

# DryRod<sup>®</sup> Ovens

## Operating Instructions

### Type 200HT Series Electrode Stabilization Ovens

- High temperature oven
- Door mounted thermometer
- Variable high temperature for rebaking and reconditioning



Part No.	Description	Temperature Range*	Insulation	Chamber Size	Capacity (for 18" electrodes)	Weight	Dimensions
Type 200HT Series Ovens with Wheels							
1200461	120/240V AC at 1500 watts with installed thermometer	100° - 660°F (38° - 350°C) +/-25°F (14°C) adjustable thermostat control with indicator light	2" fiberglass	14.5" x 17" x 18"	200 lb (90.7 kg)	90 lb (41 kg)	22" x 23.75" x 25" (55.9 x 60.3 x 63.5 cm)

\* Operation on Direct Current (DC) will damage oven and void warranty. Average stabilized temperature at 70°F ambient temperature.

### Product Description

#### ! CAUTION

- To provide continued protection against risk of electrical shock, power cord must be connected to a properly grounded outlet.
- To avoid damage, never place oven in contact with welding current.
- Store in dry location. Unit not to be exposed to rain or moisture.

### Wiring

Check type and voltage on nameplate.

Type 200HT (120/240V AC only) single phase shipped at 1/240V wiring

**Note:** Type 200HT Series ovens are wired at the factory for 120 volts. For 240 volt use, rewire heating element connections per the 240 volt wiring diagram.

### Grounding

Type 200HT Series ovens have a 10 foot power supply cord. When used with a grounding plug cap and a grounded receptacle, these ovens meet all local code requirements.

### Amp Draw

Ovens operating on 120 AC voltage draw 12.5 amps. Those operating on 240 AC voltage draw 6.3 amps.

### Electrode Placement

DryRod® ovens have removable shelves to allow storage of more than one group of electrodes. It is recommended to store different electrodes in separate ovens to avoid contamination. Spread the electrodes evenly, allowing space over each shelf for air circulation required to remove excess moisture. The maximum suggested layer depth on any shelf is 5 inches.

### Temperature Settings

Type 200HT Series oven temperature range is 100°F (38°C) to 660°F (350°C). The thermostat dial (at front of oven) is calibrated at 120°F (50°C) to 660°F (350°C).

Required oven temperature setting is obtained by rotation of thermostat dial to line up desired temperature with indicator light in the thermostat housing.

The indicator light illuminates only when voltage is being applied to the heating elements.

Thermostat is accurate to +/-25°F (14°C) at the sensing bulb; however, temperature may vary slightly at different areas in the oven chamber as this is a convection type oven. For applications requiring higher temperature, an electrode rebaking oven is required.

At the maximum setting, the actual temperature in portions of the oven near the heating elements may reach approximately 700°F (371°C).

Temperatures over 660°F (350°C) are not recommended. They may cause oven damage and/or unacceptably high exterior surface temperatures.

### Venting

Before placing the oven into service, run the oven at 550°F (255°C) for two hours with vent hole fully open. This will help to purge the oven of any contaminants. (Smoke exiting from vent hole is common during burn-off of contaminants.)

For normal holding operation, set easily adjustable vent on the door about ¼ open. For replacement vents, see Replacement Parts section in this manual.

### Guide to Storage

Electrodes should be stored according to electrode supplier recommendations. In the absence of storage information from your electrode manufacturer, please reference Phoenix's Guide To Electrode and Flux Stabilization for approximate temperatures, found at [www.dryrod.com/guide](http://www.dryrod.com/guide).

Troubleshooting

CAUTION

- When replacing heating elements, always replace both elements. Pairing of one new element with an old element will cause rapid failure of old element.

Oven Fails To Operate: No Heat

- If the indicator light does not illuminate, check power supply.
- Check plug at outer end of power cord and run continuity check on complete power cord. If defective, replace cord assembly.
- Check indicator light for continuity. See Repair Parts drawing for access details. If defective, replace indicator light.
- Check thermostat. If indicator light illuminates, power is being supplied through thermostat to heating elements. Turn knob from low to high setting and return. A definite "snap" should be heard at low temperature end, and indicator light should turn off and on with each "snap" cycle. If "snap" is not heard and indicator light fails to operate, replace entire thermostat.
- If thermostat operates satisfactorily, check continuity of dual hairpin style heating elements at bottom center of oven. Failure of one element will cause very slow heating.
- If thermostat operates satisfactorily, recalibrate thermostat. (See Checking Thermostat Calibration section below.)

Oven Operates: Overheats, Low Heat, Does Not Heat to Desired Temperature

- Check power supply to confirm voltage is within acceptable range of 120 or 240 volts AC +/-10%.
- Check that the variable thermostat is properly set to the desired temperature.
- Check that enough time has been allowed for heat-up. A cold, fully loaded oven may take up to four hours to fully heat and stabilize.
- Check that the variable thermostat is securely mounted. A loosely mounted thermostat will not properly sense the oven temperature.

Checking Thermostat Calibration

Each thermostat is adjusted at the factory and calibrated on precision instruments to control temperatures accurately. Adjustment or re-calibration is not needed unless the thermostat has been mishandled in transit or changed or abused while in service.

To check calibration:

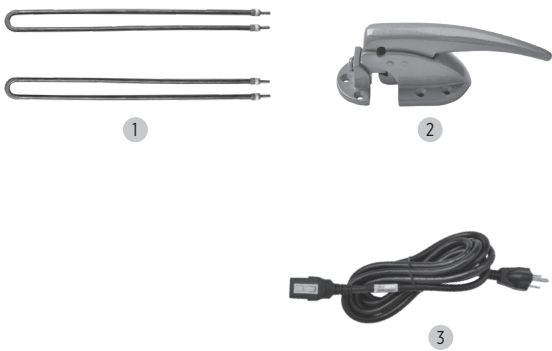
- Use a high grade mercury thermometer to check temperature. For griddle control, use a disc type thermocouple. Put a couple drops of oil on griddle surface plate and place thermocouple disc flat into the oil.
- Turn the dial of the thermostat to 300° mark.
- Allow enough time for temperature to stabilize or until several temperature readings are identical.

Recommended Spare Parts

For users of large DryRod oven quantities or users not in North America:

For normal daily operation, the following spare parts and quantities are recommended to have inventoried.

Item No.	Spare Part Description	Part No.	Recommended Quantity per 10 Ovens
1	Heating Element Kit	1257096	1
2	Door Latch and Strike	1252200	1
3	North American Power Cord	1257540	1
4	Thermostat Kit	1257085	1



## Replacement Parts

### Ordering Information

To order spare or replacement parts, visit our website: [www.dryrod.com](http://www.dryrod.com). When ordering, please confirm that you are ordering parts for the correct oven.

Item No.	Description	Qty	Part No.
1	Door Latch and Strike	1	1252200
2	North American Locking Power Connection Kit		1257395
	Rivet	1	
	Locking Power Inlet	1	
	120V North American Locking Cord	1	1257540
3	Indicator Light		1257402
4	Vent Cover Kit	1	1257172
5	Door Mounted Thermometer Kit		1250300
	Door Mounted Thermometer	1	
	Mounting Bracket	1	
	Cover	1	
6	Heating Element Kit		1257096
	Element	2	
	Thermostat Kit		1257085
	Thermostat	1	
	Thermostat Knob	1	
	Shelving Kit		1255150
	Shelving Assembly	1	
	Gasket Kit		1257163
	Gasket (per foot)	8	
	Power Inlet Kit		1257390
	Rivet	1	
	Locking Power Inlet	1	
	Hinge Kit (2 hinges)	1	1250206
	North American Power Cord	1	1257540

**Replacement Parts**

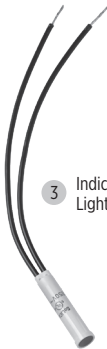
1 Door Latch and Strike



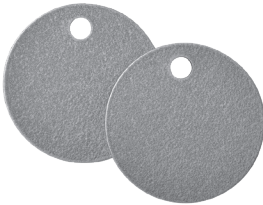
2 North American Locking Power Connection Kit



3 Indicator Light



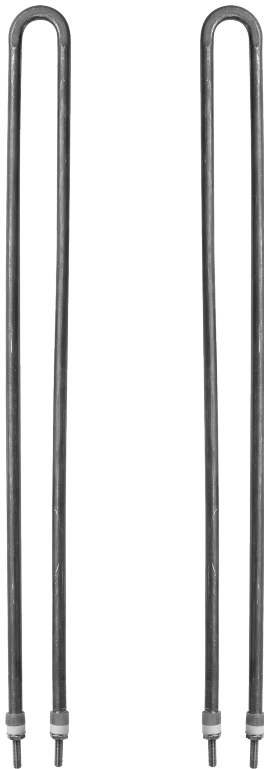
4 Vent Cover Kit



5 Thermometer Kit



6 Heating Element Kit

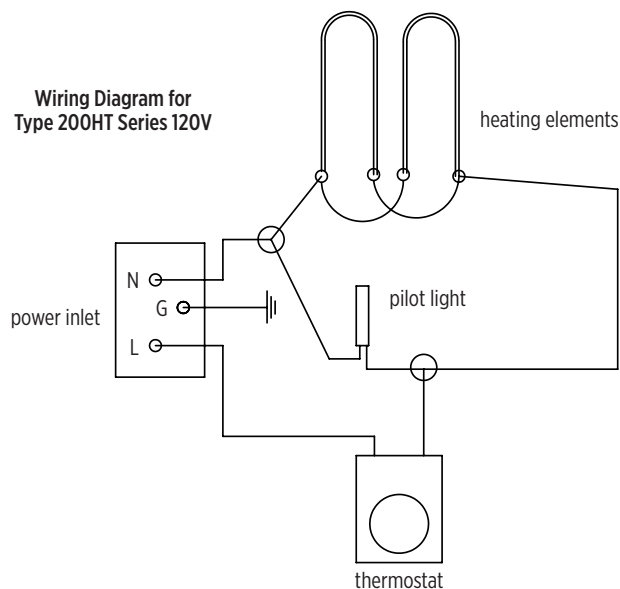


## Wiring

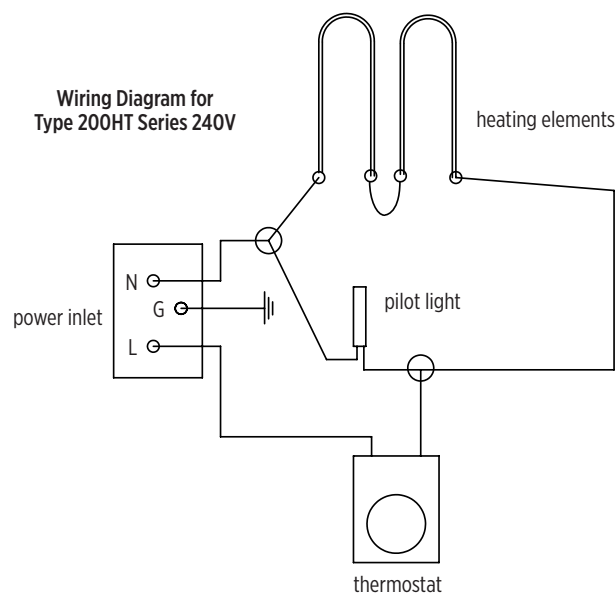
### CAUTION

- All wiring should be done by a licensed electrician in accordance with state codes, local codes, and National Electrical Code (NEC) or International Electric Commission (IEC) standards.
- Improper installation or use may result in serious injury.
- Always remove oven from power source before troubleshooting or repairing.

Wiring Diagram for  
Type 200HT Series 120V



Wiring Diagram for  
Type 200HT Series 240V



## Guide to Electrode & Flux Stabilization

### Eliminate expensive rework and protect welding profits!

This guide explains proper storage and oven holding temperatures:

- Recondition/rebake procedures for electrode coatings exposed to moisture are included.
- Remove electrodes from cardboard containers before placing in ovens.
- Electrode coatings should not be exposed to the re-baking temperature without first being reconditioned at a lower temperature. Failure to do so may result in breakdown of electrode coatings. After re-baking, lower temperature to holding level until reissued.

Download your guide at [www.dryrod.com/guide](http://www.dryrod.com/guide).

## Warranty

Phoenix Ovens International LLC warrants its products against defects in material and workmanship. The company will, at its discretion, repair or replace any properly installed Phoenix International manufactured product which fails under normal operating conditions within one year from date of receipt. Contact the factory for return authorization before returning the product to Phoenix International freight prepaid. If our inspection confirms that the product is defective under terms of this warranty, it will be repaired/replaced and returned freight prepaid.

This warranty applies only to products sold by Phoenix International, Inc. and specifically excludes installation or de-installation labor, transportation or equipment of another manufacturer used in conjunction with Phoenix International products. No other warranty, expressed or implied, exists beyond this warranty declaration.

Phoenix constantly strives to improve its products and therefore reserves the right to change design, materials and specifications without notice.