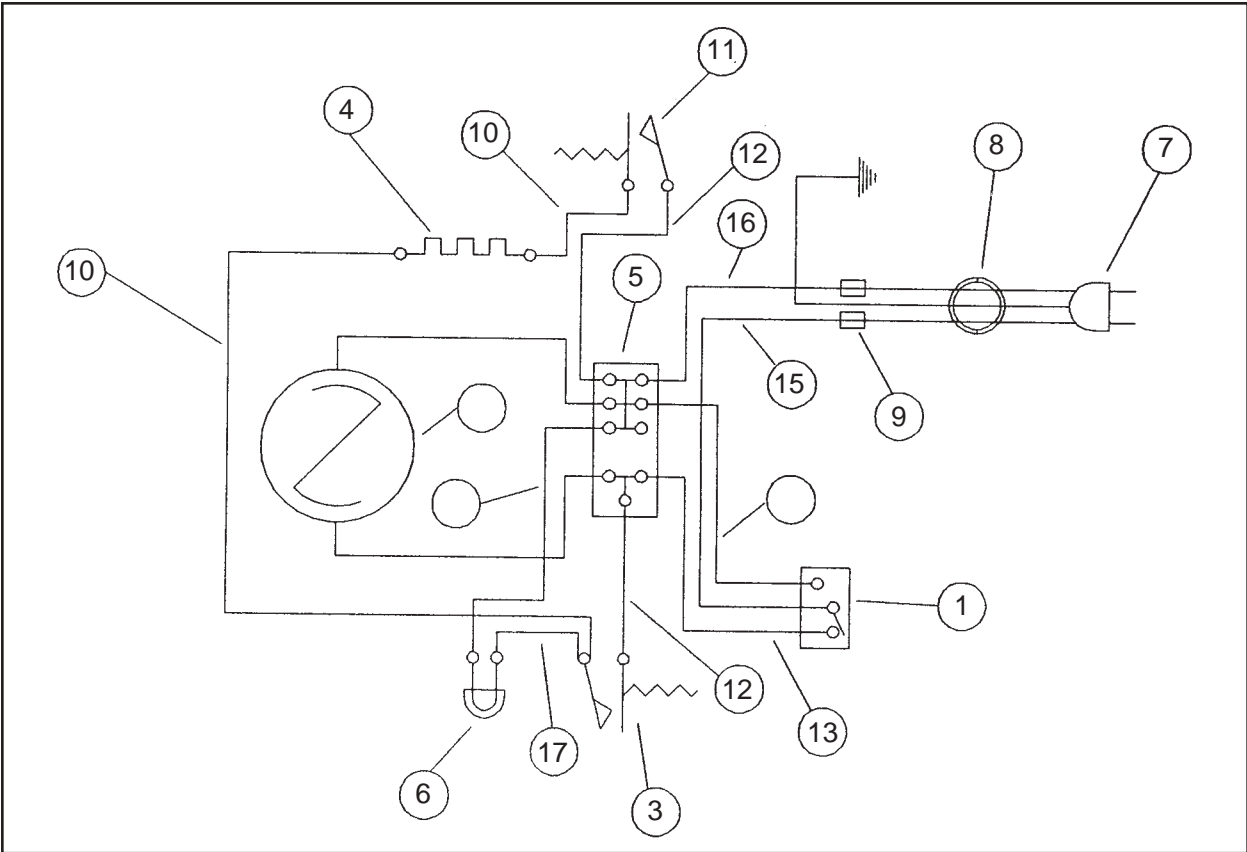


Figure 7. 608 Wiring Diagram

SUGGESTED TIMES AND TEMPERATURES

NOTE: Actual times and temperatures may vary considerably from those shown below. They are affected by the product weight, consistency, temperature, recipe, and type of pan. If your recipe differ record your proven time and temperature for ready reference

PRODUCT	DEGREE °F	TIME
MEATS		
Lasagna	275°F	90 mins.
Hot Dogs, 10 1 lb.	325°F	10–15 mins
Baked Stuffed Pork Chop	375°F	20–30 mins.
Bacon (on racks)	400°F	5–7 mins.
POULTRY		
Chicken Breast & Thigh	350°F	40 mins.
Chicken Back & Wing	350°F	35 mins.
Chicken (2 1/2 lbs. Quartered)	350°F	30 mins.
Chicken/Turkey Pot Pies	325°F	30–35 mins.
FISH & SEAFOOD		
Fish Sticks	325°F	16–18 mins
Fish Steaks (5 oz. frozen)	350°F	20 mins.
Baked Stuffed Shrimp	400°F	6–7 mins.
Baked Stuffed Lobster	400°F	10 mins.
Lobster Tails (frozen)	425°F	9 mins.
POTATOES		
Idaho Potatoes (120 ct.)	400°F	50 mins.
Oven Roasted Potatoes	325°F	10 mins.
BAKED GOODS		
Frozen Berry Pie (22 oz.)	350°F	30 mins.
Fresh Apple Pie (20 oz.)	375°F	25 mins.
Pumpkin Pie	300°F	30 mins.
Apple Turnovers	350°F	15 mins.
Bread (1 lb. loaves)	325°F	30 mins.
Corn Bread (Northern)	325°F	25 mins.
Corn Bread (Southern)	375°F	15–20 mins.
Hamburger Rolls	300°F	15 mins.
Yeast Rolls	325°F	25 mins.
Croissant	325°F	15–18 mins
French Bread	375°F	18–20 mins.
Chocolate Cake	325°F	20 mins.
Fruit Cake	275°F	70 mins.
Brownies	325°F	20 mins
Danish	325°F	12 mins.
Sugar Cookies	300°F	15 mins.
Chocolate Chip	325°F	10 mins.
Peanut Butter Cookies	325°F	10 mins.



Certified to ISO 9001, 1994

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