

DryRod[®] II Ovens

Operating Instructions

Type 5 Series Electrode Stabilization Ovens

- Wire wrapped heating elements provide consistent oven temperature
- Removable cord secured to oven by locking power inlet allows for easy replacement
- Carry handles or pull handle with wheels available
- Optional digital thermometer

Compliances:  



Part No.	Description	Power Cord	Temperature Range*	Insulation	Chamber Size	Capacity (for 18" electrodes)	Weight	Dimensions
Type 5 Series Ovens with Wheels								
1205522	120/240V AC at 300 watts	North American	100° - 300°F (38° - 149°C) +/-25°F (14°C) adjustable thermostat	1.5" fiberglass	8" diameter x 20" deep	50 lb (25 kg)	43 lb (19.5 kg)	15" x 16" x 27"
1205520	120/240V AC at 300 watts with digital thermometer							
1215522	120/240V AC at 300 watts	European/Schuko						
1215520	120/240V AC at 300 watts with digital thermometer							
1225522	120/240V AC at 300 watts	United Kingdom						
1225520	120/240V AC at 300 watts with digital thermometer							
Type 5 Series Ovens with Handles								
1205523	120/240V AC at 300 watts	North American	100° - 300°F (38° - 149°C) +/-25°F (14°C) adjustable thermostat	1.5" fiberglass	8" diameter x 20" deep	50 lb (25 kg)	37 lb (16.78 kg)	14" x 14" x 24"
1205521	120/240V AC at 300 watts with digital thermometer							
1215523	120/240V AC at 300 watts	European/Schuko						
1215521	120/240V AC at 300 watts with digital thermometer							
1225523	120/240V AC at 300 watts	United Kingdom						
1225521	120/240V AC at 300 watts with digital thermometer							

* 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.

Prior to Use

1. Check for correct power supply cord and plug. Confirm that the voltage selector switch setting corresponds with the power supply to be used. Unit is set to 240V when shipped.
2. Verify the oven is empty before heating.
3. Check nameplate for voltage ratings.
4. Check for desired thermometer (if equipped) display units (°F or °C). Unit is set to °F when shipped. To change to °C, see Temperature Indication section in this manual.

Power Supply

DryRod® II ovens are designed to run on AC voltage and accept either 120 or 240 volts +/-10%. When power is supplied, the indicator light will illuminate.

DryRod II ovens are supplied with a voltage selector switch to operate on either 120 or 240 AC voltage. Please be sure to set the switch to the proper voltage being used. Operation outside these voltages will impact oven temperature.

Amp Draw

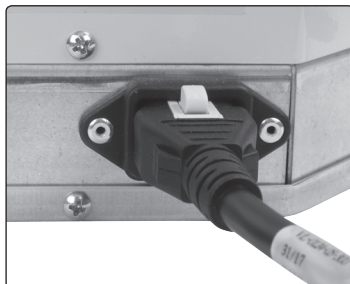
Ovens operating on 120 AC voltage draw 2.5 amps. Those operating on 240 AC voltage draw 1.3 amps.

Power Cords

DryRod II ovens are supplied with a female IEC 320 locking power inlet. This inlet accepts a male IEC 320 locking power cord to provide a fixed connection. The secured cord can be removed for replacement by applying pressure to the yellow tab on top of the locking power cord.

DryRod II oven power cords are rated for 100/240 volts. When connected to a properly grounded receptacle, these ovens meet the nationally recognized standards for which they are marked.

DryRod II ovens are available with a three blade North American power cord for 120 volt AC operation. The ovens are also available with a European/Schuko plug configuration for operation on 240 volt AC. (See Replacement Parts section in this manual for optional power cords. See front page for standard oven configuration with power cord options.)



Locking power inlet and cord

Electrode Storage

DryRod II ovens are not airtight and electrodes stored within will start absorbing ambient moisture as soon as the oven cools. We recommend removal of electrodes at shift end and storage in suitable larger holding ovens until re-issued.

DryRod II ovens are not to be used for re-baking or re-conditioning contaminated electrodes. They are designed to accept electrodes in 100% usable condition and to maintain that condition until consumed at the job site. For optimum stabilization, oven should be hot when loaded and kept powered as long as electrodes are being stored.

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. See back page for details.

Repair: Spare Parts

These instructions contain wiring diagrams and a repair parts list for your DryRod II oven. For critical welding operations requiring continuous holding, we would suggest carrying all the parts listed in the Redommed Spare Parts section in this manual.

Spare parts are available at www.dryrod.com or by contacting your local distributor.

Temperature Settings

DryRod II ovens utilize a variable thermostat, providing an operating range of 100°-300°F (38°-149°C) average stabilized load temperatures.

The oven operating temperature is set by rotating the thermostat knob clockwise to increase the temperature of the unit. To decrease the temperature rotate the knob counter clockwise. This setting is approximate and may need slight adjustment once the oven temperature stabilizes.

Temperature Indication

DryRod II ovens (part #1205520 and #1205521) are supplied with an optional battery powered, digital thermometer to indicate the actual temperature inside oven in either °F or °C.

The thermometers are supplied in °F mode. Conversion to °C mode is accomplished by pressing the button located in the battery holder. This will cycle between °F and °C. Thermometers are powered by one AA battery.

Wheels and Retracting Handle

Specific models of the DryRod II ovens are supplied with wheels and a retracting handle for easy portability.

The wheels are supplied with a steel hub and ball bearings to withstand wear over years of service. The handle is supplied with a pin and clip to lock the handle in either the extended or retracted positions. The retracted position is typically used for shipping and/or storage of the oven.

Troubleshooting

! CAUTION

- **Disconnect power before opening or servicing unit. Make sure oven is cooled before opening or servicing unit.**
- **Surfaces are hot! Use extreme care to avoid possible burns or personal injury. Protective gloves and personal protective equipment are recommended.**

Oven Fails To Operate: No Heat

1. If the indicator light does not illuminate, check power supply.
2. Confirm cord is plugged fully into power inlet. Check complete power cord for continuity. If defective, replace the entire cord.
3. Check indicator light. Using a volt meter, confirm voltage to the light leads. If voltage is confirmed and light does not illuminate, replace light. Please note the indicator light is neon and cannot be checked for continuity.
4. Disconnect heating element from the thermostat (under shell top/lid assembly). Check heating element for continuity. If no continuity, replace heating element.
5. Disconnect wiring from the thermostat. Turn the thermostat knob to the lowest temperature setting (counter-clockwise). Check for continuity through thermostat. If no continuity, replace thermostat.

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

1. Check power supply to confirm voltage is within acceptable range of 120 or 240 volts AC +/-10%.
2. Check that the voltage selector switch setting corresponds with the power supply to be used.

3. Check that the variable thermostat is properly set to the desired temperature.
4. 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.
5. Check that the variable thermostat is securely mounted. A loosely mounted thermostat will not properly sense the oven temperature.

Thermometer Indicates in Wrong Units: °F or °C (if equipped)

1. Disconnect power from the unit.
2. Remove the bottom cover from the base to expose thermometer battery housing.
3. Changing to either °F or °C is accomplished by pressing the button located in the battery holder.
4. Re-install the battery and bottom cover prior to putting the oven back in service.

Thermometer Inoperable (if equipped): Replace Battery

Indicated by a weak or absent display.

1. Disconnect power from the unit.
2. Remove the bottom cover from the base.
3. Remove the battery from the holder and replace with a fresh AA 1.5V battery. (Alkaline batteries are recommended.) Check that display is operational. If not, replace thermometer (part #1257420). (See Replacement Parts section in this manual.)
4. Re-install the battery and bottom cover prior to putting the oven back in service.

Recommended Spare Parts

For users of large DryRod II 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	1257360	1
2	Variable Thermostat Kit	1257430	1
3	Locking Power Connection Kit	1257395	1
4	Indicator Light	1257400	1
5	Voltage Selector Kit	1257410	1



Replacement Parts

Ordering Information

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

Item No.	Description	Qty	Part No.	With Wheels	With Handles
1	Thermometer Kit (standard on 1205521 & 1205520)		1257420	yes	yes
	Digital Thermometer	1			
	Screw	2			
	Label	1			
	Cable Tie	1			
2	North American Locking Power Connection Kit		1257395	yes	yes
	Rivet	2			
	Locking Power Inlet	1			
	120V North American Locking Cord	1	1257540		
3	European Schuko Power Cord	1	4131046	yes	yes
4	Handle Kit (standard on 1205521 & 1205523)		1257590	no	yes
	Screws	8			
	Handle	2			
5	Lid Assembly Kit		1257240	yes	yes
	Lid Assembly	1			
	Insulation	1			
6	Preset Thermostat Kit		1257435	yes	yes
	Preset Thermostat	1			
	Rivet	1			
7	Pull Handle Kit (standard on 1205520 & 1205522)		1257500	yes	no
	T-Handle	1			
	Plug	1			
	Lower Handle (Item 8)	1	1257501	yes	no
	Pin and Clip (Item 16)	1	1257431	yes	no
8	Lower Handle	1	1257501	yes	no
9	Heating Element	2	1257360	yes	yes

Item No.	Description	Qty	Part No.	With Wheels	With Handles
10	Base Cover Kit		1257180	yes	no
	Cover	1			
	Axle	1			
	Pin	1			
	Bracket	1			
	Nut	4			
	Bolt	4			
11	Base Kit		1257580	no	yes
	Rubber Feet	4			
	Nut	4			
	Bottom Cover	1			
	Lock Washer	4			
12	Variable Thermostat Kit		1257430	yes	yes
	Variable Thermostat	1			
	Nut	1			
	Knob	1			
13	Latch Kit		1257380	yes	yes
	Latch	1			
	Rivet	2			
14	Divider	1	1257510	yes	yes
15	Voltage Selector Switch Kit		1257410	yes	yes
	Rivets	2			
	120/240V Selector Switch	1			
16	Pin and Clip	1	1257431	yes	no
17	Indicator Light	1	1257400	yes	yes
18	Wheel Kit (two kits needed to replace both wheels)		1257440	yes	no
	Axle Cap	1			
	Wheel	1			
	Jumper Wire Kit		1257532	yes	yes
	Power Wires	8			
	Ground Wire	1			
	Base Cover without Wheels (optional)	1	1257190	yes	no
	Insulation	1	1257310	yes	yes

Replacement Parts



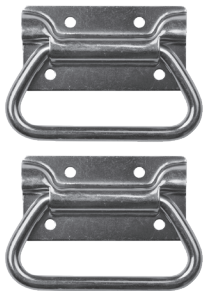
1 Thermometer Kit



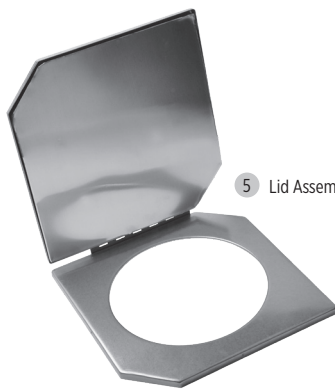
2 North American Locking Power Connection Kit



3 European/Schuko Power Cord



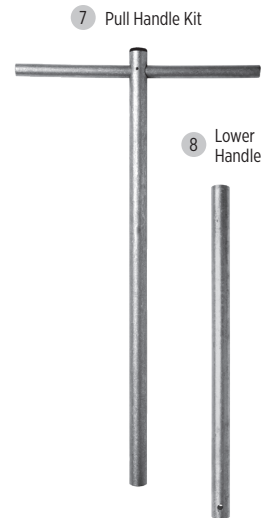
4 Handle Kit



5 Lid Assembly Kit

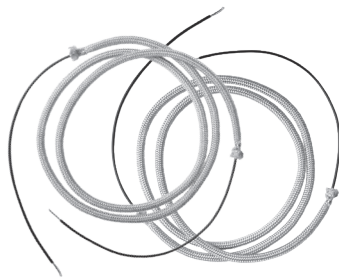


6 Preset Thermostat Kit



7 Pull Handle Kit

8 Lower Handle



9 Heating Element Kit



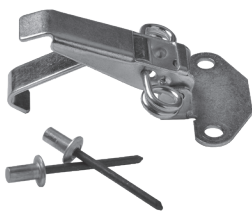
10 Base Cover Kit (oven with wheels)



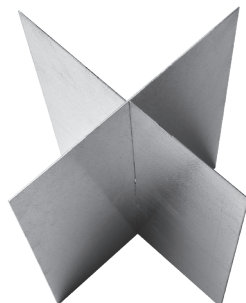
11 Base Cover Kit (oven with handles)



12 Variable Thermostat Kit



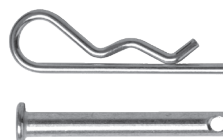
13 Latch Kit



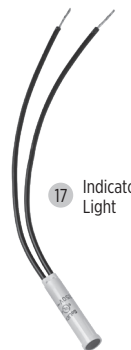
14 Divider Kit



15 Voltage Selector Switch Kit



16 Pin and Clip



17 Indicator Light



18 Wheel Kit

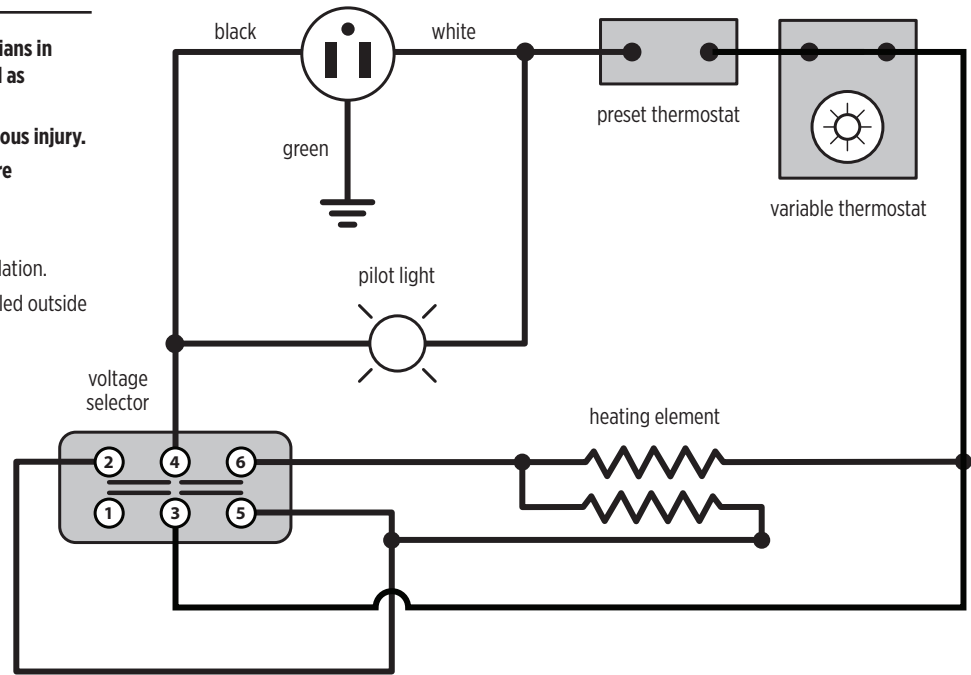
Wiring

! CAUTION

- All wiring should be done by licensed electricians in accordance with state and local codes, as well as the NEC (National Electrical Code) Standards.
- Improper installation or use may result in serious injury.
- Always remove oven from power source before troubleshooting or repairing.

Note: Jumper wires must be installed outside of insulation.

Thermometer probe wire (not shown) must be installed outside of insulation.



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.

Or, email info@dryrod.com to receive your FREE laminated 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.