Great Lakes
ORTHODONTICS, LTD.
An Employee Owned Company

Model Dryer
205-018

Operating Instructions

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1. Safety

Always observe the following safety precautions:

- Use only as specified by the operating instructions or the intrinsic protection may be impaired. After transport or storage in humid conditions, dry out the unit before connecting it to the supply voltage. During drying out the intrinsic protection may be impaired.
- Connect only to a power supply with a voltage corresponding to that on the serial number label.
- Connect only to a power supply that provides a safety ground terminal.
- Before moving, disconnect at the power supply socket.
- Do not check the temperature by touch, but instead use the thermometer.
- To reduce the risk of eye injury during high temperature operation, use safety goggles or spectacles.
- Do not touch surfaces that become hot during high temperature operation.
- Insure that the operating temperature is less than the maximum operating temperature of your sample material.
- Insure that the power switch is easily accessible during use.
- If liquid is spilled inside the unit, disconnect it from the power supply and have it checked by a competent person.
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilled on or inside the equipment.
- The responsible body shall be made aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

2. Product Information

The Great Lakes Model Dryer is designed for laboratories and clinics that require contemporary styling, accuracy and economy in a basic model dryer. It uses a dial controlled thermostat for temperature control and provides a top enter ferrule entry point for thermometer insertion. The model dryer has a chamber volume of 0.8 cu. ft. (0.02 cu. m) and a chamber temperature range of ambient +5˚C to 60˚C. The model dryer comes with two movable shelves. Additional shelving may be purchased.

3. Assembly

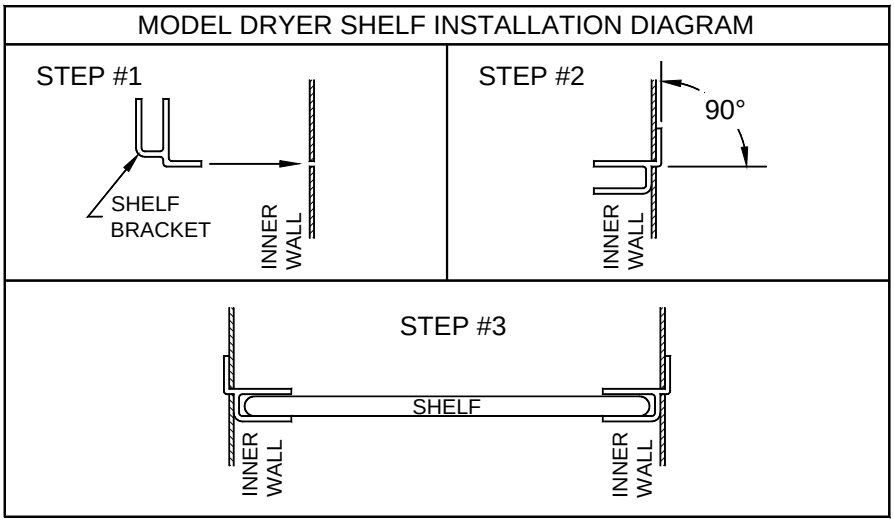
3.1 Unpacking

Remove packing materials carefully, and retain for future shipment or storage of the unit. Inspect for damage. Report all shipping damage to the carrier immediately. Shipping damage is covered by the carrier and repair/replacement for shipping damages must be coordinated through the carrier. Packs should contain:

- Model Dryer
- Operating Instructions
- Two Shelves
- Eight Shelf Brackets

3.2 Installation

Place the Model Dryer on a flat and stable surface, preferably away from drafts. Insure that the surface on which the unit is placed will withstand the radiated heat produced by typical laboratory model dryers. Plug power cord into a power supply that matches the voltage listed on the serial number label on the rear of the unit.



Insert the wire rack shelves at the desired heights. Refer to the sketch above for proper shelf bracket installation for the Model Dryer.

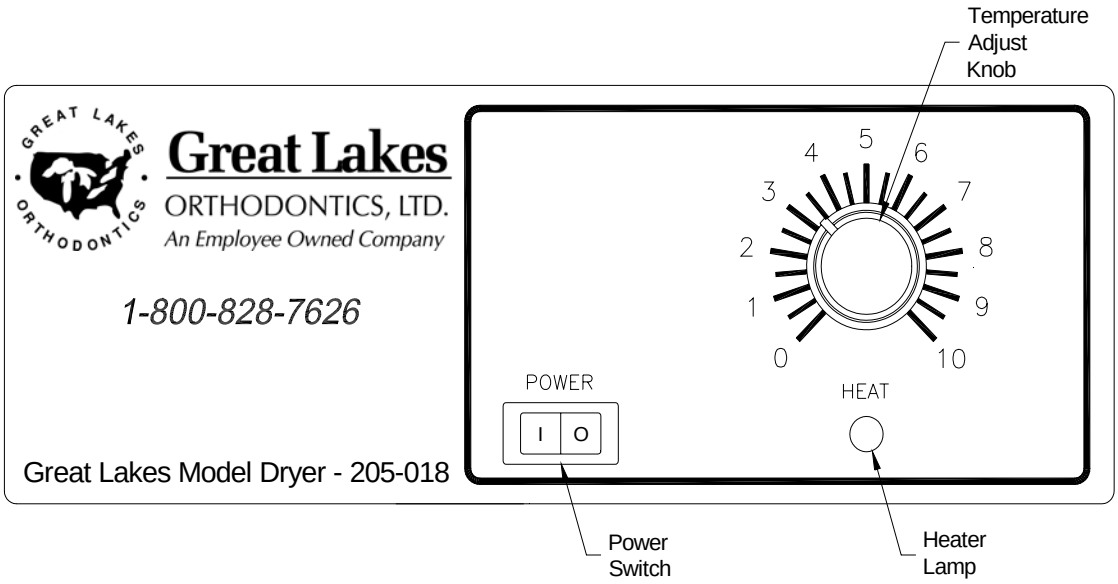
4. Operation

4.1 Controls and Indicator Lamps (see Figure below)

The power switch controls power to the unit.

The heater lamp indicates when the heater is operating.

The temperature adjust knob is used to control the chamber temperature.



4.2 Setting the Temperature

Use the temperature adjust knob to set the desired temperature. The knob is rotated clockwise to increase the chamber temperature and counter clockwise to decrease the chamber temperature.

4.3 Operating the Model Dryer

To turn the model dryer on, switch the power switch to the on (I) position. Set the desired chamber temperature. The heater lamp will illuminate and remain lit until the chamber reaches the set temperature. After reaching the set temperature, the heater lamp will cycle on and off with heater operation. Allow a 60 minute chamber temperature equilibration when starting the model dryer from a cold start. Allow at least 15 minutes for the re-equilibration when changing temperatures. To turn the model dryer off, switch the power switch to the off (O) position or unplug the unit. If the temperature adjust knob is not moved when the model dryer is powered down, the unit will return to its previously set temperature upon restart.

4.4 Drying Models

Place models on one of the top two shelves only. Do not use floor of unit. Allow space between models for air circulation. When shelves are full, do not slide shelving forward beyond back clips. With unit on, turn the temperature adjust knob to 9; the models will dry in 10-12 hours or overnight.

NOTE: *The unit is designed so that the door does not seal tightly when closed. This allows for proper air circulation and a constant internal temperature for ideal model drying conditions.*

5. Accessories

5.1 Removable Shelf	*Call your Great Lakes representative*
5.2 Shelf Bracket	*to order.*

6. Fault Diagnosis

Symptom	**Possible Cause**	**Action Required**
1. Unit does not operate	a. Unit not switched on b. Unit not plugged into power supply c. Power supply failure	a. Switch on b. Plug in, switch on c. Check that other electrical appliances on the same circuit are working
2. Chamber temperature does not rise when expected	a. Actual temperature is higher than set temperature b. Temperature control circuit fault	a. Check set temperature b. Have unit checked by competent person
3. Temperature continues to rise when not expected	a. Actual temperature is lower than set temperature b. Temperature control circuit fault	a. Check set temperature b. Have unit checked by competent person

7. Technical Specifications

This equipment is intended for indoor use and will meet its performance figures within the ambient temperature range of 10°C to 35°C, with maximum relative humidity of 80% (non-condensing). Installation Category II (transient voltages). Pollution Degree 2 in accordance with IEC 664. Suitable for operation at altitudes of up to 6500 feet.

Specifications:

Temperature Range:	(Ambient +5°C) to 60°C
Supply Voltage Range:	120V +/- 10%, 50/60 Hz 230V +/- 10%, 50/60 Hz
Power Rating:	Model 132000GL: 90W Model 132000GL-2: 90W

8. Maintenance and Service

The Great Lakes Model Dryer is designed to comply with IEC1010-1. No routine maintenance is required. There are no user serviceable parts in this product.

8.1 Cleaning

Disengage power cord prior to cleaning. If a spill occurs, use appropriate clean up procedures as required for radiation or biohazard control. The outer casing may be cleaned with water and a damp cloth. Do not submerge or immerse the model dryer in water. Before using any cleaning or decontamination method except those recommended by the manufacturer, users should check that the proposed method would not damage the equipment.

9. Warranty

When used in laboratory conditions and according to these operating instructions, Great Lakes warrants this product to be free of defective material and workmanship for a period of one year from the date of manufacture. The liability of Great Lakes for any defective equipment during the warranty period shall be limited to the repair of such equipment or replacement thereof without charge for parts or labor.

10. Service

Should service be required, contact your Great Lakes Orthodontics Sales Representative at 1-800-828-7626.