



# Proofer

# EP18/24

## Operator's Manual

and

## Technical Supplement

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# Preface

The EP18/24 & EP18/24/34 Econo Proofers are designed for retail bakery, in-store bakery and the donut shop. It features six individual clear acrylic doors with stainless steel tops, bottoms and ends, to enable loading and unloading of 3 screens or bun pans per door. This minimizes heat and humidity loss. The air is recycled every eighteen seconds.

The EP18/24/34 Econo Proofer has a warning light that glows when humidity water is low in the reservoir. In the European Community, the machines are available with the following electrical configurations:

- 220/240 volts, 1 phase, 50/60 hertz

A thorough understanding of how to operate, clean, and maintain the Econo Proofer safely will prevent production delays and injuries. The operator must work safely at all times, read and follow the instructions in this manual, and heed all warnings, including the following:

- To avoid electrocution or other injury, turn off the machine's main power before attempting any cleaning, disassembly, adjustment, or repair.
- To avoid damaging the machine, never use force to assemble, disassemble, operate, clean, or maintain it.
- Distilled or filtered water must be used in the proofer to avoid corrosion.

- Be careful never to get water, or other materials on the floor. If anything does get spilled on the floor, mop it up immediately. Materials on the floor can cause people to slip or fall, resulting in serious injury or loss of life.
- To prevent unintentional startup and possible fire, disconnect the machine from the power source if there is a local power outage. When the power is restored, it is safe to connect the machine to the power source again.
- To avoid electrocution, make sure that all electrical cords are not frayed or cracked and that they do not pass through any water.
- Make sure that all electrical cords are routed so that no one will trip over them.
- If water is spilled while cleaning the proofer, be sure to dry the floor thoroughly.

Do not permit water pan to run out of water. Check often. Use only soft or distilled water in the operation of this proofer.

# 1

# Operation

## Control Functions

SEE FIGURE 2, Following:

- A. **HUMIDITY CONTROL PILOT LIGHT:** Indicates when the water heater element is heating.
- B. **HUMIDITY CONTROL:** Control for the water heating element. Set on high, the water heat element will remain on constantly. Set on any setting other than high, the control will cycle on and off. Higher numbered settings create a longer on-cycle and high humidity.
- C. **WARNING – LOW WATER PILOT LIGHT:** Indicates whenever the water in the water reservoir is getting low. At the same time this pilot light comes on, a buzzer will go off, and power to the water heating element is automatically turned off. **NOTE:** This will result in a drop of loss of humidity in the proof box.
- D. **HEAT CONTROL:** Control for the air heating element.
- E. **HEAT CONTROL PILOT LIGHT:** Indicates when the air heat element is heating.
- F. **CONTROL BOX POWER SWITCH:** Controls the power to the control box.
- G. **CONTROL BOX POWER PILOT LIGHT:** Indicates the power in the control box is on.

### CAUTION

Do not permit water pan to run out of water. Check often. Use only soft or distilled water in the operation of this proofer.

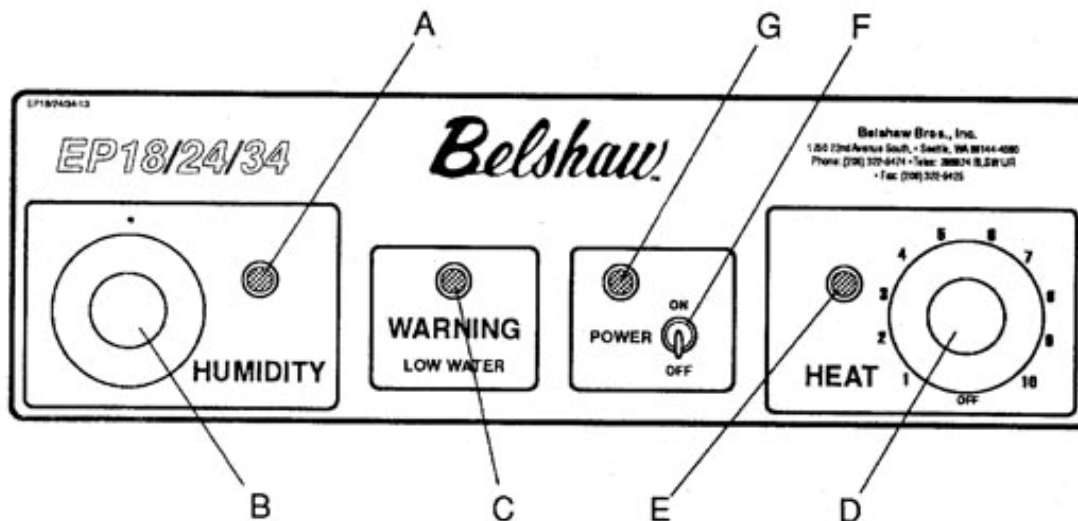


Figure 2

## Operation Instructions

### CAUTION

If water is spilled while filling the water pan, thoroughly dry all surfaces including the floor. Spilled water may cause serious injury, loss of life, or damage to equipment. Water may continue to drip. To prevent the floor from becoming wet and slippery, use a pan to collect dripping water. Do not move the proofer when water is in the reservoir.

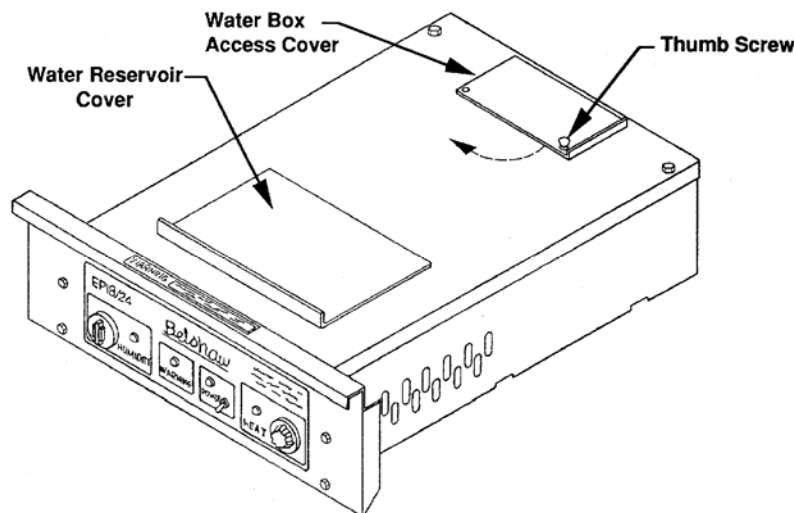
(**Note:** Use only distilled or purified water in Proofer to avoid build-up in the water box of minerals and deposits normally found in tap water.)

1. Lift off water reservoir cover and fill water reservoir (see Figure 3). If necessary, open lower door(s) and remove screen(s) or

tray(s) to access the water reservoir. Do not fill beyond ½” of the top edge. When finished replace cover and doors.

**Note:** Do not pull the control box out to gain access to the water reservoir because water may be spilled when moving the control box.

2. Turn on control box power switch.
3. Set heat control to desired temperature.
4. After proof box is up to temperature, turn humidity control to high. When desired humidity has been achieved, turn humidity control down to a midpoint setting. **NOTE:** final optimum settings of both heat control and humidity control can only be determined through daily use of the proof box.



**FIGURE 3**

# 3

# Cleaning

## **Proof Box**

Once a week, clean the proof box as follows:

1. Remove and clean Plexiglas doors with warm water.
2. Disconnect from power and remove control box from cabinet.
3. Remove and clean the screen rack angles, angle supports, and air duct.
4. Wipe the cabinet interior clean.
5. Special attention should be given to cleaning the water box (Item 2 of Control Box Assy, parts list drawings). Clean the water box as follows:
  - A. Remove water reservoir cover.
  - B. Empty the water reservoir pan.
  - C. Remove water box access cover thumb screw and rotate access cover to open position. (see Figure 3)
  - D. Use a rubber syringe baster to remove sediment from the water box. Wipe the inside of the water box with a rag.
  - E. Add a small amount of water to the water reservoir pan. Water should flow freely into the water box. If not, clean out the water line between the water box and the water reservoir pan. Check for blockage at the water box inlet hole first.
  - F. Close water box access cover and fasten with thumbscrew.
  - G. Replace water reservoir cover.

Following are some cleaning charts, to help keep track of regularly scheduled cleaning.





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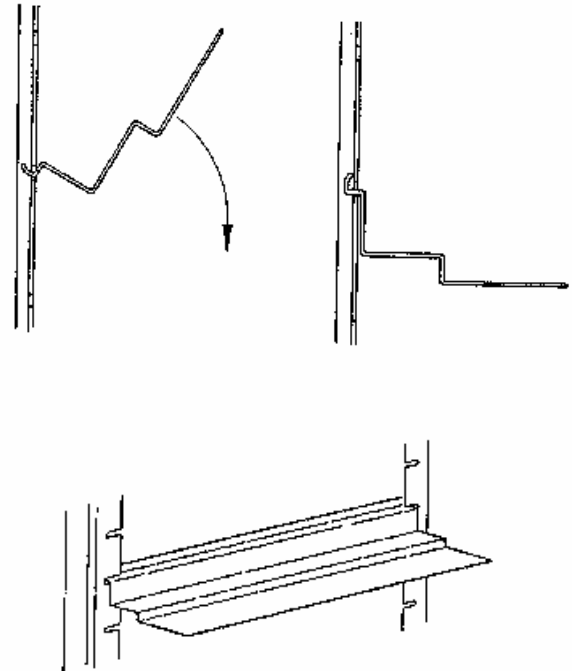
# 1

# Installation

## Unpacking and Assembling the Econo Proofer

Use a forklift to transport the shipping crate to the workstation.

- Break down the shipping crate.
- Remove the packing materials from the proofer, including foam, tape, brown paper, plastic, and white protective coating.  
**Do not remove the plastic from the Plexiglas doors at this time.**
- Cut the bands holding the control box in place and remove control box from cabinet.
- Remove and discard the plywood that the control box was resting on.
- Inspect the machine to see that no parts are bent, scratched, or otherwise damaged. If any damage has occurred in shipping, file a freight claim with the shipping company immediately.
- Clean the humidifier water box and the fill box. Refer to Section 3 for cleaning instructions.
- Install screen rack angles onto angle supports by tilting the angles up and sliding the flange into the notches of the supports. See Figure 1.



**Figure 1**

- If not already done, remove the packing material from the control box and put water reservoir cover in place over water reservoir.
- Place control box into cabinet, push cord through the hole in the floor, to the left of the control panel, and close cord opening cover plate.
- Remove protective covering from the Plexiglas doors. Clean the doors with warm water.
- Insert the hinge pin on right side of door into place, then slip the left side hinge pin onto slot.

### **WARNING**

**If water is spilled while cleaning the proofer, be sure to dry the floor thoroughly.**

- **Note: due to vibration in shipping, the door handles might get out of adjustment. To adjust door handles: loosen the screws which fasten the handle to the plexiglas door, adjust position of the handle so it just clears the bottom of the door above when both are closed; tighten screws. If more than one door handle requires adjustment, start with the one nearest the top of the proofer and work down.**
- Turn humidity control, heat control, and control box power switch to their off positions (see Operation Instructions)
- Connect Econo Proofer cord to power source. **Check wiring diagram and data plate for proper power specifications.**
- Mail the attached warranty registration form within ten days of installation.

- Keep this manual for future reference. Put it where you know you can find it.

## Initial Cleaning

Remove all the packing materials. Wipe the Econo Proofer with a soft, damp cloth. Dry these areas completely.

### **WARNING**

**To avoid electrocution or other injury, turn off the machine's main power before attempting any cleaning, disassembly, adjustment, or repair.**

# 2

# Maintenance

The EP18/24/34 Econo Proofer requires no maintenance, other than the daily/weekly cleaning.

# 3

# Troubleshooting

If you have problems with your EP18/24/34 Econo Proofer, call your dealer or another qualified technician.

If your dealer cannot help you, please call Belshaw. To do so, first dial the appropriate international access code, then 1-206-322-5474.

When you call, please specify the following:

- The model name of the machine.
- The serial number of the machine.
- The voltages, phase, and cycle of the machine.

## **WARNING**

**If you perform repairs yourself or have them performed by anyone other than a service technician authorized by Belshaw Bros., you do so at your own risk.**

## **WARNING**

**Disconnect the machine from the power source before disassembling, repairing, or wiring.**

<b>THE PROOF BOX WILL NOT HEAT UP</b>	
<b>Possible Causes</b>	<b>What To Do</b>
Control box power switch is not on.	Flip switch to on position.
Defective heat control.	Replace the heat control.
Loose wire or bad connection.	Repair the wire.
Defective heat element.	Replace the heat element.
Defective control box power switch.	Replace power switch.
<b>LACK OF HUMIDITY OR UNEVEN HUMIDITY</b>	
<b>Possible Causes</b>	<b>What To Do</b>
Low water.	Refill water reservoir.
Defective humidity control.	Replace the humidity control.
Defective snap disc thermostat.	Replace the snap disc thermostat.
Defective water heat element.	Replace the water heat element.
Restriction or sediment in the water line or the water heat box inlet hole.	Clean out water line.
Loose wire or bad connection in humidity circuit.	Repair loose wire or connection in humidity circuit.
Blower is not running.	See “Blower Will Not Run” section
Doors out of alignment.	Align doors.

<b>BLOWER WILL NOT RUN</b>	
<b>Possible Causes</b>	<b>What To Do</b>
Control box power switch is not on.	Flip switch to on position.
Defective blower motor.	Replace blower motor.
Defective control box power switch.	Replace control box power switch.
Loose wire or bad connection in blower control circuit.	Repair loose wire or bad connection.