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HydroVection™

HV-50
INSTALLATION - OPERATION - MAINTENANCE

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 instllation, 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

ABOUT THE HYDROVECTION

Blodgett Hydrovection ovens are quality produced using high-grade stainless steel with first class workmanship.

The multiple speed fan, which is guarded against accidental finger contact, is driven by a quiet and powerful motor. The condenser draws out excess moisture from the appliance. Condensation and waste water, which result during hydro cooking and cleaning, are continuously drained.

The use of high quality insulation impedes excessive heat radiation and saves energy.

The Hydrovection has an 11" high stand for double stack units and a 29" high stand for single ovens.

The practical oven door, with viewing window, have a wide swing radius and handle which can be operated easily, even with wet or greasy hands.

Ease of operation is guaranteed through the simple arrangement of the controls. Graphic symbols make the appliance easy for even inexperienced kitchen staff to operate. A third function, the Cool Down mode, allows the oven cavity to cool down rapidly with the door opened.

Cleaning is kept to a minimum. The interior is sprayed with a self-acting cleaning solution which interacts with humidity to easily remove crusts and stains. The oven is designed for easy care and is welded water tight so that the internal cooking cavity may be rinsed with a hose after the cleaning process.

PLUMBING SPECIFICATIONS	
WATER	
Water pressure	30 PSI (207 kPa) minimum 50 PSI (345 kPa) maximum
Water connection	3/4" garden hose - Cold water only
Water pressure regulator setting	Preset to 30 PSI (207 kPa)
Minimum requirements	TDS: 40-125 ppm Hardness: 35-100 ppm Chlorides: <25 ppm Silica: <13 ppm Chlorine: <0.2 ppm Chloramine: <0.2 ppm pH: 7.0-8.5
DRAINAGE	
Drain type	Atmospheric Vented Drain
Drain connection	1" NPT Male
Maximum water drain temperature	140ºF (60ºC)

ELECTRICAL RATINGS							
VOLTAGE	**HZ**	**KW**	**PHASE**	**MAX LOAD (AMPS)**			**MOTOR**
				L1	L2	L2	
208	60	13	3	38	38	34	3/4 HP, 208-240V, 3 phase, 2.6 amps
240	60	13	3	31	31	29	3/4 HP, 208-240V, 3 phase, 2.6 amps

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 or replacement of gas piping and the connection, installation, repair or servicing of equipment.

• 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

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1, as applicable.

Installation must conform 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 C22.1 as applicable.

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

Australia and general export installations

Instllation 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

Oven Location and Ventilation

OWNER'S RESPONSIBILITIES

Installation responsibilities prior to service startup inspection

You are entitled to a free start-up inspection service by our factory ASAP. Before a factory representative arrives to perform a startup procedure, the owner must already have satisfied the following requirements.

1. Oven(s) are uncrated, stacked (if applies) and put in place.

   NOTE: Please refer to Stacking.

Maximum shelf loading - 60 lbs (27.3 Kg)

OVEN LOCATION

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

Certain minimum clearances must be maintained between the oven and any combustible or non-combustible construction. See the table below.

In addition, the following clearances are recommended for servicing.

- Oven body sides - 12" (30cm)

- Oven body back - 12" (30cm)

OVEN MODEL	MINIMUM REQUIRED CLEARANCES		
	Right Side	**Left Side**	**Back**
HV-50E	0" (0mm)	0" (0mm)	0" (0mm)

NOTE: Blodgett recommends 4" clearance from any heat source on the control panel side of the oven, an optional heat shield should be considered.

VENTILATION

The necessity for a properly designed and installed ventilation system cannot be over emphasized. The ventilation system will allow the unit to function properly while removing unwanted vapors and products of combustion from the operating area.

The appliance must be vented with a properly designed mechanically driven exhaust hood. The hood should be sized to completely cover the equipment plus an overhang of at least 6" (15 cm) on all sides not adjacent to a wall. The capacity of the hood should be sized appropriately and provisions made for adequate makeup air.

⚠ **WARNING!!**

Failure to properly vent the oven can be hazardous to the health of the operator; and will result in operational problems, unsatisfactory baking, and possible damage to the equipment. Damage sustained as a direct result of improper ventilation will not be covered by the Manufacturer's warranty.

When installed in the Commonwealth of Massachusetts, this appliance must be interlocked with the hood exhaust system so that the appliance may be operated only when the hood exhaust system is running.

U.S. and Canadian Installations

Refer to your local ventilation 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.

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 unit, please contact your local distributor. If you do not have a local distributor, please call Blodgett at 0011-802-658-6600.

NOTE: The oven weighs approximately 350 lbs, we recommend using either a fork truck or genie lift to raise the oven.

1. Remove the bolts securing the oven shipping brackets to the pallet.

2. Open the oven door. Remove the side racks and baffle from inside the oven cavity.

3. Cut a piece of cardboard 18" (457 mm) x 26" (660 mm) and place in the oven cavity above the elements. This will protect the oven from the forks of the forklift.

4. Adjust the forks on the lift to less than 16" (406 mm) apart so they will fit between the elements and the right side of the oven cavity.
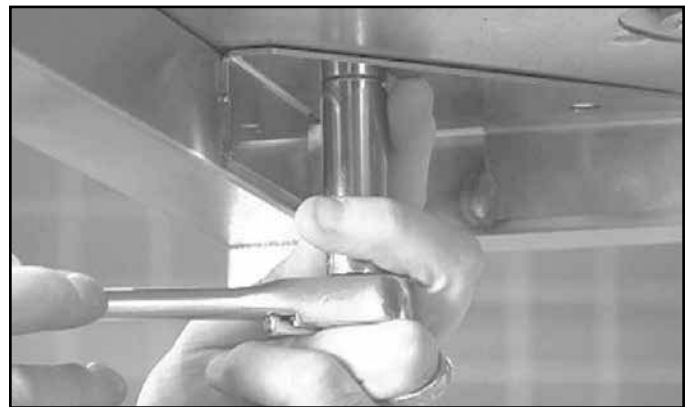

Figure 1

5. Raise the oven to above the height of the stand.

6. Remove the shipping brackets from the bottom of the oven. Save the bolts to use in STEP 8.

7. Position the stand below the oven. Be sure the support arms on the stand are on the right side when facing the front of the oven. Place the oven flush with the front of the stand and lower into place.

Figure 2

8. Attach the oven to the stand using the bolts removed in STEP 6.

Figure 3

![icon] Installation

Oven Assembly to Stand

OVEN LEVELING

1. Place a level on top of the oven. Loosen the set screws on the side of each caster. Turn the adjustment collar clockwise to raise and counter clockwise to lower the oven.

2. When the oven is level, tighten the casters by turning the two set screws on the side of each caster assembly.

Figure 4

Stacking

⚠ **WARNING!!**

Stacking should be performed by qualified installation personnel only. The ovens are heavy. Take care to use proper tools and techniques when lifting and stacking units.

1. Attach the stand to the bottom oven.

2. Place the top oven on the bottom oven. Be sure all four sides are flush.

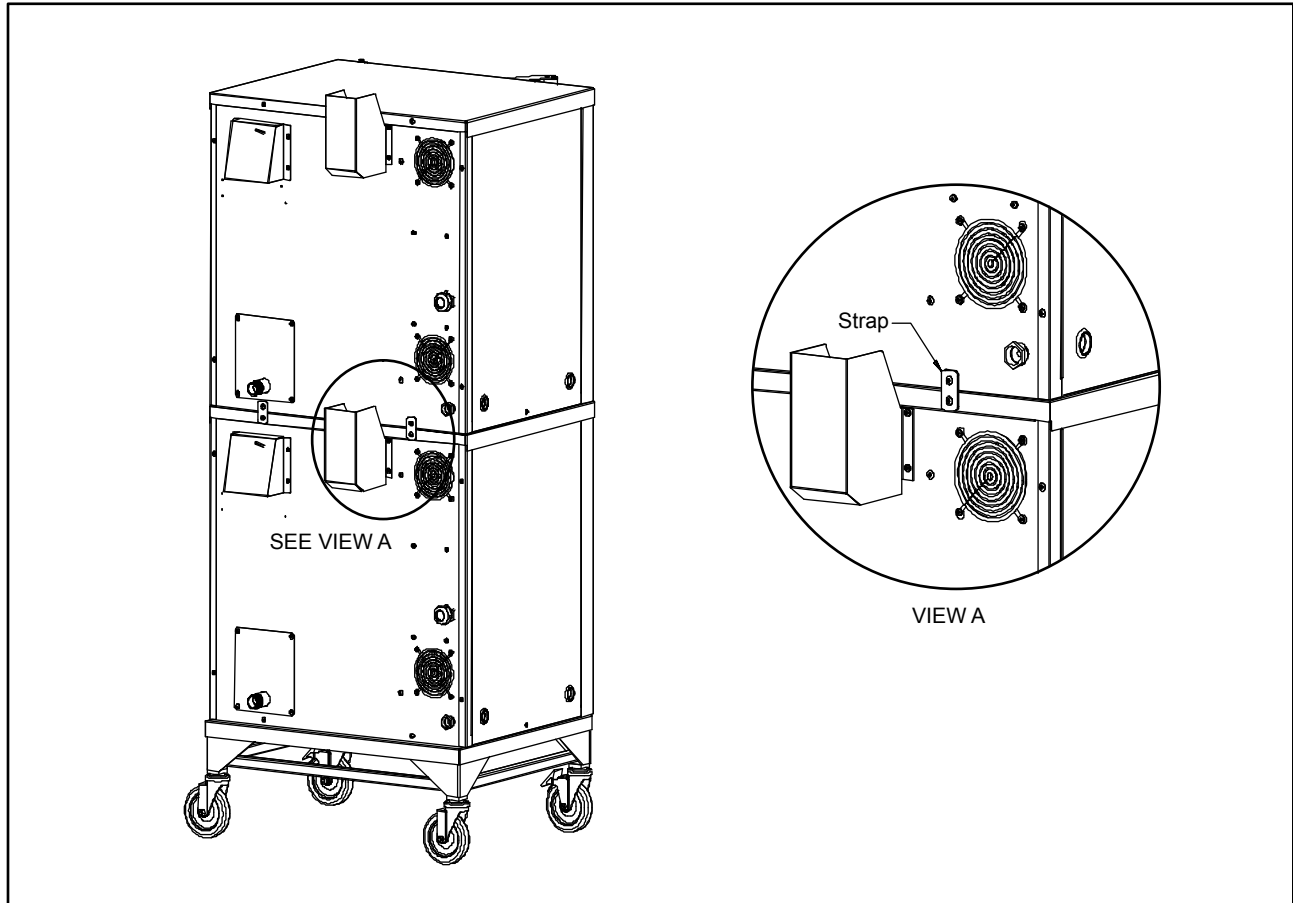3. Bolt the two ovens together on the rack using two stacking straps.

SEE VIEW A

Strap

VIEW A

Figure 5

⚒ Installation

Plumbing Connections

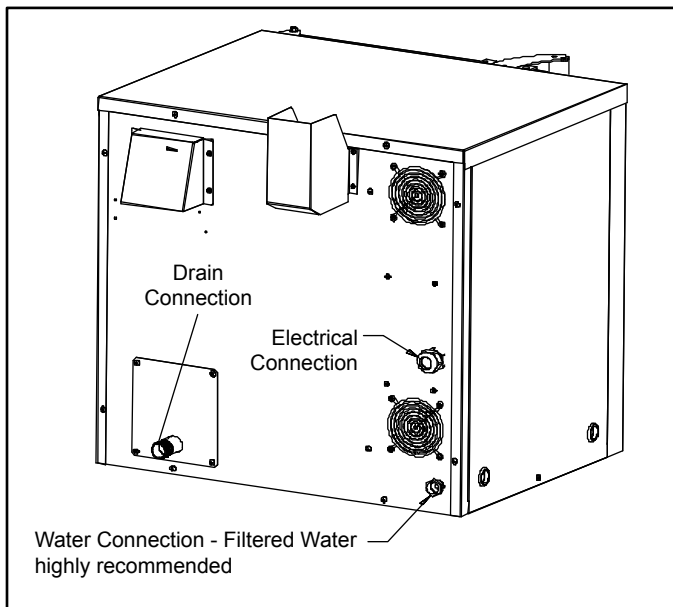### WATER CONNECTION

NOTE: Must use COLD WATER ONLY.

Connect the appliance to quality water via a pressure hose with 3/4" GHT (19mm) couplings. See Figure 6 for connections. A shut off valve is to be provided adjacent to the oven.

⚠ WARNING!!

Operating the appliance without the water regulator installed will invalidate your warranty.

This product must be installed by a licensed Plumber or Gas Fitter when installed within the Commonwealth of Massachusetts.

Drain Connection

Electrical Connection

Water Connection - Filtered Water highly recommended

Figure 6

DRAIN CONNECTION

The drain should be run to an open floor drain avoiding flexible hose that could sag and allow trapped water to accumulate. The drain hose should not be submerged in water. if the drain is submerged, the oven will not drain properly. The customer must supply the piping from the oven to the drain.

Specific water/drain connection for City of Los Angeles

1. Each drain line from the appliance shall be routed without dips or sags to terminate above the flood level rim of an approved indirect waste receptor.

2. The appliance shall be installed in accordance with the manufacturer's printed instructions and the LAPC and LAMC, 1999 editions.

3. A backflow protection device may be required by local codes. If so, install on the potable water system directly ahead of the appliance. The backflow protection device shall be any of the following: an approved pressure type vacuum breaker installed at least 12" above the highest point of use, a double check valve backflow preventer or a reduced pressure principal backflow preventer.

All Models

NOTE: Electrical connections must be performed by a qualified installer only.

Before making any electrical connections to these appliances, check that the power supply is adequate for the voltage, amperage, and phase requirements stated on the rating name plate mounted on the appliance.

The circuit breaker that is used to provide power to this appliance must have a minimum of .076" (3mm) contact spacing. The circuit breaker must meet all Local and National installation standards.

All appliances must be installed in accordance with Local or National Electrical codes.

A wiring schematic is located on the inside of the removeable side panel.

NOTE: Disconnect the power supply to the appliance before servicing.

⚠ **WARNING!!**

Improper installation may invalidate your warranty.

A strain relief for the power supply cord is provided. The installer must supply a cord that meets all Local and National installation standards.

⚠ **WARNING!!**

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

⊞ Operation
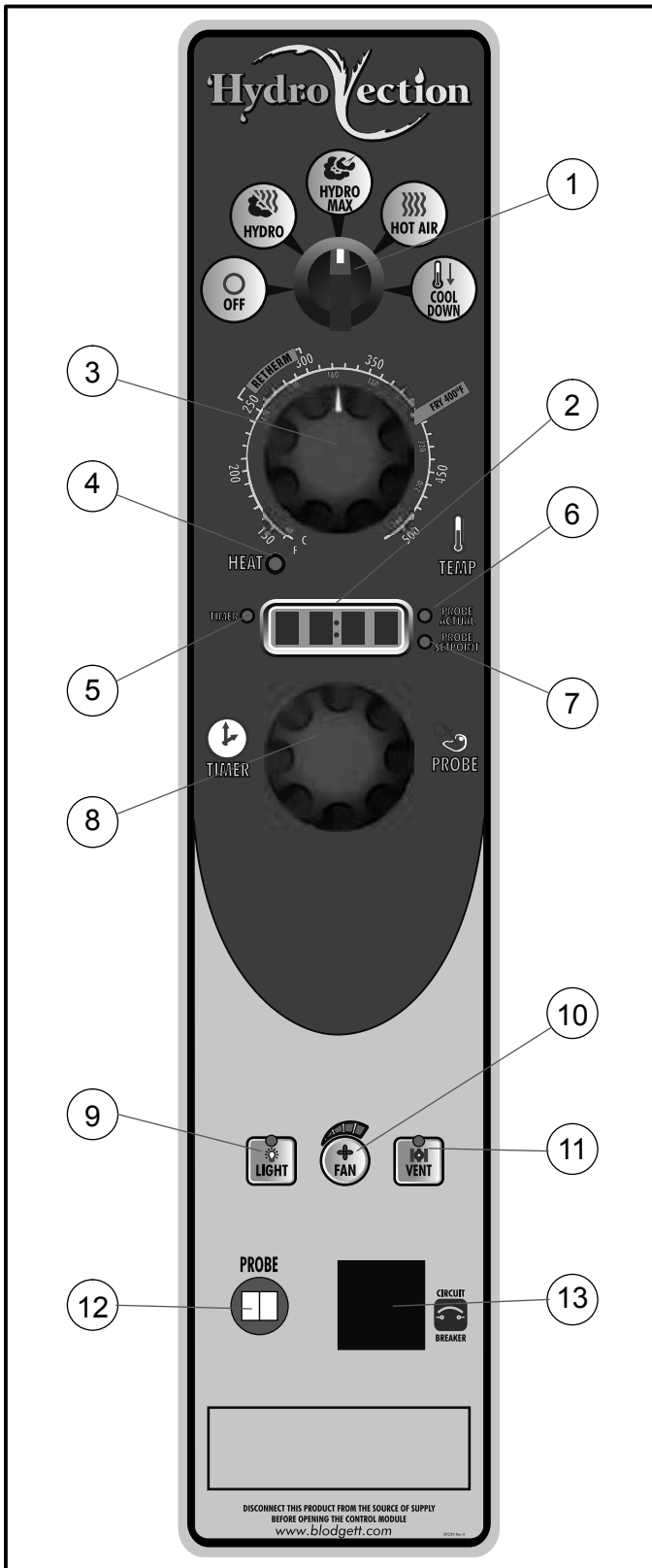
Standard Control

Figure 7

CONTROLS IDENTIFICATION

1. MODE SELECTOR SWITCH - turns power to the oven on or off. Allows selection of Hydro, Hydro Max, Hot Air, Combi or Cool Down Modes.

2. DISPLAY - displays time and temperature information.

3. TEMPERATURE DIAL - used to set desired cooking temperature.

4. HEAT LAMP - lights when the oven is calling for heat

5. TIMER LED - lights when the cook time is displayed

6. PROBE ACTUAL LED - lights when the actual probe temperature is displayed

7. PROBE SETPOINT LED - lights when the core setpoint temperature is displayed

8. TIMER/PROBE KNOB - use to select and set either cook time or probe temperature

9. LIGHTS KEY - press to turn the oven lights on and off

10. FAN SPEED KEY - used to select fan speed.

11. CAVITY VENT KEY - used to open or close vent to release steam from cavity.

12. PROBE CONNECTION - used to connect the core temperature probe to the control.

13. CIRCUIT BREAKER - Used to turn power to the unit on or off.

TIMER COOKING

1. Press the TIMER/PROBE KNOB (8) to select the timer mode. The TIMER LED lights.

2. Turn the MODE SELECTOR Switch (1) to the desired function.

3. Set the TEMPERATURE DIAL (3) to the desired cook temperature.

4. When the oven has reached the cook temperature, load the product.

5. Rotate knob to enter the desired cook time in the display. You can clear the display by rotating counter clockwise. The timer begins on its own.

6. The temperature, time and mode can be altered at any time during the cooking process.

7. When the timer reaches 00:00, the buzzer sounds. Press or rotate the TIMER/PROBE KNOB (8) counter clockwise to silence the buzzer. Remove the product.

PROBE COOKING

1. Press the TIMER/PROBE knob (8) to select the probe setpoint mode. The PROBE SETPOINT LED (7) lights.

2. Rotate the knob to enter the desired final cook temperature in the display.

3. Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.

4. Connect the core probe to the PROBE CONNECTION (12) at the bottom of the control.

5. The display gives the actual core probe temperature by pressing the TIMER/PROBE knob (8) again.

6. When the product reaches the final cook temperature the buzzer sounds.

COOL DOWN

NOTE: The unit can be cooled down rapidly.

1. To cool down the oven cavity, open the door and select Cool Down on the MODE SELECTOR Switch (1).

⊞ Operation
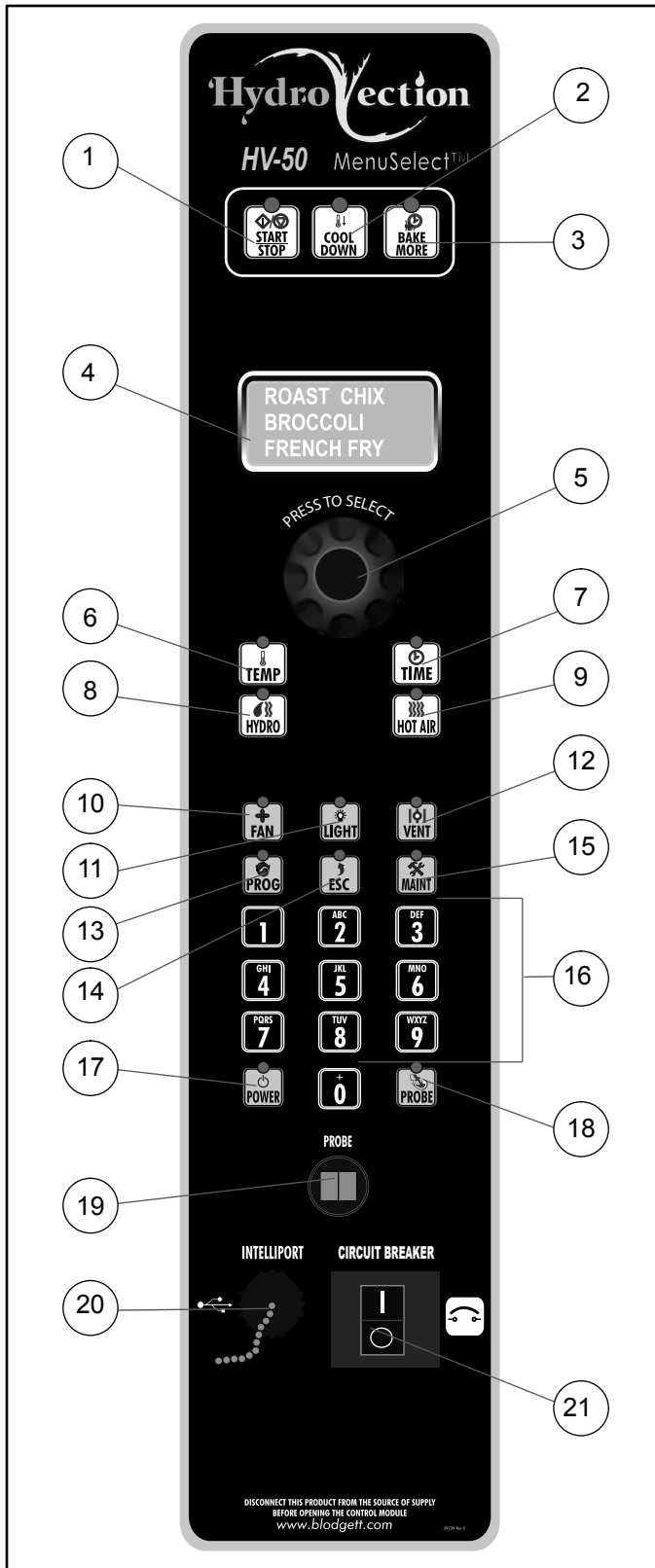
MenuSelect™ Control

Figure 8

CONTROL DESCRIPTION

1. START/STOP KEY - press to start, cancel or pause the bake

2. COOL DOWN KEY - initiates oven cool down cycle

3. BAKE MORE KEY - press at the end of a bake cycle to add additional bake time in one minute increments.

4. DISPLAY - displays time or temperature and other information related to oven function and/or programming.

5. DIAL - used to enter set points, time, and programmable settings. Also used to select the programmed product.

6. TEMP KEY - used to set or change the bake temperature

7. TIME KEY - used to set or change the bake time.

8. HYDRO KEY - press to enter hydro mode

9. HOT AIR KEY - press to enter hot air mode

10. FAN KEY - press to select the fan speed

11. LIGHT KEY - press to turn the lights on and off.

12. VENT KEY - press to manually open and close the oven vent

13. PROGRAM KEY - press to enter product programming and save programmed settings.

14. ESCAPE KEY - press to back up one step during programming

15. MAINTENANCE KEY - press to enter manager programming and save programmed settings

16. ALPHA/NUMERIC KEYPAD - used to program recipes.

17. POWER KEY - used to place control in and out of standby mode.

18. PROBE KEY - press to use core probe cooking

19. CORE PROBE CONNECTION - plug core temperature probe in here when using probe cooking

20. USB PORT - Used to download programming information from a USB drive

21. CIRCUIT BREAKER - Used to turn power to the unit on or off.

OVEN STARTUP

1. Be sure the shutoff switch and/or circuit breaker switch below the control panel are in the on position. The display flashes OFF PRESS POWER KEY TO START.

   NOTE: If the real time clock and auto wake up functions are enabled the display reads PRESS POWER KEY TO START AUTO START.

2. Press the POWER KEY (17). The display reads PREHEAT and the oven heats to the last manual set temperature in the hot air mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.

MANUAL COOKING

1. Turn the DIAL (5) until the display reads MANUAL.

2. Press the TIME KEY (7). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

   NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

   NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

4. Press the desired mode key, Hydro or Hot Air.

   If Hydro is selected, rotate the dial, or use the alpha/ numeric keypad to enter the desired percentage of moisture.

5. When the display flashes READY / IDLE, open the door. Load the product.

6. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROGRAMMED COOKING

1. Turn the DIAL (1) until the name of the product is highlighted. Press the center of the dial to select. The oven preheats to the programmed temperature in the correct cooking mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.

2. Open the door. Load the product.

3. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROBE COOKING

1. Press the PROBE key (18) to select the probe mode. The display reads CORE PROBE COOK & HOLD. Turn the dial to select either YES or NO. Press the center of the dial to select.

   If YES is selected, Cook & Hold has been enabled. In the Cook & Hold mode, the oven cavity lowers to the product pull temperature as the product cooks.

   If NO is selected, Cook & Hold has not been enabled the cavity maintains the cook temperature.

2. Turn the DIAL to enter the desired product pull temperature in the display. Press the center of the dial to save the pull temperature.

3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

   NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

4. Press the desired mode key, Hydro or Hot Air.

   If Hydro is selected, rotate the dial, or use the alpha/ numeric keypad to enter the desired percentage of moisture.

5. Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.

⚕ Operation

MenuSelect™ Control

6. Connect the core probe to the PROBE CONNEC-TION (19) at the bottom of the control.

   NOTE: Do not connect the probe before the cook mode has been selected.

7. The display gives the actual core probe temperature as well as the oven set temperature.

8. When the product reaches the pull temperature the buzzer sounds.

9. Press the START/STOP KEY (1) to silence the buzzer.

   If using Cook & Hold - The cavity temperature continues to drop to the product pull temperature and the display counts up, telling the operator how long the product has been held. Disconnect the core probe and remove the product when ready.

   If not using Cook & Hold - The cavity remains at the cook temperature. The display does not count up. Disconnect the core probe and remove the product when the buzzer sounds.

DURING ANY COOK CYCLE

Venting Moisture from the Oven Cavity

1. Press the VENT KEY (12). This manually opens the vent until the key is pressed again to close it.

Pause a Bake Cycle

1. To pause a cook cycle, press the START/STOP KEY (1). The LED on the start/stop key flashes. The bake cycle will pause until the key is pressed again.

Cancel a Cook Cycle

1. To cancel the cook cycle, press and hold the START/STOP KEY (1).

AT THE END OF ANY COOK CYCLE

1. An alarm sounds, the display reads DONE.

2. If more bake time is desired, press the BAKE MORE KEY (3). This will add an additional one minute of time for each press of the key.

3. When you are satisfied with the bake, press the START/STOP KEY (1) to silence the alarm. Open the door to remove the product.

OVEN SHUTDOWN

1. Press the COOL DOWN KEY (2). The display reads AUTO COOL DOWN ACTUAL TEMP. To speed up the cool down process, open the door and press the VENT KEY (12) to open the vent.

2. When the oven has cooled down, the display reads OFF PRESS POWER KEY TO START.

   NOTE: The lights shut off and the vent closes automatically at the end of the cool down cycle.

PRODUCT PROGRAMMING

Entering the Program Mode

1. Press the PROGRAM KEY (13). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.

Naming a Product Recipe

NOTE: Use the following procedure to name a new product or edit the name of an existing product.

1. For a new recipe, turn the dial to the first open product. Press the center of the dial to select.

   To edit an existing name, rotate the dial to the name to be changed. Press the center of the dial to select.

2. Use the dial to scroll down to Edit Name. Press the center of the dial to enter the edit name menu.

3. Turn the dial or use the alpha/numeric keypad to select the first character. Press the center of the dial to advance to the next character. Repeat for all remaining characters.

   NOTE: Product names may be up to 10 characters long and can contain spaces. Use the #1 key to insert spaces in a recipe name.

   NOTE: To select letters using the keypad, press the appropriate key once if you need the first letter on the key, twice for the second and three times for the third. For example to enter the letter L press the #5 key three times.

4. Press the PROG KEY (13). With SAVE highlighted, press the dial to save the product name.

Programming a Product Recipe

NOTE: The control can hold 99 recipes. Each recipe may have up to 6 cooking stages.

1. Turn the dial to highlight the name of the product to be programmed. Press the center of the dial to select the product.

2. The display reads PRODUCT NAME: STAGE 1. Press the center of the dial to select the stage.

3. Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

   NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

4. Rotate the dial to select the desired cooking mode. Choose from Hydro or Hot Air. Press the center of the dial to set the cook mode.

   If Hydro is selected, rotate the dial, or use the alpha/numeric keypad to enter the desired percentage of moisture.

5. Rotate the dial, or use the alpha/numeric keypad to enter the desired cook temperature. Press the center of the dial to set the bake temperature.

   NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

6. Rotate the dial to select the desired fan speed. Choose from gentle, low, high or turbo. Press the center of the dial to set the fan speed.

7. Rotate the dial to select the fan rotation cycle. Choose between manual or auto.

   NOTE: This is the length of time the fan will rotate in one direction before reversing.

   If manual is selected, rotate the dial or use the alpha/numeric keypad to enter the desired fan cycle. Press the dial to set the fan cycle.

   If auto is selected, the program will use the default fan cycle setting. The default is set through the Manager Programming. See page 18.

8. Rotate the dial to set the vent position. Choose between OPEN or CLOSE. Press the center of the dial to set the vent position.

9. Use the dial to scroll down to PRODUCT NAME: STAGE 2. Press the center of the dial to select stage 2.

10. Repeat steps 2-9 for all remaining stages.

11. When all stages have been programmed, press the PROGRAM KEY (13). To save the programming, use the dial to scroll to YES. Press the center of the dial. The control exits the program mode.

USING THE USB PORT

1. With the power on, remove the cover of the USB port (20) and insert the USB drive.

2. Press the MAINTENANCE KEY (15).

3. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.

4. Turn the dial to highlight either COPY RECIPE FROM USB or COPY RECIPE TO USB, then press the center of the dial to select.

5. When the transfer is complete, press any key to return to the menu.

6. Turn the dial to highlight EXIT. Press the center of the dial to select. The display returns to the previous menu.

7. Turn the dial to highlight EXIT. Press the center of the dial to select.

🍴 Operation

MenuSelect™ Control

MANAGER PROGRAMMING

Entering the Manager Program Mode

1. Press the MAINTENANCE KEY (15). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.

2. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select the product.

Programming Auto Start

NOTE: The Auto Start function enables the oven to turn on at a programmed time of day and preheat to a programmed temperature.

1. Turn the dial to highlight AUTO START. Press the center of the dial to select.

2. Turn the dial to select either ON or OFF. Press the center of the dial to select.

   If ON is selected, the display reads AUTO START 24 HOUR TIME 00:00. Turn the dial to enter the time you would like the oven to begin preheating. Press the center of the dial to select.

   The display reads AUTO START TEMP XXX. Turn the dial to enter the desired preheat temperature. Press the center of the dial to select.

Programming Oven Setup

These menus allow the manager to set up basic oven functions

1. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select.

2. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.

3. Turn the dial to highlight the oven function you wish to change. Press the center of the dial to select. Choose from the following functions:

   Recipe Password - Select YES or NO to enable password protection on recipe programming. If YES is selected the passcode 3124 must be entered to change recipe programming.

   Temp Unit - Select either degrees F or C.

   Cool Down Temp - Select the set temperature for the oven to achieve in Cool Down mode

   Temp Disp Rate - Set the rate, in seconds, at which the display switches between actual and setpoint temperature

Input Rsp Time - Set the length of time allowed to input each variable when programming recipes before control automatically exits out

Setback Time - When not used for a period of time, the oven temperature will automatically reduce to conserve energy. This variable sets the length of time the oven remains at the idle temperature before being lowered.

Ready Beep - Select either ON or OFF. This is the audible alarm that sounds when the oven has reached the set temperature.

Cook Cool Fan - Select either YES or NO. This function allows the control to display OPEN OVEN DOOR when you are attempting to lower the set temperature of the oven.

Restore Manual - Select either YES or NO. This variable enables the oven to remember the last settings used for manual cooking.

4. After editing a function, press the center of the dial to save.

5. When all desired functions have been edited, turn the dial to highlight EXIT. Press the center of the dial to exit the manager programming mode.

SmartTouch Touchscreen Control

Figure 9

CONTROL DESCRIPTION

1. DISPLAY - displays information related to oven function and/or programming.

2. USB Port and COVER - Use to transfer recipes and data to/from the control

3. CORE PROBE CONNECTION - plug core temperature probe in here when using probe cooking

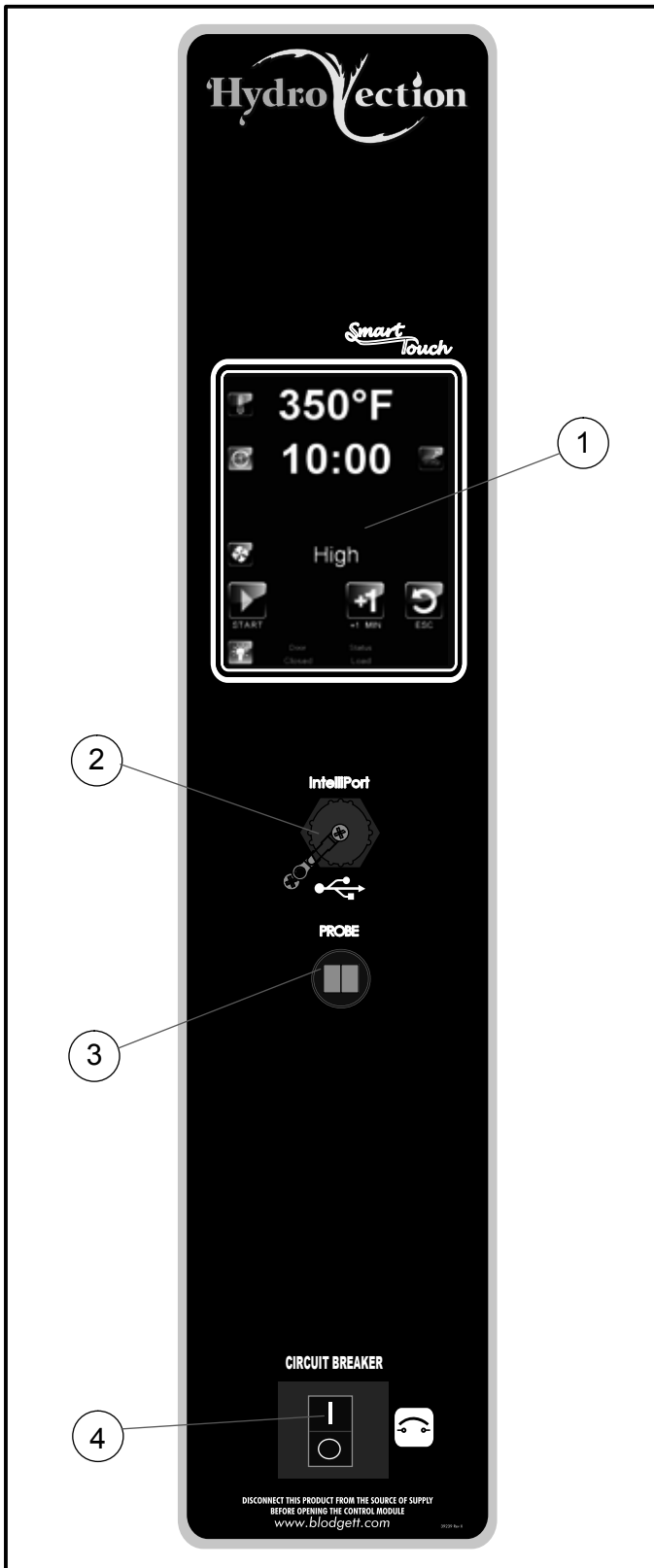4. CIRCUIT BREAKER - Used to turn power to the unit on or off.

⚙ Maintenance

SmartTouch Touchscreen Control

MANUAL MODE COOKING

1. Select the POWER button to turn on the oven and proceed to the manual screen.

2. Set the desired cook settings.

   Temperature - Press the temperature text and enter the desired oven temperature on the keypad provided. Press SAVE & EXIT key to return to this screen.

   Cook Time - Press the time text and enter the desired cook time on the keypad provided. Press SAVE & EXIT to return to this screen.

   Core Probe Cooking - To use the core probe cooking feature, press the PROBE COOK icon. Press the temperature text that appears and enter the desired product core temperature on the keypad provided. Press SAVE & EXIT key to return to the manual cook screen. Insert a product probe in the probe outlet on the control panel. To use the HOLD option, press the HOLD key. Once activated, key will be blue. To escape from probe cooking press the time icon.

   Cavity Moisture - Press the HOT AIR icon to reduce the cavity moisture content in 10% increments. At 0% the oven is in the Hot Air mode. Press the HYDRO icon to increase the cavity moisture content in 10%

   increments. Press % text to set the exact percentage with the keypad. Press the SAVE & EXIT key to return to the manual cook screen. Press and hold the HOT AIR icon for 1 second to set humidity to 0% quickly. Press and hold the HYDRO icon for 1 second to set the humidity to 100% quickly.

   Fan Speed - With the FAN icon highlighted, press the fan speed text (Gentle, Low, High or Turbo). When Turbo is displayed, press the text again to reduce the fans speed to Gentle.

   Fan Reversal Interval - To adjust the fan reversal time, press the FAN REVERSAL icon. Then press the time text and enter the desired reversal interval on the keypad provided. Press SAVE & EXIT key to return to this screen.

   Vent Position - At any time the vent can be opened or closed by toggling the VENT icon. When the icon is highlighted the vent is open.

   Lights - At any time the lights can be turned on or off by toggling the LIGHT icon.

3. Press START Icon to begin cooking. Press Cancel key to stop cooking. Press +1 MIN to add 1 minute to the cook time.
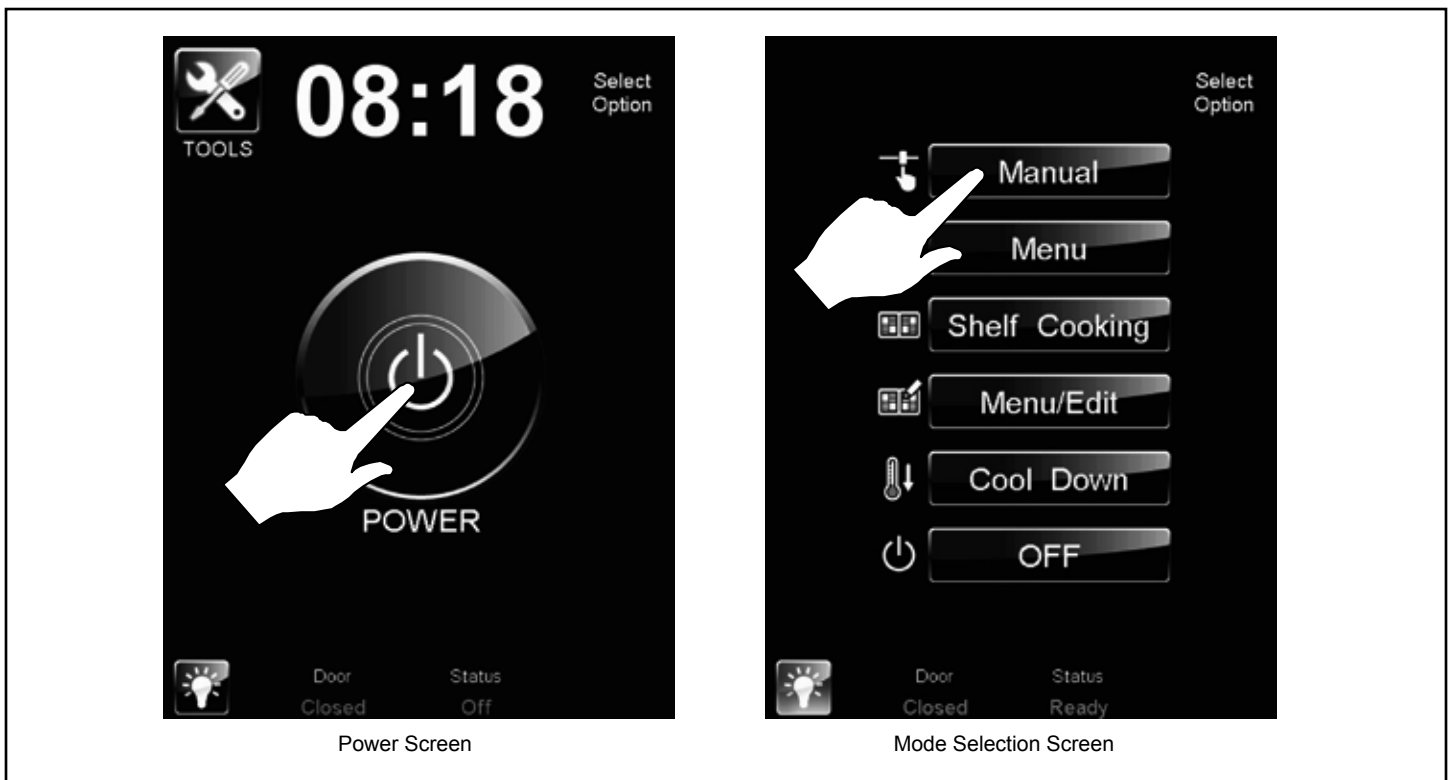

Power Screen   Mode Selection Screen

Figure 10

SmartTouch Touchscreen Control

Temp — 350°F

Time — 10:00 — Probe Cooking

Hot Air Mode — 33% — Hydro Mode

Fan Speed — High — Fan Reversal Increment

START   +1 MIN   ESC

Lights — Door Closed   Status Load — Vent Position
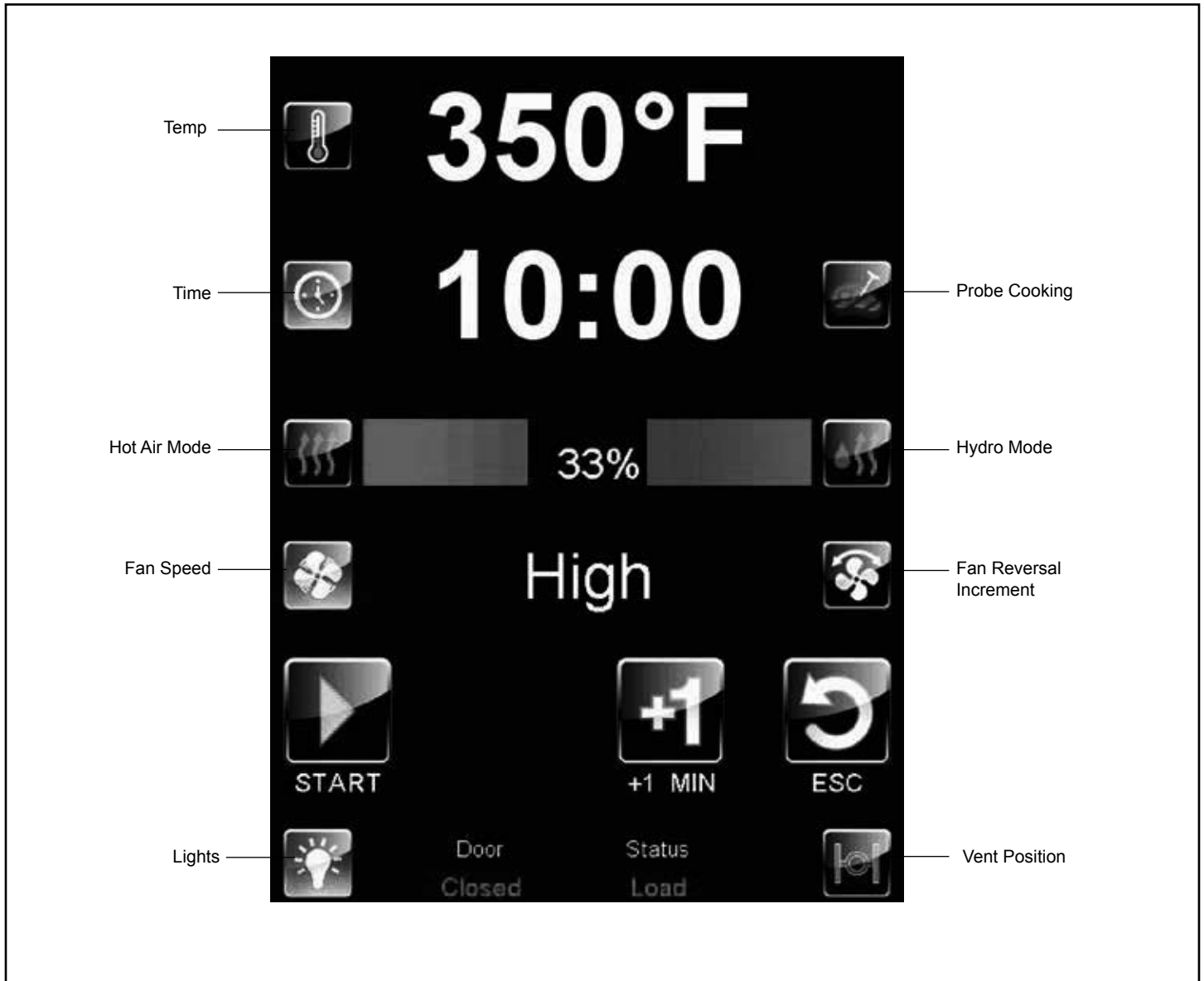
Figure 11

✳ Maintenance

SmartTouch Touchscreen Control

MENU MODE COOKING

1. On a manual screen, press the ESC key to exit the screen.

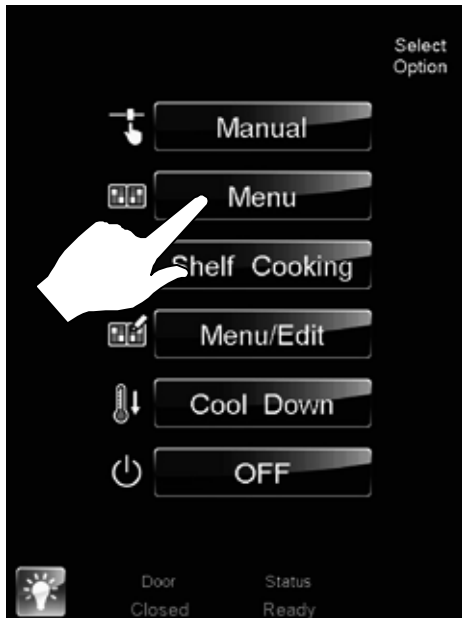2. Select the MENU key to cook using the preprogrammed menu items.

Figure 12

3. Push the SELECT ITEM PRODUCT ICON in the top right corner of the screen

Figure 13

4. Select the desired food category for your product.
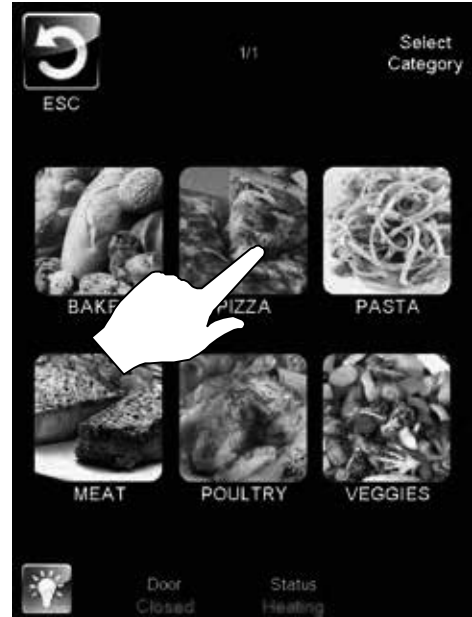
Figure 14

5. Within the food category, select the desired product you wish to cook.

Figure 15

6. Once selected the control returns to the Menu Cooking screen. Press the START KEY to begin the cook cycle.

SHELF COOKING

1. Select the SHELF COOKING key.
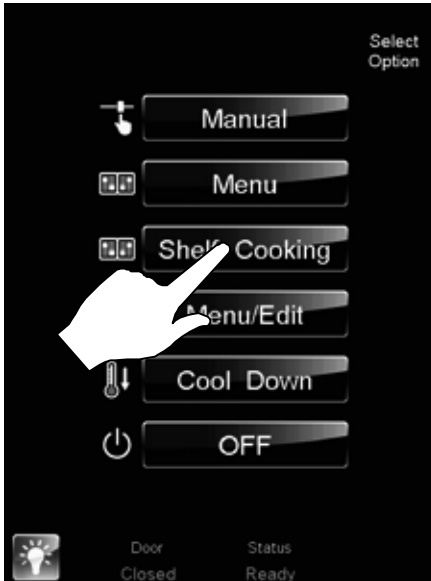
Figure 16

2. Select which shelves you intend to place the selected food item on. Press selected item icon in the upper right corner of the screen to add different items that share the same cook temperature but may have different cook times.

   Once preheated, start icons will appear. You can choose start all or start individual shelves.

Figure 17

3. During the cook cycle, individual shelf cook timers will count down as the product is cooked. If you wish to cancel the bake, you can press the STOP ALL key, or you can stop individual shelves.

   To add time, select +1 MIN key for individual shelves or +1 MIN ALL key to add time to all shelves. Each time the key is pressed, 1 minute of cook time is added.

   Press STOP again to reset to the original values. CLEAR ALL to clear all products from all shelves. All Shelves must be cleared to escape the screen.

   Once the bake is complete the beeper will sound.

Figure 18

SmartTouch Touchscreen Control

EDITING A MENU

1. Select the MENU/EDIT icon to edit the recipes in the menu mode.
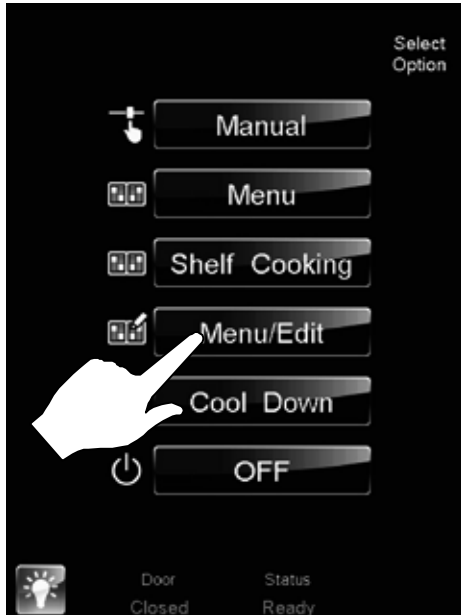
Figure 19

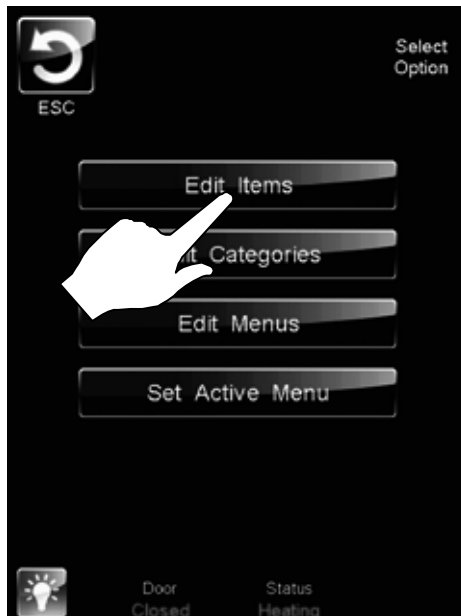2. Select the EDIT ITEMS icon to edit the menu items.

Figure 20

3. To edit an existing item, select the item while the EDIT ITEMS key is highlighted.

   To delete an Item, select the item while the DELETE key is highlighted.

   To create a new item, select the NEW ? icon while the EDIT key is highlighted.

Figure 21

SmartTouch Touchscreen Control

4. Each recipe is made up of steps containing seven settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

To add a step, press the + key icon.

To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

Once you are finished, press the DISK icon to save the changes.

Figure 22

⚙️ Maintenance

SmartTouch Touchscreen Control

EDITING A CATEGORY

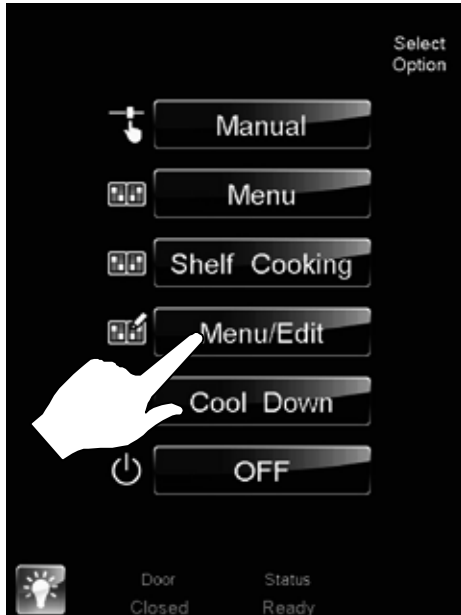1. Select the MENU/EDIT icon to edit the recipes in the menu mode.

Figure 23

2. Select the EDIT CATEGORIES icon to select which items are in each category.

Figure 24

3. To edit an existing category, select the category while the EDIT key is highlighted.

To delete a category, select the category while the DELETE key is highlighted.

To create a new category, select the NEW ? icon while the EDIT key is highlighted.
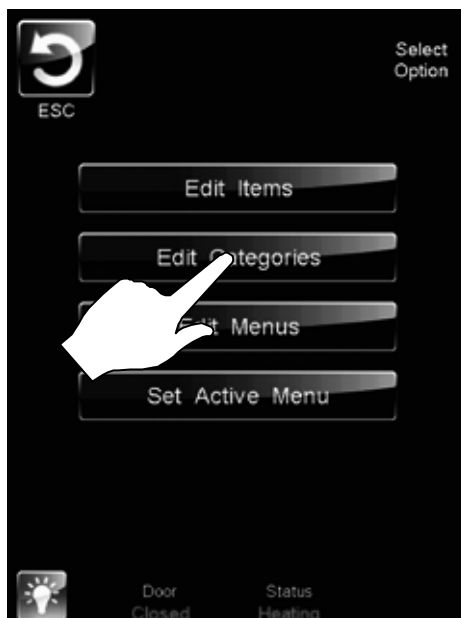
Figure 25

4. Select what you would like to edit.

To edit the name, press the EDIT NAME key. A keyboard will appear, enter the desired name and press ENTER to return to this menu.
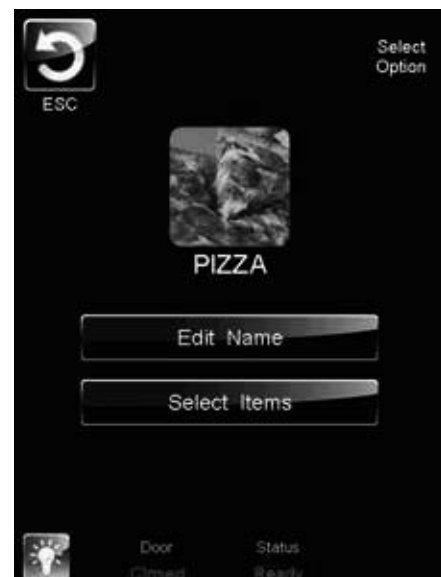

Figure 26

SmartTouch Touchscreen Control

5. To edit the category icon, press the category icon displayed in the category edit screen. The Select Icon screen is displayed. Select the desired icon. To view more icon options, press the arrow key.

    Once the category icon is selected, the category edit screen is displayed. Press the DISK icon to save your changes.

Figure 27

6. To edit items within a category, press the SELECT ITEMS key on the edit category screen.

    Select the items you would like to appear within the category. When complete, press ESC key to return to the previous menu. Press the DISK icon to save your changes.

Figure 28

⚙ Maintenance

SmartTouch Touchscreen Control

CREATING NEW MENU ITEMS
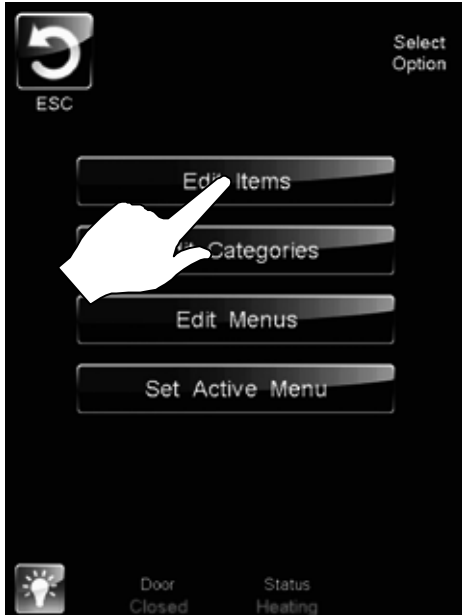
1. Select the EDIT ITEMS key.

Figure 29

2. Select New?

3. Select the food icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.

4. Name the item. Press the blank shelf below the icon to name the recipe. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.

5. **Program the recipe steps** - Each recipe is made up of steps containing seven settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

   To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

   To add a step, press the + key icon.

   To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

   To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

   Once you are finished, press the DISK icon to save the changes.

6. To file recipe under an existing category, press the EDIT CATEGORIES key. Select the desired category. Press the SELECT ITEMS key. Highlight the new item. Press the ESC key. The disk will be displayed, press to save your changes.

CREATING NEW CATEGORIES

1. Select the EDIT CATEGORIES key.

Figure 30

2. Select New?

3. Select the category icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.

4. Press EDIT NAME. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.

5. Press SELECT ITEMS. Select items to be filed in the new category. Items will be highlighted as they are selected. Press ESC key to return to the previous screen. The disk will be displayed, press to save your changes.

6. To display the category, it must be added to the default menu as follows:

    Press the EDIT MENUS key. Select the DEFAULT key. Select the CATEGORIES key. Highlight the new category. Press the ESC key to return to the previous screen. The disk will be displayed, press to save your changes.

⚙ Maintenance

SmartTouch Touchscreen Control

TRANSFERRING RECIPES USING THE USB

1. Return to the power screen.

Figure 31

2. Press the TOOLS key. Enter the code 6647 on the keypad.

Figure 32

3. Press the MANAGE MENU DATA key. Insert the USB drive into the Intelliport.

To Store Menu Data to a USB

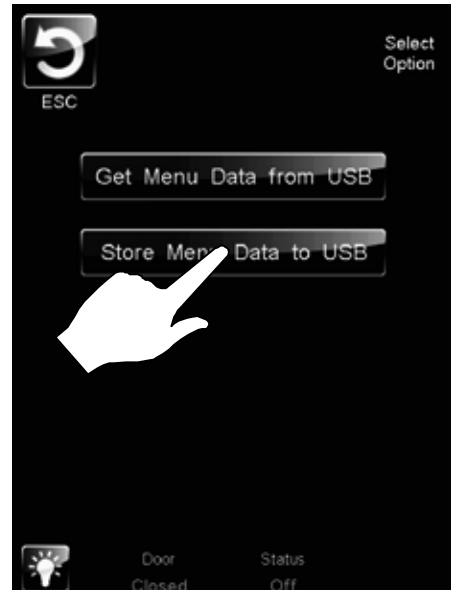1. Press the STORE MENU DATA to USB key to transfer recipes to the USB.

Figure 33

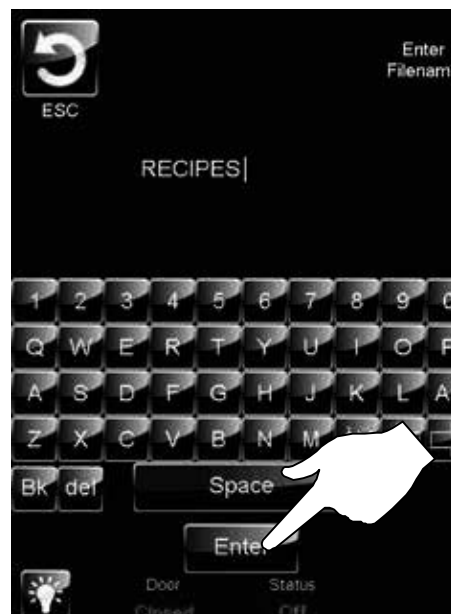2. The keyboard screen is displayed. Use to enter desired file name. Press the ENTER key when finished.

Figure 34

3. The status screen appears to display the download status. The display returns to the previous screen when download is complete.

Figure 35

4. Press the ESC key to exit USB screen.

To Retrieve Menu Data from USB

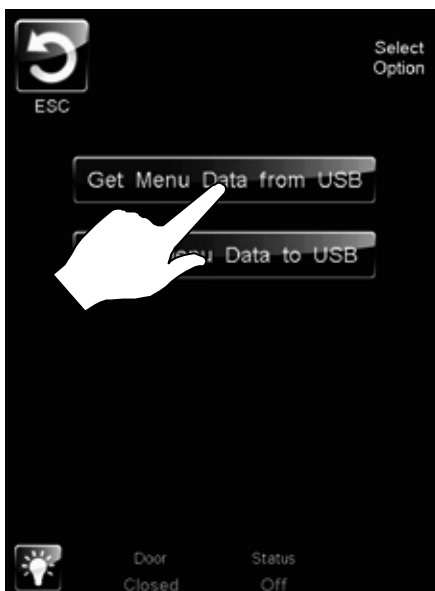1. Press the GET MENU DATA from USB key to transfer recipes from the USB.

Figure 36

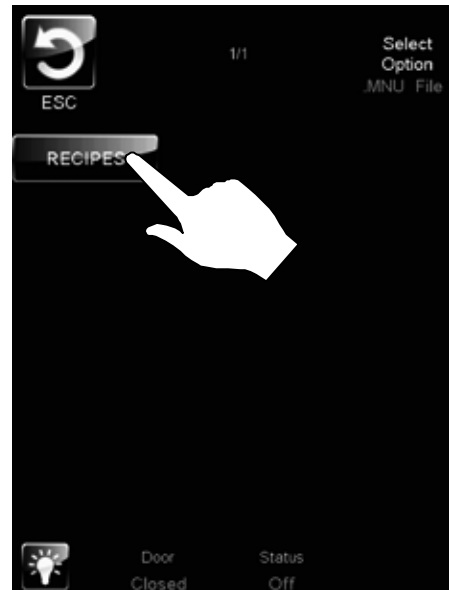2. The control displays all menu (.MNU) files on the USB drive. Select the desired file.

Figure 37

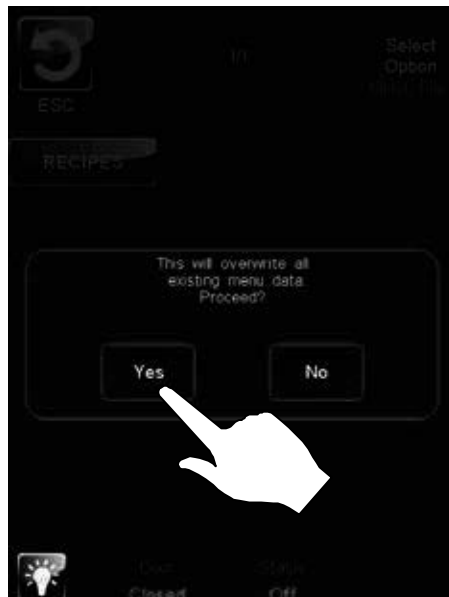3. The overwrite warning screen appears. Press YES to continue

Figure 38

4. The status screen appears to display the upload status. The display returns to the previous screen when upload is complete.

5. Press the ESC key to exit USB screen.

✴ Maintenance

SmartTouch Touchscreen Control

COOL DOWN

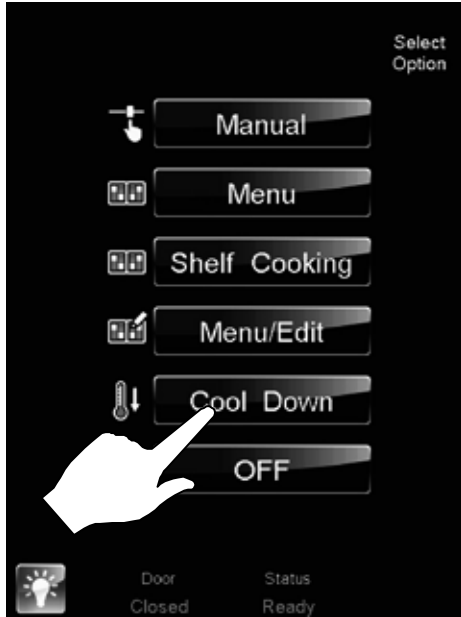1. To cool down the unit, press the COOL DOWN icon.

Figure 39

2. The oven will toggle between cooling and open door in yellow until the oven is cool. Once cool, the oven will go to standby.

NOTE: *If the oven is shut down with the circuit breaker switch at the bottom of the front panel, the display will return to the power screen. Select your option to begin.*

Figure 40

Spray Bottle Operating Procedure

NOTE: Only use a commercial oven cleaner/degreaser with the spray bottle. DO NOT use chemicals that are not intended as oven cleaners. See chemical manufacturer's information for intended use.

1. Unscrew the sprayer head and fill the container to the MAX mark. Screw the head assembly on firmly to ensure an airtight seal. The liquid must be clean and free from foreign matter. Do not overfill - space must be left for compressing air.

2. To build up pressure, pump approximately 20 full strokes when the container is filled with liquid. The higher the pressure, the finer the spray. If the container is only partially filled, then more pumping is required to compress the additional air space.

3. To spray, depress the trigger with your thumb.

4. Adjust spray nozzle for a wide spray pattern.

5. After a period of spraying, the pressure will drop. Restore the pressure by operating the air pump.

6. Release pressure after use by inverting the spray head and depressing the trigger or by slowly unscrewing the spray head assembly which will allow air to escape from around the filling aperture.

7. After use, rinse the spray bottle with clean water and check that the hole in the nozzle is perfectly clean and clear. Warm water (not hot) used with a household detergent is a useful cleaning agent for this purpose.

   NOTE: Further information can be found in the instruction leaflet supplied with your spray bottle.

⚠ **WARNING!!**

Protective clothing and eyewear should be worn while using cleaning agents.

Clean the pump 2 or 3 times per week with warm water
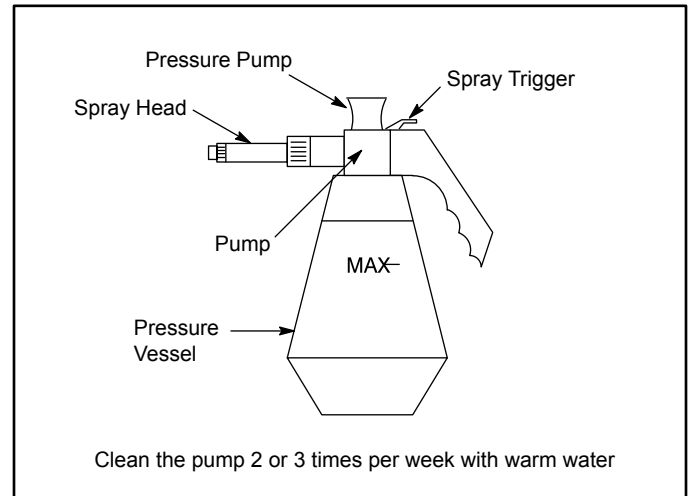
Figure 41

Complete Spray Bottle - P/N R0006

Spray Head Repair Kit - P/N R6332

� Maintenance

Cleaning and Preventive Maintenance

CLEANING THE INTERIOR

Daily Cleaning

Daily cleaning of the appliance is essential for sanitation, and to ensure against operational difficulties. The stainless steel cavity may corrode with improper cleaning of the oven. Use an oven cleaning detergent in conjunction with the supplied spray bottle.

For difficult cleaning, allow the spray-on oven cleaner to work longer before rinsing.

1. Cool the appliance down to 140ºF (60ºC) or, if the oven has been idle, turn the Hydro mode on for 3 to 4 minutes in order to warm the cavity surfaces.

2. Fill the spray bottle and pump air into the container with the pressure pump.

3. Spray the interior of the oven with a cleaning solution. Be certain to spray cleaner through the fan guard to cover all surfaces.

   NOTE: Never spray water into the appliance when the temperature is above 212ºF (100ºC).

4. Let the cleaner work the time recommended by the cleaning solution manufacturer. For difficult, baked on grease, etc. allow to work over night.

5. Set the timer for 15 to 20 minutes.

6. Run the oven at 225ºF (107ºC) in the Hydro mode with 100% humidity. This will soften all burned on residue.

7. Rinse the appliance interior with water (a hose is supplied, but take care that only the interior cavity is sprayed with water). Wipe the interior dry after rinsing.

8. The door should be kept slightly open after cleaning. This will allow the oven to vent and increase the life of the door gasket.

On stainless interiors, deposits of baked on splatter, oil, grease or light discoloration may be removed with a good non toxic industrial stainless steel cleaner. Apply cleaners when the oven is cold and always rub with the grain of the metal. The racks, rack supports and the blower wheel may be cleaned in the oven or by removing them from the oven and soaking them in a solution of ammonia and water.

NOTE: DO NOT use corrosive cleaners not intended for oven cleaning on your Hydrovection oven.

Recommended cleaners:

• ECOLAB - Greasecutter Plus

• CELLO - EZ Clean

• Diversey-Lever - Advance Oven Cleaner

⚠ **WARNING!!**

Be sure to read and follow the MSDS or safety instructions on the bottle for your oven cleaner.

Cleaning and Preventive Maintenance

Oven Weekly Cleaning

In addition to the daily cleaning, it is necessasry to clean behind the fan guard of this oven on a weekly basis. This is necessary for proper functioning of the oven. Scale will build up on the fan and heat source leading to a less efficient oven.

1. Turn off the oven. Make sure that the oven is cooled down to under 140ºF (60ºC).

2. Remove the rack guides.

3. Rotate the screw to unlock the fan guard.

Figure 42

4. Remove the fan guard.

Figure 43

5. Thoroughly spray cleaner onto the fan and heat source. Close the door to allow the cleaner to work.

6. After ten minutes, rinse the cleaner off. Return the fan guard to the closed position. Rotate the screw to secure the fan guard.

Remove and clean the blower wheel every 6 months.

CLEANING THE EXTERIOR

The exterior of the appliance may be cleaned and kept in good condition with a light oil. Saturate a cloth and wipe the appliance when it is cold; wipe dry with a clean cloth.

⚠ **WARNING!!**

DO NOT spray the outside of the appliance with water or clean with a water jet. Cleaning with a water jet can impregnate chlorides into the stainless steel, causing the onset of corrosion.

PREVENTIVE MAINTENANCE

The best preventive maintenance measures are the proper initial installation of the equipment and a program for cleaning the appliance routinely. The Hydrovection requires no lubrication. Contact the factory, the factory representative or a local Blodgett service company to perform maintenance and repairs should they be required.