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**MARK V-100 XCEL
CONVECTION OVEN
INSTALLATION - OPERATION - MAINTENANCE**

(Formerly MARK V XCEL)



BLODGETT OVEN COMPANY

www.blodgett.com

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PN 36433 Rev R (10/15)

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Your Service Agency's Address:

Model

Serial number

Oven installed by

Installation checked by

IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

The information contained in this manual is important for the proper installation, use, and maintenance of this oven. Adherence to these procedures and instructions will result in satisfactory baking results and long, trouble free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

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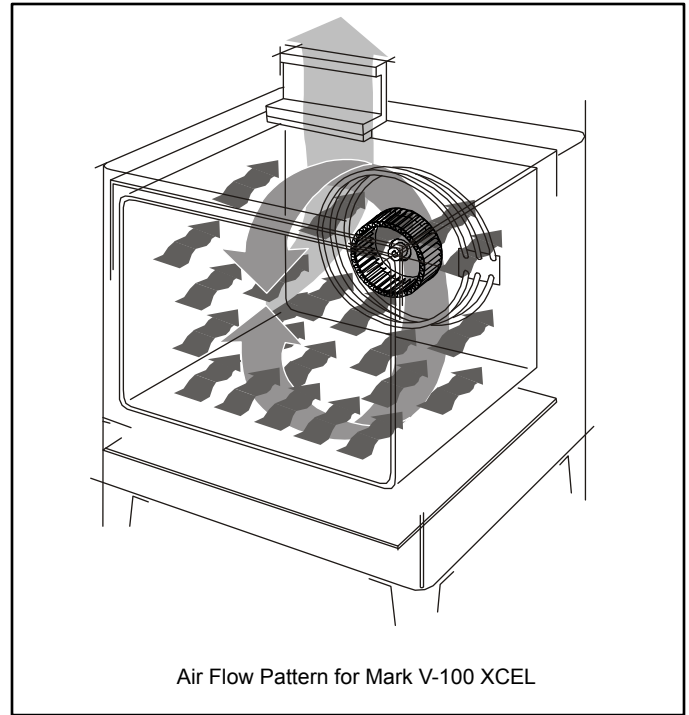


Installation

Oven Description and Specifications

Cooking in a convection oven differs from cooking in a conventional deck or range oven since heated air is constantly recirculated over the product by a fan in an enclosed chamber. The moving air continually strips away the layer of cool air surrounding the product, quickly allowing the heat to penetrate. The result is a high quality product, cooked at a lower temperature in a shorter amount of time.

Blodgett convection ovens represent the latest advancement in energy efficiency, reliability, and ease of operation. Heat normally lost, is recirculated within the cooking chamber before being vented from the oven: resulting in substantial reductions in energy consumption and enhanced oven performance.



Air Flow Pattern for Mark V-100 XCEL

Figure 1

ELECTRICAL RATINGS- MKV1XL/AA								
VOLTAGE	HZ	KW	PHASE	MAX LOAD (AMPS)				MOTOR
				L1	L2	L3	N	
U.S. and Canadian installations								
208	60	11.0	1	53	—	53	—	6 AWG
208	60	11.0	3	33	28	33	—	8 AWG
220-240	60	11.0	1	50	—	50	—	6 AWG
220-240	60	11.0	3	28	23	28	—	8 AWG
440	60	11.0	3	16	13	16	—	12 AWG
480	60	11.0	3	15	12	15	—	12 AWG
General Export installations								
220-240	50	11.0	1	50	—	50	—	Size per local code
220/380	50	11.0	3	17	15	15	4	Size per local code
240/415	50	11.0	3	19	14	14	5	Size per local code
230/400	50	11.0	3	19	14	14	5	Size per local code

Delivery and Location

DELIVERY AND INSPECTION

All Blodgett ovens are shipped in containers to prevent damage. Upon delivery of your new oven:

- Inspect the shipping container for external damage. Any evidence of damage should be noted on the delivery receipt which must be signed by the driver.
- Uncrate the oven and check for internal damage. Carriers will accept claims for concealed damage if notified within fifteen days of delivery and the shipping container is retained for inspection.

The Blodgett Oven Company cannot assume responsibility for loss or damage suffered in transit. The carrier assumed full responsibility for delivery in good order when the shipment was accepted. We are, however, prepared to assist you if filing a claim is necessary.

OVEN LOCATION

The well planned and proper placement of your oven will result in long term operator convenience and satisfactory performance.

The following clearances must be maintained between the oven and any combustible or non-combustible construction.

- Oven body right side - 0" (0 cm)
- Oven body left side - 0" (0 cm)
- Oven body back - 0" (0 cm)
- Oven body bottom - 1/2" (1.2 cm)

The following clearances must be available for servicing.

- Oven body sides - 12" (30 cm)
- Oven body back - 12" (30 cm)

It is essential that an adequate air supply to the oven be maintained to provide a sufficient flow of combustion and ventilation air.

- Place the oven in an area that is free of drafts.
- Keep the oven area free and clear of all combustibles such as paper, cardboard, and flammable liquids and solvents.
- Do not place the oven on a curb base or seal to a wall. This will restrict the flow of air and prevent proper ventilation. Tripping of the blower motor's thermal overload device is caused by an excessive ambient temperature on the right side of the oven. This condition must be corrected to prevent permanent damage to the oven.

Before making any utility connections to this oven, check the rating plate to be sure the oven specifications are compatible with the electrical services supplied for the oven.

1. Pull out control panel. The rating plate attached to the inside of the control compartment.



Installation

Oven Assembly

SANITATION BOLTS

These bolts are required by NSF to block any exposed hole on the back of an oven. This includes:

- any unit, single or stacked, without a back panel.
- any holes in stacked units not used for mounting stacking brackets.

1. Locate the 5/16" bolts that were shipped with the oven.
2. Install the bolts as shown.

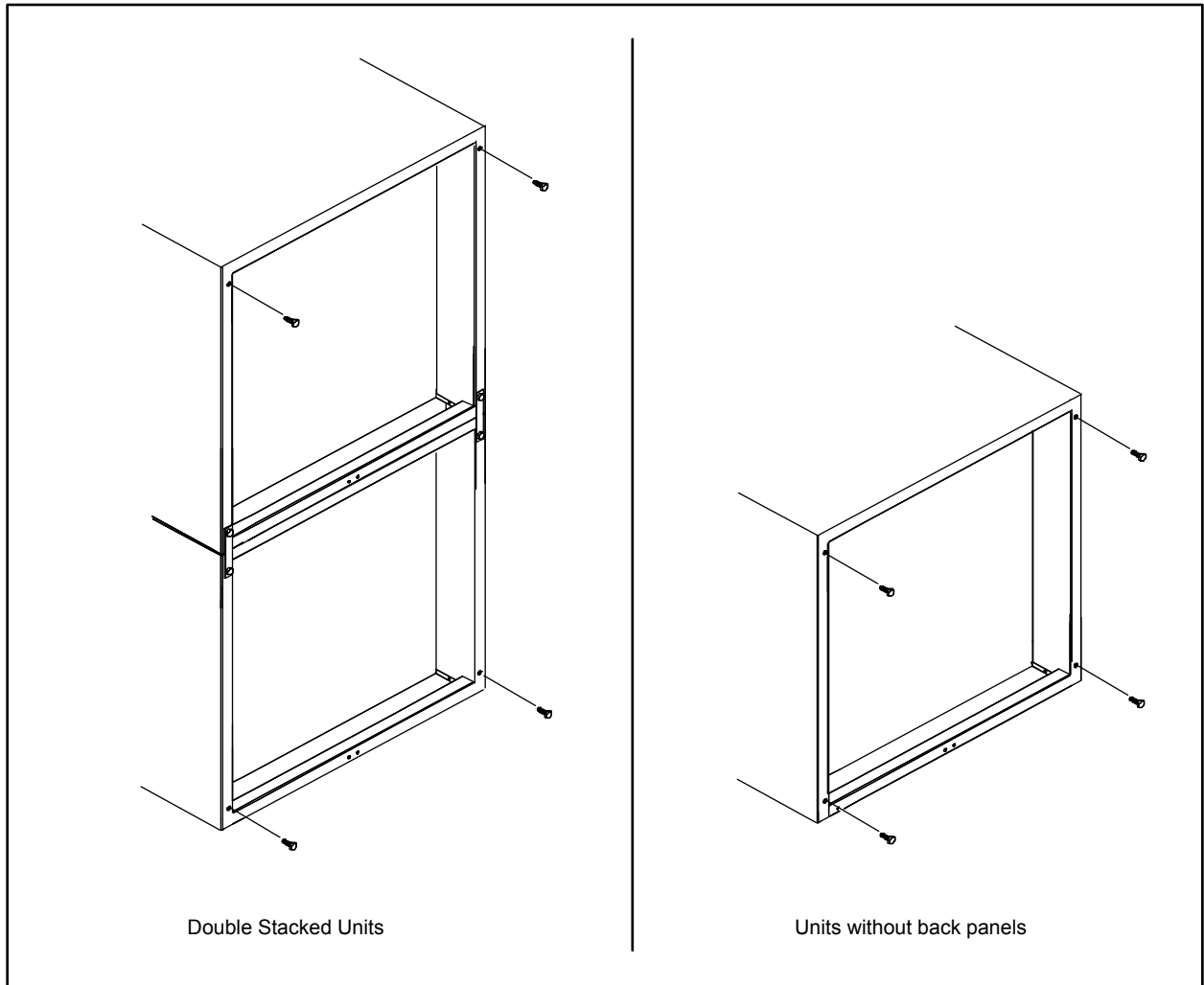


Figure 2

Oven Assembly

LEG ATTACHMENT

1. Lay the oven on its back.
2. Align the threaded stud in each leg with the nut located inside each bottom corner of the oven frame. Turn the legs clockwise and tighten to the nearest full turn.
3. Align the two leg plate holes in each leg with those in the oven bottom. Secure each leg using two 1/2" bolts.

NOTE: If using casters see CASTER ASSEMBLY before proceeding.

4. Level the oven by screwing the adjustable leg feet in or out as necessary.

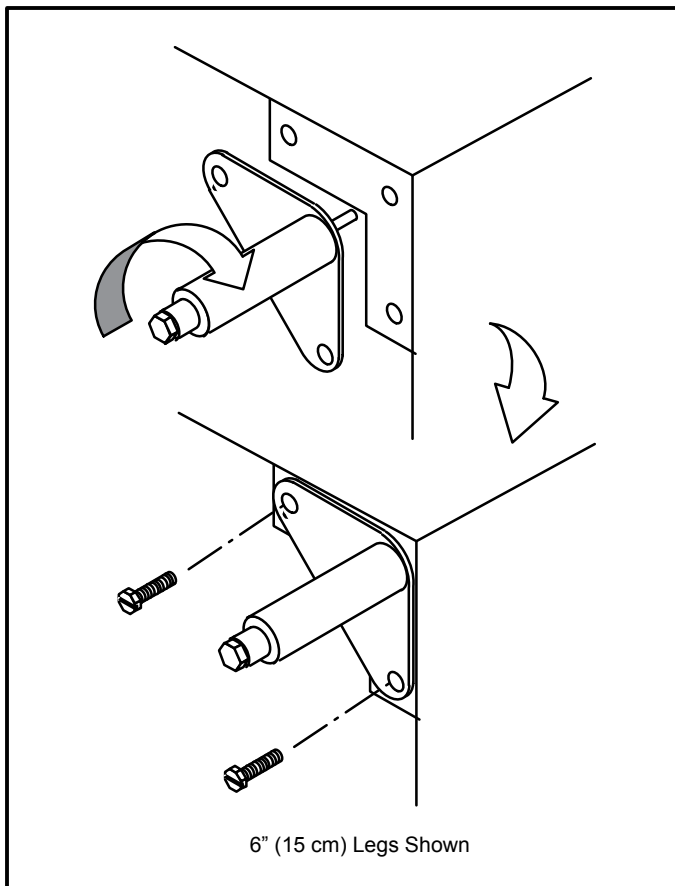


Figure 3

CASTER ASSEMBLY

NOTE: Install the locking casters on the front of the oven. Install the non-locking casters on the back of the oven.

Castors for Single and Double Stacked Ovens:

1. Attach the legs as described.
2. Pry the adjustable feet out of the legs
3. Insert one caster into each leg as shown. Tighten the lock nuts to secure the casters.

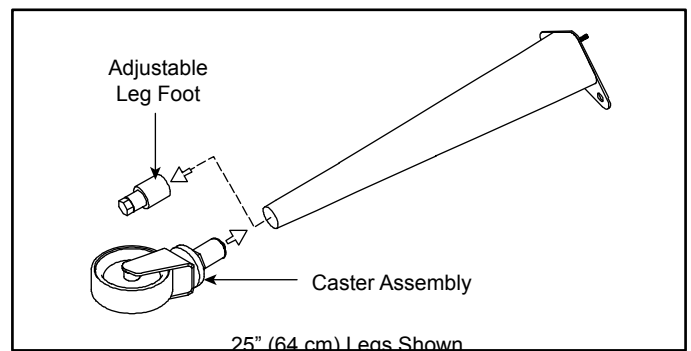


Figure 4

Low Profile Casters for Double Stacked Ovens:

1. Align the three holes in each caster assembly plate with those in the oven bottom. Secure each caster using three 1/2" bolts.

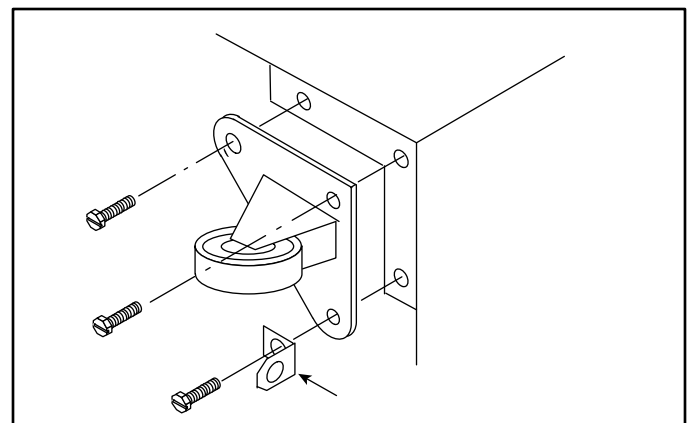


Figure 5



Installation

Oven Assembly

DOUBLE SECTION ASSEMBLY

1. Secure the short legs to the bottom sections as described.
2. Attach lower flue box to lower oven.
3. Place the upper section in position on top of the lower oven.
4. Attach the stacking brackets using the remaining 5/16" bolts shipped with the ovens.
5. Install flue riser and attach upper flue box to upper oven.

WARNING!!

When stacking ovens be sure to remove the single oven flue boxes prior to attaching upper and lower boxes and riser.

OVEN LEVELING

After assembly, the oven should be leveled and moved to the operating location.

1. The oven can be leveled by adjusting the feet or casters located on the bottom of each leg.

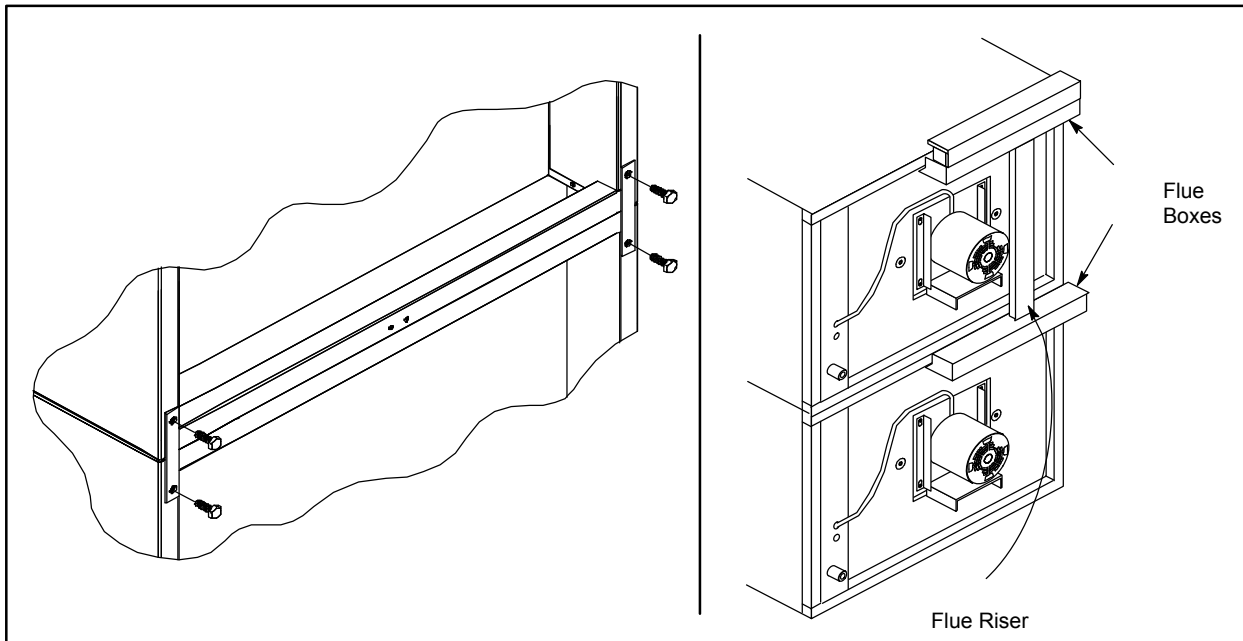


Figure 6

Utility Connections - Standards and Codes

THE INSTALLATION INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE OVEN AND/OR INJURY TO THE OPERATOR.

Qualified installation personnel are individuals, a firm, a corporation, or a company which either in person or through a representative are engaged in, and responsible for:

- the installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance.

Qualified installation personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.

U.S. and Canadian installations

All ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-Latest Edition and/or Canadian National Electric Code C22.2 as applicable.

The ventilation of this oven should be in accordance with local codes. In the absence of local codes, refer to the National ventilation code titled, "Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment", NFPA-96-Latest Edition.

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

General export installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your Blodgett oven, please contact your local distributor. If you do not have a local distributor, please call the Blodgett Oven Company at 0011-802-658-6600.





Installation

Electrical Connection

Wiring diagrams are located in the control compartment and on the back of the oven.

The electric motor, indicator lights and related switches are connected to the oven as follows:

1. Remove the bottom trim and control panel covers. Slide the control panel forward.
2. Connect the supply conduit to the wire duct located in the lower left hand corner on the back of the oven.
3. Run the supply wires through the duct to the front of the oven.

4. Connect the supply wires to top of right contactor in the control compartment at the lower right corner of the oven.

5. Reinstall the bottom trim and control panel covers.

NOTE: To prevent damage there is no power to the heating elements when the blower is not operating.

THE BLODGETT OVEN COMPANY CANNOT ASSUME RESPONSIBILITY FOR LOSS OR DAMAGE SUFFERED AS A RESULT OF IMPROPER INSTALLATION.

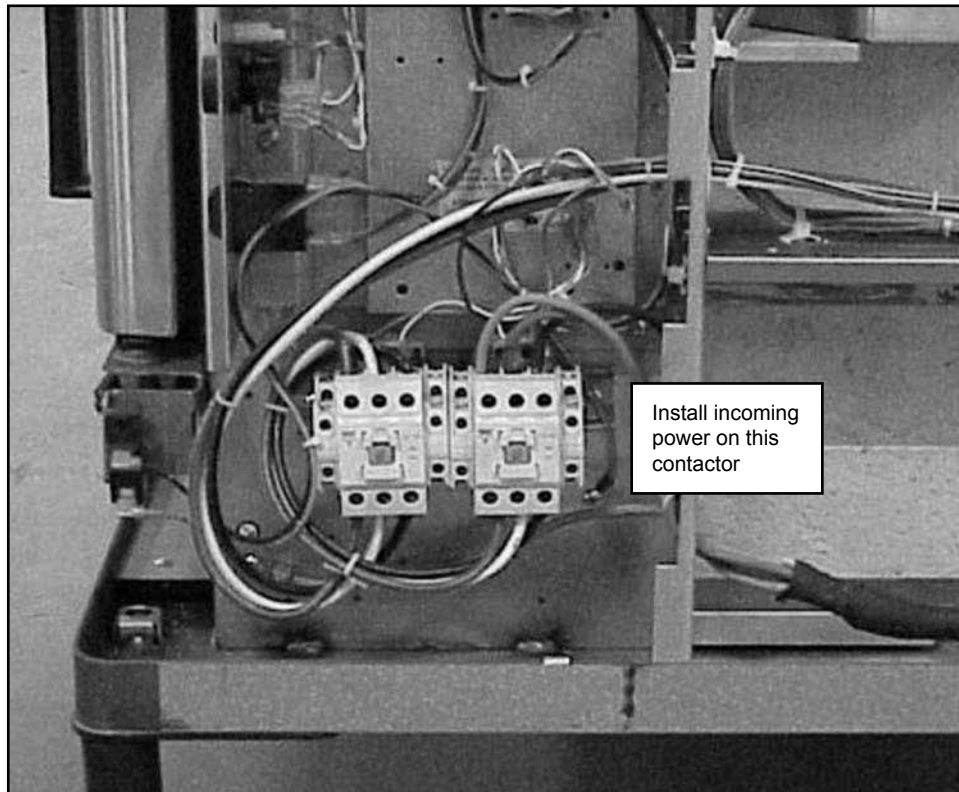


Figure 7

OVEN RESTRAINT

If casters are used in conjunction with a power supply cord for movable appliances, a fixed restraint should be provided.

The restraint (ie: heavy gauge cable) should be attached without damaging the building. DO NOT use the gas piping or electrical conduit for the attachment of the permanent end of the restraint! Use anchor bolts in concrete or cement block. On wooden walls, drive hi test wood lag screws into the studs of the wall.

If the oven is moved from its regular location, the restraint must be reconnected when the oven is returned.

1. Mount the supplied bracket to the leg bolt just below the power cord.
2. Attach the clip on restraining cable to the mounting bracket.

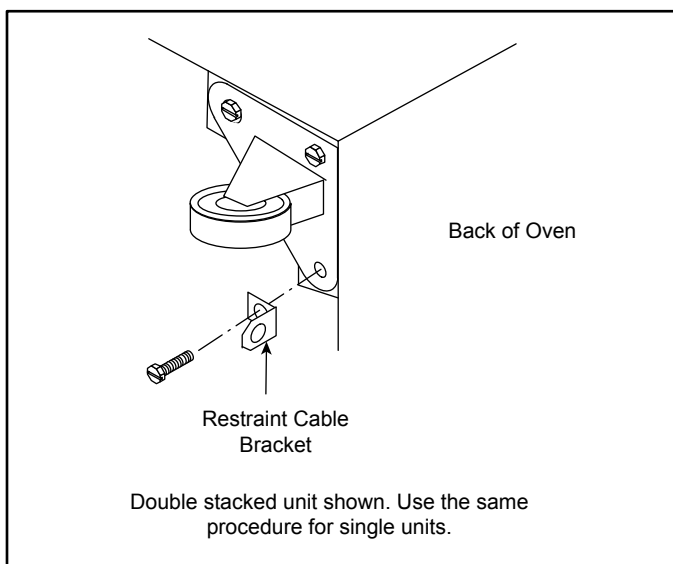


Figure 8

ADJUSTMENTS ASSOCIATED WITH INITIAL INSTALLATION

Each oven, and its component parts, have been thoroughly tested and inspected prior to shipment. However, it is often necessary to further test or adjust the oven as part of a normal and proper installation. These adjustments are the responsibility of the installer, or dealer. Since these adjustments are not considered defects in material or workmanship, they are not covered by the Original Equipment Warranty. They include, but are not limited to:

- calibration of the thermostat
- adjustment of the doors
- leveling
- tightening of fasteners.

No installation should be considered complete without proper inspection, and if necessary, adjustment by qualified installation or service personnel.



Operation

Safety Information

The information contained in this section is provided for the use of qualified operating personnel. Qualified operating personnel are those who have carefully read the information contained in this manual, are familiar with the functions of the oven and/or have had previous experience with the operation of the equipment described. Adherence to the procedures recommended herein will assure the achievement of optimum performance and long, trouble-free service.

Please take the time to read the following safety and operating instructions. They are the key to the successful operation of your Blodgett oven.



SAFETY TIPS

For your safety read before operating

General safety tips:

- If the oven needs to be moved for any reason, the supply cord must be disconnected from the unit before removing the restraint cable. Reconnect the restraint after the oven has been returned to its original location.
- DO NOT remove the control panel cover unless the oven is unplugged.

Solid State Manual Control

CONTROL DESCRIPTION

1. SELECTOR SWITCH - controls power to the oven for high fan, low fan or cool down.
2. OVEN READY LIGHT - when lit indicates elements are heating. When the light goes out the oven has reached operating temperature.
3. SOLID STATE THERMOSTAT - allows an infinite selection of temperatures from 150-550°F (66-288°C). (infinite control shown)
4. TIMER - activates an electric buzzer that sounds when the cook time expires.
5. LIGHTS SWITCH - controls interior lights.
6. CIRCUIT BREAKER SWITCH - controls power to the oven.

OPERATION

1. Turn the SELECTOR Switch (1) to either HIGH FAN or LOW FAN. The blower and control compartment cooling fan operate and are controlled automatically by the action of the doors.
2. Set the SOLID STATE THERMOSTAT (3) to the desired setting or temperature.
3. Preheat until the OVEN READY LIGHT (2) goes out.
4. Load product into the oven. Determine cook time and set the TIMER (4).
5. When the buzzer sounds, remove the product from the oven. Turn the TIMER knob (4) to OFF to silence the buzzer.
6. Turn the SELECTOR Switch (1) to OVEN OFF.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

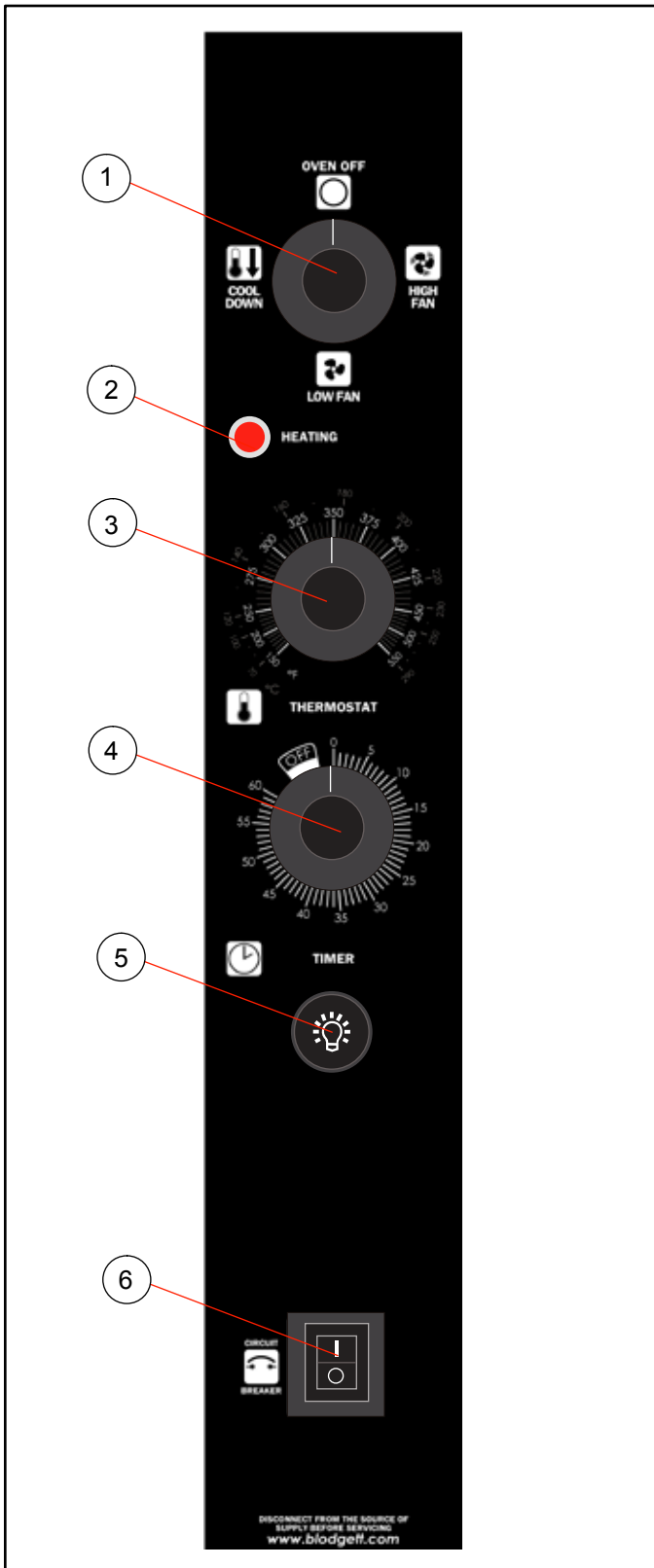


Figure 9



Operation

Solid State Digital Control

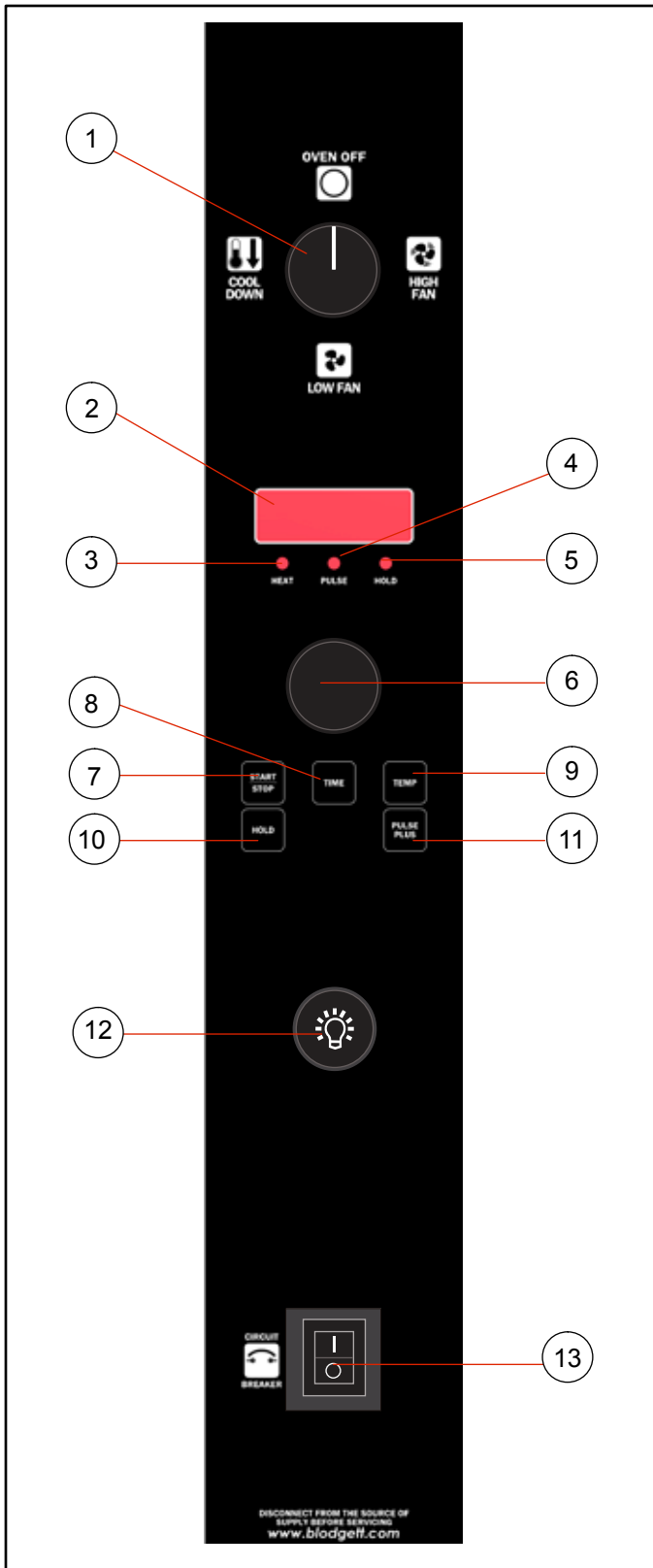


Figure 10

CONTROL DESCRIPTION

1. SELECTOR SWITCH - turns power to the oven on or off. Allows selection of Cook or Cool Down Modes and fan speed (if applicable).
2. DISPLAY - displays time or temperature and other information related to oven function.
3. HEAT LAMP - lights when heater is on.
4. PULSE LAMP - lights when Pulsed Fan Mode is turned on.
5. HOLD LAMP - lights when Hold Mode is turned on.
6. DIAL - used to enter set points in display
7. START/STOP KEY - starts or stops the timer.
8. TIME KEY - used to show time in the display.
9. TEMP KEY - used to show set temperature in the display.
NOTE: Actual temperature is shown while the TEMP key is held down.
10. HOLD KEY - turns Hold Mode on or off.
11. PULSE KEY - turns Pulse Mode on or off.
12. LIGHTS SWITCH - controls interior lights.
13. CIRCUIT BREAKER SWITCH - controls power to the oven.

PROGRAMMING

To set the cook temperature:

1. Press TEMP (9) key.
2. Rotate dial (6) to enter temperature.

To set the cook time:

1. Press TIME (8) key.
2. Rotate the dial (6) to enter time.

NOTE: Time is entered in hours:minutes (0:00) or minutes:seconds (00:00).

To set the hold time:

1. Press HOLD key (10) to turn hold mode on.
NOTE: HOLD light is on.
2. Rotate dial (6) to enter the hold temperature.
3. Press START/STOP key (7)



Solid State Digital Control

To set the pulse time:

1. Press PULSE KEY (11) to turn pulse mode on.
NOTE: Pulse light is on.
2. Rotate DIAL (6) to enter the pulse time. Pulse time is a portion of the pre-set cook time.

OPERATION

Cook Only:

1. Turn SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Load product into oven.
NOTE: The display reads LOAD with the oven is near the set temperature.
4. Press the START/STOP key (7). The timer begins to count down.
5. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
6. Press the START/STOP key (7) to silence the buzzer.
7. Remove the product.

Cook with Hold:

NOTE: HOLD light is on when hold mode is on and off when hold mode is off.

1. Turn SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Press the HOLD key (10). Enter the hold temperature.
4. Load product into oven.
NOTE: The display reads LOAD with the oven is near the set temperature.
5. Push the START/STOP (7) key. Timer begins to count down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE. The buzzer turns off after a few seconds. The display reads HOLD until the oven reaches the hold temperature. Then the timer begins to count up.
7. Push the START/STOP key (7) to stop timer.
8. Remove the product.
9. Push HOLD (10) key to turn off hold mode.

Cook with Pulse:

NOTE: PULSE light is on when pulse mode is on and off when pulse mode is off.

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Enter cook time and cook temperature.
3. Press PULSE KEY (11). Enter the pulse time. A minimum of one minute must be entered to operate.

NOTE: Pulse time is a portion of the cook time and does not increase the previously entered cook time.

4. Load product into oven.

NOTE: The display reads LOAD with the oven is near the set temperature.

5. Push START/STOP KEY (7). The timer begins to count down the cook time. The oven will be in pulse mode for the set pulse time. Once the set time has expired, the unit will automatically switch to cook mode and continue counting down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
7. Push the START/STOP KEY (7) to turn the buzzer off.
8. Remove the product.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.



Operation

Solid State Digital Control with Humidaire

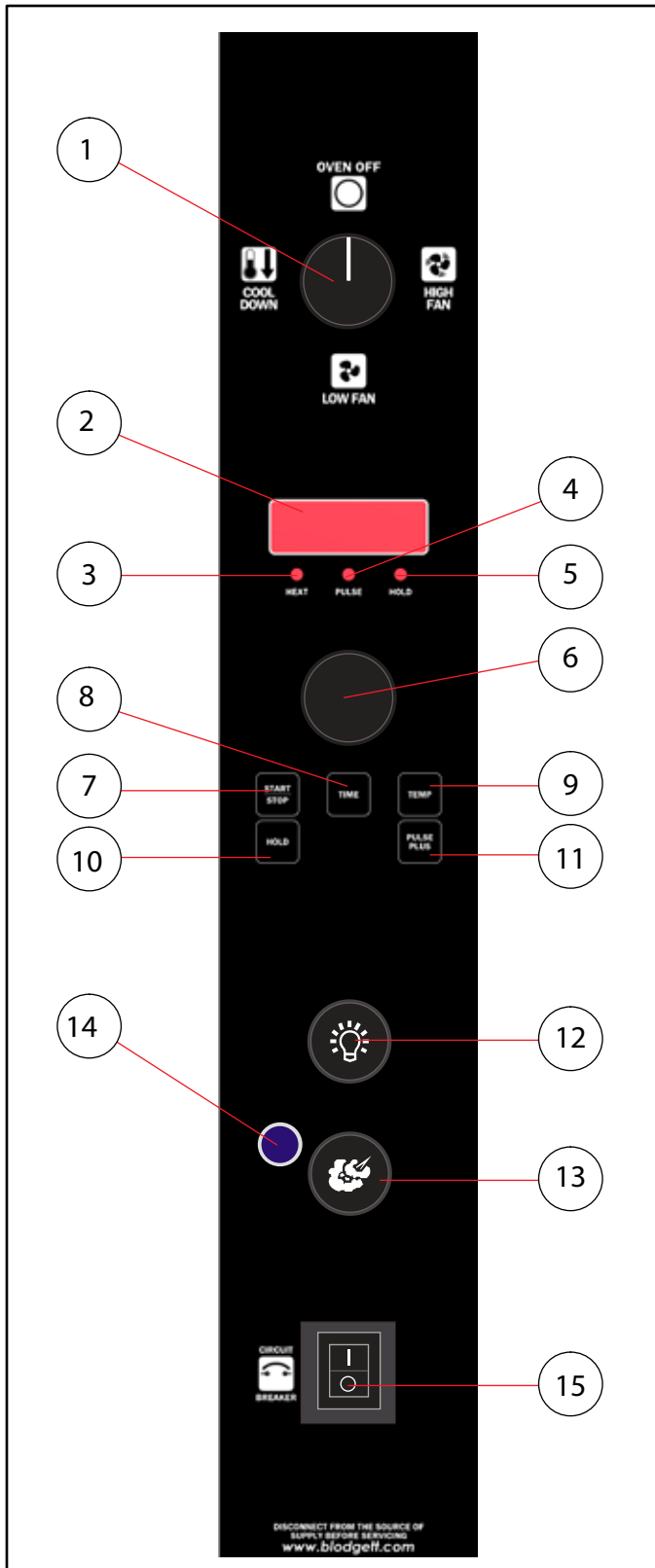


Figure 11

CONTROL DESCRIPTION

1. SELECTOR SWITCH - controls power to the oven for high fan, low fan or cool down.
2. DISPLAY - displays time or temperature and other information related to oven function.
3. HEAT LAMP - lights when heater is on.
4. PULSE LAMP - lights when Pulsed Fan Mode is turned on.
5. HOLD LAMP - lights when Hold Mode is turned on.
6. DIAL - used to enter set points in display
7. START/STOP KEY - starts or stops the timer.
8. TIME KEY - used to show time in the display.
9. TEMP KEY - used to show set temperature in the display.
NOTE: Actual temperature is shown while the TEMP key is held down.
10. HOLD KEY - turns Hold Mode on or off.
11. PULSE KEY - turns Pulse Mode on or off.
12. LIGHTS SWITCH - controls interior lights.
13. HUMIDAIRE START SWITCH - activates moisture injection for a preset period of 30 seconds.
14. HUMIDAIRE LAMP - lights when water is being injected
15. CIRCUIT BREAKER SWITCH - controls power to the oven.



Solid State Digital Control with Humidaire

PROGRAMMING

To set the cook temperature:

1. Press TEMP (9) key.
2. Rotate dial (6) to enter temperature.

To set the cook time:

1. Press TIME (8) key.
2. Rotate the dial (6) to enter time.

NOTE: Time is entered in hours:minutes (0:00) or minutes:seconds (00:00).

To set the hold time:

1. Press HOLD key (10) to turn hold mode on.

NOTE: HOLD light is on.

2. Rotate dial (6) to enter the hold temperature.
3. Press START/STOP key (7)

To set the pulse time:

1. Press PULSE KEY (11) to turn pulse mode on.

NOTE: Pulse light is on.

2. Rotate DIAL (6) to enter the pulse time. Pulse time is a portion of the pre-set cook time.

OPERATION

Cook Only:

1. Turn the SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Load product into the oven.

NOTE: The display reads LOAD when the oven is near the set temperature.

4. Press the START/STOP key (7). The timer begins to count down.
5. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
6. Press the START/STOP key (7) to silence the buzzer.
7. Remove the product.

Cook with Hold:

NOTE: HOLD light is on when hold mode is on and off when hold mode is off.

1. Turn the SELECTOR switch (1) to the desired position.
2. Enter the cook time and temperature.
3. Press the HOLD key (10). Enter the hold temperature.
4. Load product into the oven.

NOTE: The display reads LOAD when the oven is near the set temperature.

5. Push the START/STOP (7) key. Timer begins to count down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE. The buzzer turns off after a few seconds. The display reads HOLD until the oven reaches the hold temperature. Then the timer begins to count up.
7. Push the START/STOP key (7) to stop timer.
8. Remove the product.
9. Push HOLD (10) key to turn off hold mode.

Cook with Pulse:

NOTE: PULSE light is on when pulse mode is on and off when pulse mode is off.

1. Turn the SELECTOR SWITCH (1) to the desired position.
2. Enter cook time and cook temperature.
3. Press PULSE KEY (11). Enter the pulse time. A minimum of one minute must be entered to operate.

NOTE: Pulse time is a portion of the cook time and does not increase the previously entered cook time.

4. Load product into the oven.

NOTE: The display reads LOAD when the oven is near the set temperature.



Operation

Solid State Digital Control with Humidaire

5. Push START/STOP KEY (7). The timer begins to count down the cook time. The oven will be in pulse mode for the set pulse time. Once the set time has expired, the unit will automatically switch to cook mode and continue counting down.
6. When the cook timer reaches 00:00 the buzzer sounds and the display reads DONE.
7. Push the START/STOP KEY (7) to turn the buzzer off.
8. Remove the product.

Oven Cool Down:

1. Turn the SELECTOR Switch (1) to COOL DOWN.

NOTE: The doors may be opened to speed the cooling process.

Oven Shut Down:

1. Turn the SELECTOR SWITCH (1) to OVEN OFF.

The Humidaire Function:

Moisture may be injected into the oven cavity at any time during the cook cycle.

1. Press the HUMIDAIRE START SWITCH (13). Water injects into the oven cavity for 30 seconds. After the water stops injecting, the motor automatically turns off for 30 seconds. This enables the moisture to saturate the product. Once the humidaire cycle is complete, the oven resumes normal operation.

NOTE: The oven must be above 230°F (110°C) for humidaire to operate.

The amount of water injected during the Humidaire cycle may be adjusted as follows:

1. Check the pressure gauge on the back of the oven while the water is dispensing. The pressure should be no higher than 3 psi. If less moisture is desired, the pressure can be set below 3 psi.
2. To adjust the water pressure, loosen the locknut on the pressure regulator.

Turn the adjusting screw counter clockwise to decrease the water pressure.

Turn the adjusting screw clockwise to increase the water pressure if it is below 3 psi.

NOTE: Increasing the water pressure will increase the amount of water injected during the humidaire cycle. Decreasing the pressure will decrease the water injected during the humidaire cycle.

3. Reset the locknut on the regulator.
4. Recheck the water pressure.



WARNING!!

Setting the pressure above 3 psi will lead to excessive water in the oven.

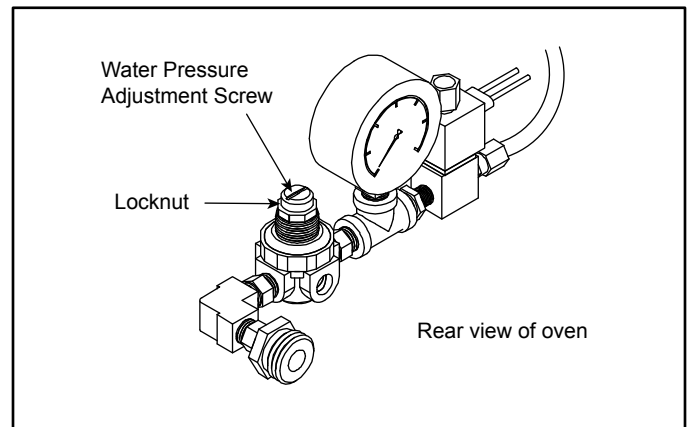


Figure 12



How Cook & Hold Works

With the optional COOK & HOLD feature, meat is roasted at lower temperatures for longer periods of time. This preserves flavor and tenderness and prevents over drying. There are three phases in cook and hold roasting.

- Primary Cooking - controlled by the COOK & HOLD TIMER. The meat is cooked at a low temperature until approximately 2/3 done.
- Cooking from Stored Heat - when the primary cook time expires, the oven automatically switches to HOLD. The product continues to cook from the heat stored in the oven. Meat must remain in the hold cycle for a minimum of 1-1/2 to 2 hours before being served.
- Hold - holds the product for several hours before serving without loss of moisture or tenderness.

All meat should be completely thawed by refrigeration. Using frozen meat increases the cook time causing shrinkage.

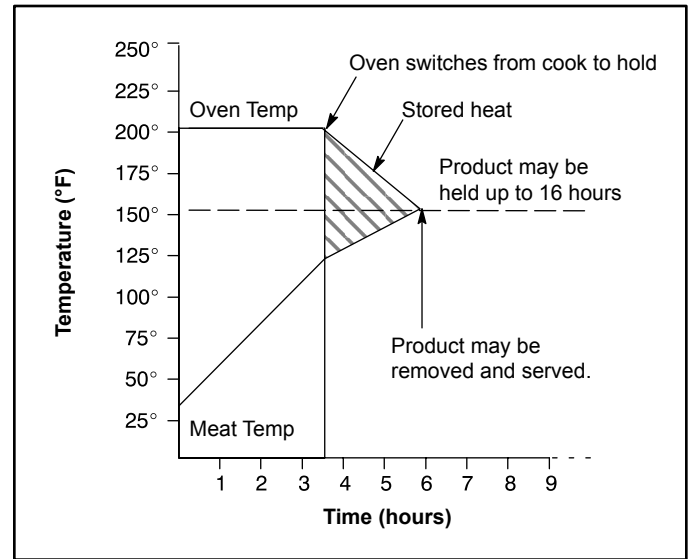


Figure 13

PRODUCT	COOK TEMP.	HOLD TEMP.	QUANTITY	COOK TIME (HRS)	MIN. HOLD TIME (HRS)	TOTAL TIME (HRS)
Prime rib, bone cap off 14-18 lbs. (6.4-8.1 kg)	200°F	140°F	1	3	1	4
	93°C	60°C	3	3-1/4	1-1/2	4-3/4
			6	3-1/2	2	5-1/2
Prime rib, bone cap on 14-18 lbs. (6.4-8.1 kg)	200°F	140°F	1	3-1/2	1	4-1/2
	93°C	60°C	3	4	1-1/2	5-1/2
			6	4-1/2	2	6-1/2
Top or bottom rounds 20-22 lbs. (9.1-10.0 kg)	200°F	140°F	1	3-1/2	1	4-1/2
	93°C	60°C	3	4	1-1/2	5-1/2
			6	4-1/2	2	6-1/2
Pork roast or ham 10-12 lbs. (4.5-5.4 kg)	250°F	170°F	2	4	1	5
	121°C	76°C	4	4-1/4	1-1/2	5-3/4
			6	4-1/2	2	6-1/2
Turkey 20-22 lbs. (9.1-10.0 kg)	250°F	170°F	1	3-1/4	1	4-3/4
	121°C	76°C	6	4	1-1/2	5-1/2
Leg of Lamb, bone in 8-10 lbs. (4.36-4.5 kg)	225°F	160°F	2	2-1/2	1	3-1/2
	107°C	71°C	4	2-3/4	1-1/2	4-1/4
			6	3	2	5



Operation

General Guidelines for Operating Personnel

COOK TIMES AND TEMPERATURES

Preheating the oven

Always preheat the oven before baking or roasting. We recommend preheating 50°F (28°C) above the cook temperature to offset the drop in temperature when the doors are opened and cold product is loaded into the oven. Set the thermostat to the cook temperature after the product is loaded.

NOTE: For frozen product, preheat the oven 100°F (56°C) above the cook temperature.

Cook Temperatures

Generally, cook temperatures should be 50°F (28°C) lower than deck or range oven recipes. If the edges of the product are done but the center is raw, or if there is color variation, reduce the thermostat setting another 15-25°F (10-15°C). Continue to reduce the cook temperature on successive loads until the desired results are achieved.

NOTE: Cooking at excessive temperatures will not reduce cook time, it will produce unsatisfactory baking and roasting results.

Cook Time

Check the product in about half the time recommended for deck or range oven recipes. Record times and temperatures which provide best results for future reference.

NOTE: Cook time will vary with the amount of product loaded, the type of pan and the temperature.

OPERATING TIPS

Pans and Racks

Product or pan height determines how many racks are used. The oven holds up to ten 18" x 26" (45.7 x 66.0 cm) bun pans.

Load the oven from the bottom, centering the pans on the rack. Never place a pan or aluminum foil on the bottom of the oven. This obstructs the flow of air and results in uneven baking and roasting.

Roasting

To reduce shrinkage when roasting, place meat directly on the racks. Place a sheet pan one-half full of water in the bottom rack position. The water evaporates, increasing humidity in the oven chamber. The pan catches grease from the meat, making oven cleaning easier.

Baking

Weigh the product to ensure equal distribution in each pan. Varying amounts of product will cause uneven baking results.

Fans

The fan must be operating for the oven to heat. Use the Pulse Plus feature to allow light or liquid product to set in the pan and to avoid rippling towards the fan. If your oven is not equipped with this feature use the following procedure.

1. Preheat the oven 25°F (15°C) above the baking temperature.
2. Load the oven with product. Close the doors.
3. Set the thermostat to the baking temperature.
4. Turn the oven off.
5. Allow the product to set for 5-7 minutes with the fan off. The residual heat in the oven sets the product.
6. Turn the oven on for the remainder of the bake.

Lights

Turn the oven lights off when not viewing the product. Leaving the lights on for extended periods of time shortens the bulb life considerably.



Suggested Times and Temperatures

PRODUCT	TEMPERATURE	TIME	# SHELVES
Meats			
Hamburger Patties (5 per lb)	400°F (205°C)	8-10 mins.	10
Steamship Round (80 lb. quartered)	275°F (135°C)	2 hrs 45 mins.	2
Standing Rib Choice (20 lbs, trimmed, rare)	235°F (115°C)	2 hrs 45 mins.	2
Banquet Shell Steaks (10 oz. meat)	450°F (235°C)	7-8 mins.	5
Swiss Steak after Braising	275°F (135°C)	1 hr.	5
Baked Stuffed Pork Chop	375°F (190°C)	25-30 mins.	5
Boned Veal Roast (15 lbs.)	300°F (150°C)	3 hrs. 10 mins.	2
Lamb Chops (small loin)	400°F (205°C)	7-8 mins.	5
Bacon (on racks in 18" x 26" pans)	400°F (205°C)	5-7 mins.	10
Poultry			
Chicken Breast & Thigh	350°F (175°C)	40 mins.	5
Chicken Back & Wing	350°F (175°C)	35 mins.	5
Chicken (21/2 lbs. quartered)	350°F (175°C)	30 mins.	5
Turkey Rolled (18 lb. rolls)	310°F (155°C)	3 hrs 45 mins.	3
Fish and Seafood			
Halibut Steaks, Cod Fish (frozen 5 oz)	350°F (175°C)	20 mins.	5
Baked Stuffed Lobster (21/2 lb.)	400°F (205°C)	10 mins.	3
Lobster Tails (frozen)	425°F (220°C)	9 mins.	5
Cheese			
Macaroni & Cheese Casserole	350°F (175°C)	30 mins.	5
Melted Cheese Sandwiches	400°F (205°C)	8 mins.	10
Potatoes			
Idaho Potatoes (120 ct.)	400°F (205°C)	50 mins.	5
Oven Roasted Potatoes (sliced or diced)	325°F (165°C)	10 mins.	5
Baked Goods			
Frozen Berry Pies (22 oz)	325°F (150°C)	35 mins.	5 (30 pies)
Fresh Apple Pie (20 oz.)	350°F (175°C)	25-30 mins.	5 (30 pies)
Pumpkin Pies (32 oz.)	300°F (150°C)	30-50 mins.	5 (20 pies)
Fruit Crisp	300°F (150°C)	25 mins.	5
Bread (24 - 1 lb. loaves)	325°F (155°C)	30 mins.	3
Southern Corn Bread	375°F (190°C)	15-20 mins.	5
Baking Soda Biscuits	400°F (205°C)	6 mins.	5
Brown & Serve Rolls	350°F (175°C)	15 mins.	5
Sheet Cakes (5 lb. mixed batter per pan)	325°F (160°C)	16-18 mins.	5
Chocolate Cake	325°F (160°C)	20 mins.	5
Brownies	325°F (150°C)	15 mins.	5

NOTE: Actual times and temperatures may vary considerably from those shown above. They are affected by weight of load, temperature of the product, recipe, type of pan and calibration of thermostat. Should your recipe vary, write in your proven time and temperature for ready reference.



Maintenance

Cleaning and Preventative Maintenance

DAILY CLEANING

Oven Cool Down:

1. Turn the oven to COOL DOWN.

NOTE: The doors may be opened to speed the cooling process.

Cleaning the exterior

1. Saturate a cloth with a mild soap and water mixture. Wipe the oven when it is cold.
2. Dry the oven with a clean cloth.
3. Heat tint and heavy discoloration may be removed with any non-toxic, non-caustic, commercial oven cleaner and stainless steel polish.

Cleaning the interior

Deposits of baked on splatter may be removed with any non-toxic, non-caustic, food safe, commercial oven cleaner.

1. Apply cleaner following the manufacturer's direction. Always rub with the grain of the metal.

WEEKLY CLEANING

1. Remove any loose debris or particle buildup from the racks, rack supports, baffle, blower wheel and temperature probe.

MONTHLY CLEANING

Clean racks, rack supports, baffle and blower wheel

1. Remove the racks, rack supports and baffle.
2. Hold the blower wheel with a gloved hand.
3. Use an L-shaped brush to clean the fins on the blower wheel.
4. Use a hand brush to clean the center portion of the blower wheel.
5. Wipe around the fan with a damp towel.
6. Soak racks, supports and baffle in a solution of non-toxic, non-caustic, food safe, commercial oven cleaner. Allow to soak overnight if necessary.
7. Reinstall parts.

Clean temperature probe

1. Use a damp towel to wipe the probe. Handle with care.

Clean cooling fan

1. Brush off the cooling fan located on the back of the oven behind the control compartment.

PREVENTATIVE MAINTENANCE

Annual Maintenance

The following checks should be part of an annual scheduled maintenance. This maintenance must be performed by an authorized service agency. Contact your local Blodgett service company, a factory representative or the Blodgett Oven company.

1. Check venting system.
2. Check temperature calibration.
3. Adjust and grease door switch for proper closure.
4. Clean any debris out of control tray. Check for loose connections. Replace any discolored connections.
5. Retorque all electrical connections between the element and contactors.



WARNING!!

Always disconnect the appliance from the power supply before servicing or cleaning.



POSSIBLE CAUSE(S)	SUGGESTED REMEDY
SYMPTOM: Heating elements do not come on.	
<ul style="list-style-type: none"> • Oven not plugged in. • Power switch on the control panel is off. • Control set below ambient temperature. • Doors are open. • Computerized controls - error code on display. 	<ul style="list-style-type: none"> • Plug in electrical supply cord. • Set the control panel to COOK or OVEN ON. • Set to desired cook temperature. • Close doors. • *
SYMPTOM: Oven does not come to ready.	
<ul style="list-style-type: none"> • The oven has not reached preheat temperature. • Fan delay feature may be activated, if applicable. • Internal problem with main temperature control. 	<ul style="list-style-type: none"> • Wait for oven to reach preheat temperature. • Deactivate fan delay feature. • *
SYMPTOM: Convection fan does not run.	
<ul style="list-style-type: none"> • Oven is not plugged in. • Oven is not set to the cook mode. • Circuit breaker tripped. • Fan delay feature may be activated, if applicable. • Doors are open 	<ul style="list-style-type: none"> • Plug in electrical supply cord. • Set the control panel to COOK or OVEN ON. • Reset the breaker. • Deactivate fan delay feature. • Close doors.
SYMPTOM: General baking problems.	
<ul style="list-style-type: none"> • Computerized controls - incorrect product programming. • Thermostat out of calibration. 	<ul style="list-style-type: none"> • Reprogram control per Operation section. • *
<p><i>*Denotes remedy is a difficult operation and should be performed by qualified personnel only. It is recommended, however, that All repairs and/or adjustments be done by your local Blodgett service agency and not by the owner/operator. Blodgett cannot assume responsibility for damage as a result of servicing done by unqualified personnel.</i></p>	

 **WARNING!!**

Always disconnect the power supply before cleaning or servicing the oven.