Corning PC-400D

Corning 6795-400D PC-400D Digital Hot Plate Instruction Manual

Model: PC-400D | Part Number: 6795-400D

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of your Corning 6795-400D PC-400D Digital Hot Plate. Please read this manual thoroughly before operating the device and retain it for future reference. This hot plate is designed for heating various liquids and solutions in laboratory, industrial, and educational settings.

2. SAFETY INFORMATION

Operating any heating device requires adherence to safety protocols to prevent injury or damage. Observe the following precautions:

- **Electrical Safety:** Ensure the hot plate is connected to a properly grounded 120V/60Hz AC outlet using the U.S. three-prong plug. Do not operate with damaged cords or plugs.
- **High Temperature Hazard:** The Pyroceram top surface can reach temperatures up to 550°C. Always use appropriate heat-resistant gloves and protective eyewear.
- **"HOT TOP" Indicator:** A red "HOT TOP" warning light illuminates when the surface temperature exceeds 60°C, even if the heat control is turned off. Do not touch the surface when this light is active.
- **Flammable Materials:** Never heat flammable liquids or materials directly on the hot plate. Ensure adequate ventilation when heating any substances.
- **Spill Prevention:** While the hot plate features a design that deflects spills from electrical components, avoid spills whenever possible. Clean spills immediately after the unit has cooled.
- **Stable Placement:** Always place the hot plate on a stable, level, and heat-resistant surface, away from combustible materials.
- **Supervision:** Do not leave the hot plate unattended during operation, especially when heating substances.

3. PRODUCT OVERVIEW

The Corning PC-400D is a digital hot plate designed for precise temperature control in laboratory applications. It features a durable Pyroceram glass-ceramic top and a user-friendly control interface.

An image showing the Corning PC-400D Digital Hot Plate. The unit features a white Pyroceram top plate, a gray base, and a control panel with a digital LED temperature display, a power indicator, a 'HOT TOP' warning light, and a temperature control knob. A black power cord with a three-prong plug is visible on the right side.

Key Features:

- **Digital LED Display:** Shows temperature in degrees Celsius.
- **Pyroceram Top Surface:** 5 x 7 inch (W x D) glass-ceramic plate, resistant to scratches, corrosion, and chemicals.
- **Microprocessor Control:** Maintains consistent and repeatable temperature settings from 5°C to 550°C, adjustable in 5°C increments. Accuracy of ±2°C.
- **Illuminated Power Indicator:** Green light indicates power is on.
- **"HOT TOP" Warning:** Red light indicates surface is hot, even when turned off.
- **Spill Protection:** Two-piece casting design deflects spills from electrical components. Angled front panel minimizes damage from spills.
- **Built-in Rod Support:** For mounting support rods (sold separately).
- **Large Control Knob:** For easy temperature adjustment.

4. SETUP

1. **Unpacking:** Carefully remove the hot plate from its packaging. Inspect the unit for any signs of damage. Report any damage to your supplier immediately.

2. **Placement:** Position the hot plate on a stable, level, and non-combustible surface. Ensure there is adequate clearance around the unit for ventilation and to prevent heat buildup.

3. **Power Connection:** Connect the hot plate's three-prong power cord to a grounded 120V/60Hz AC electrical outlet. The power indicator light will illuminate green.

4. **Rod Support (Optional):** If using a support rod (sold separately), insert it into the built-in rod mount support located at the rear of the unit. Secure it as needed for your application.

5. Operation

1. **Power On:** Ensure the hot plate is plugged in. The green power indicator light should be on.

2. **Setting Temperature:** Rotate the large control knob clockwise to increase the desired temperature. The digital LED display will show the set temperature in degrees Celsius. The display will blink until the set temperature is reached.

3. **Temperature Range:** The hot plate can be set to temperatures between 5°C and 550°C, in increments of 5°C.

4. **Temperature Stability:** The microprocessor control maintains the set temperature with an accuracy of ±2°C. Note that there may be variances between the set temperature and the actual surface temperature, especially at higher settings, as indicated in the product specifications.

5. **"HOT TOP" Warning:** The red "HOT TOP" indicator light will activate when the surface temperature exceeds 60°C. This light remains on until the surface cools below 60°C, even if the heat control is turned to "Off".

6. **Power Off:** To turn off the heating element, rotate the control knob counter-clockwise until it reaches the "Off" position. The "HOT TOP" indicator may remain lit until the surface cools.

7. **External Temperature Control (Optional):** This unit can be used with an external temperature controller (sold separately) for applications requiring even finer control or immersion probe capabilities.

6. Maintenance

Proper maintenance ensures the longevity and safe operation of your hot plate.

- **Cleaning:** Always ensure the hot plate is unplugged and completely cool before cleaning. The Pyroceram surface can be cleaned with a damp cloth and mild detergent. Avoid abrasive cleaners or scouring pads that could scratch the surface.
- **Spills:** The unit's design helps deflect spills. In case of a spill, allow the unit to cool, then carefully clean the affected areas. Do not allow liquids to enter the internal components.
- **Inspection:** Periodically inspect the power cord for any signs of damage. If damage is found, discontinue use and contact a qualified service technician.
- **Storage:** When not in use, store the hot plate in a clean, dry environment.

7. Troubleshooting

If you encounter issues with your hot plate, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not power on.	No power to outlet; power cord damaged; internal fuse.	Check power outlet with another device. Inspect power cord for damage. If cord is damaged, discontinue use and seek professional repair.
Hot plate not heating or heating inconsistently.	Temperature knob set to "Off"; internal heating element issue.	Ensure the control knob is set to a desired temperature. If the issue persists, contact customer support.

Problem	Possible Cause	Solution
Digital display blinking continuously.	Unit has not reached the set temperature.	This is normal operation. The display will stop blinking once the set temperature is achieved.
Actual temperature differs from set temperature.	Normal operational variance; external factors.	The manual notes that some variances may occur, especially at higher temperatures. For critical applications, consider using an external temperature probe or controller.

For issues not listed here or if troubleshooting steps do not resolve the problem, please contact Corning customer support.

8. SPECIFICATIONS

Model	PC-400D
Part Number	6795-400D
Plate Material	Pyroceram Glass-Ceramic
Plate Dimensions (W x D)	5 x 7 inches
Temperature Range	5°C to 550°C
Temperature Increments	5°C
Temperature Accuracy	±2°C
Power Source	120V/60Hz
Overall Dimensions (H x W x D)	4.25 x 7.75 x 11 inches
Controls	Digital LED display, Control Knob
Special Features	Built-in rod support, Spill-deflecting design, "HOT TOP" indicator

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Corning customer service directly. Refer to the official Corning website or your purchase documentation for specific warranty terms and contact details.

Manufacturer: Corning Incorporated

Website: www.corning.com