

DryRod[®] Ovens

Operating Instructions

Type 950FX Series Flux Stabilization Ovens

- Adjustable thermostatic control
- Dispensing gate valve enables easy handling of hot flux



Part No.	Description	Temperature Range*	Insulation	Chamber Size	Capacity (for 18" electrodes)	Weight	Dimensions
Type 950FX Series Ovens							
1200605	3/240V AC at 3000 watts	100° - 450°F (38° - 232°C) +/- 25°F (14°C) adjustable thermostat control with indicator light	2" fiberglass	6.5 cubic feet (0.18 cubic meters) hopper	600 lb (272 kg) granulated flux	375 lb (170 kg)	43" x 43" x 45" (109.2 x 109.2 x 114.3 cm)
1200604	3/480V AC at 3000 watts						

* 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.

Installation

This oven is created and packaged for long-distance shipment. Exercise care in removing the oven from the wooden crate.

After oven is in its final location, anchor as required, open the oven door and remove packing material, manuals and loose parts.

Wiring

Check type and voltage on nameplate.

Type 950FX (240V AC only) three phase

Type 950FX (480V AC only) three phase

Grounding

The 950FX Series ovens have a grounding lug in the upper control box.

Amp Draw

Ovens operating on 240 AC voltage draw 12.5 amps. Those ovens operating on 480 AC voltage draw 6.25 amps.

Flux Placement

Type 950FX ovens can be loaded by removing cover (hanging it on side of oven using built-in hook) and pouring flux directly into oven. Set desired temperature, remove flux open valve on lower side of unit and close when sufficient quantity has run out.

Temperature Settings

Temperature range is 100°F (38°C) to 450°F (232°C). The thermostat dial is calibrated from 100° to 550°F. Required oven temperature setting is obtained by rotation of dial to line up desired temperature with indicator light in the thermostat housing.

The indicator light operates only when the voltage is applied to the heating elements. Momentary rotation past desired temperature setting may be necessary to activate the indicator light in order to locate it for indexing purposes.

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.

Excess Heat: At maximum setting, the actual temperature in portions of the oven near the heating elements may exceed the upper range.

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.

Troubleshooting

! CAUTION

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

Oven Fails To Operate: No Heat

1. If the indicator light does not illuminate, check power supply.
2. Check plug at outer end of power cord and run continuity check on complete power cord. If defective, replace cord assembly.
3. Check indicator light for continuity. See Repair Parts drawing for access details. If defective, replace indicator light.
4. 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.
5. If thermostat operates satisfactorily, check continuity of heating elements at bottom center of oven. Failure of one element will cause very slow heating.

Oven Operates: Overheats

1. Check thermostat operation as in Step 4 (Oven Fails to Operate: No Heat) and Step 2 (Oven Operates: Temperature Setting Off).

Oven Operates: Temperature Setting "OFF"

1. Check thermostat operation as in Step 4 (Oven Fails to Operate: No Heat).
2. If thermostat continues to operate satisfactorily, recalibrate per "Checking Thermostat Calibration" section below.

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:

1. 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.
2. Turn the dial of the thermostat to 300° mark.
3. Allow enough time for temperature to stabilize or until several temperature readings are identical.

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.

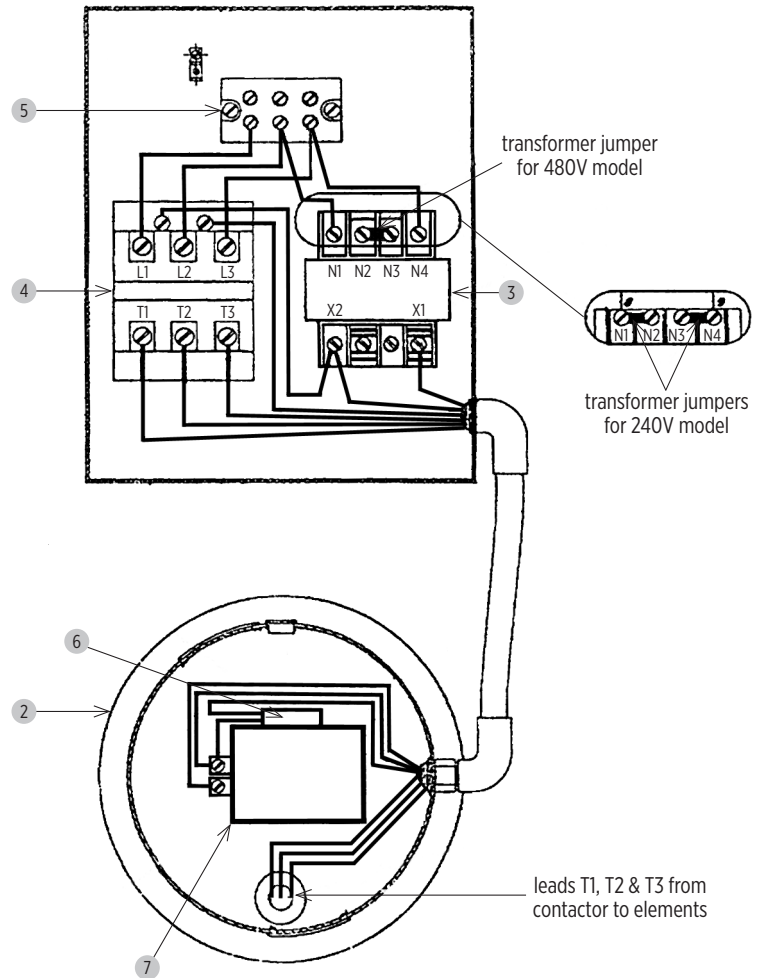
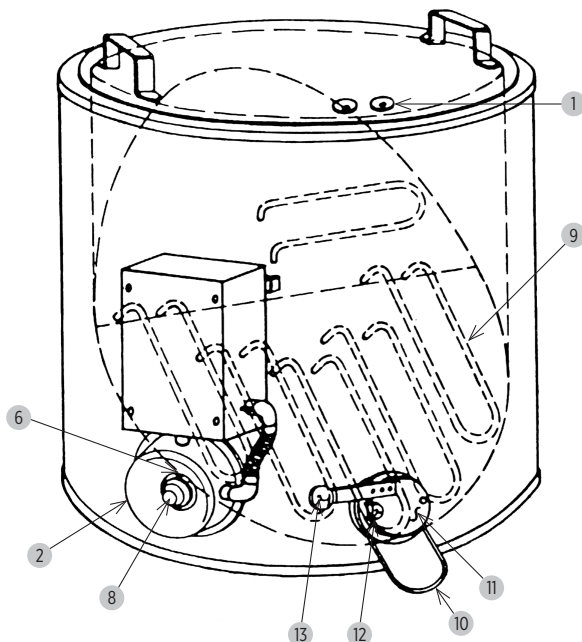
Item No.	Spare Part Description	Part No.	Recommended Quantity per 10 Ovens
1	Heating Element Kit (240/480V)	1257144	1
2	Thermostat Kit (240/480V)	1253800	1

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.

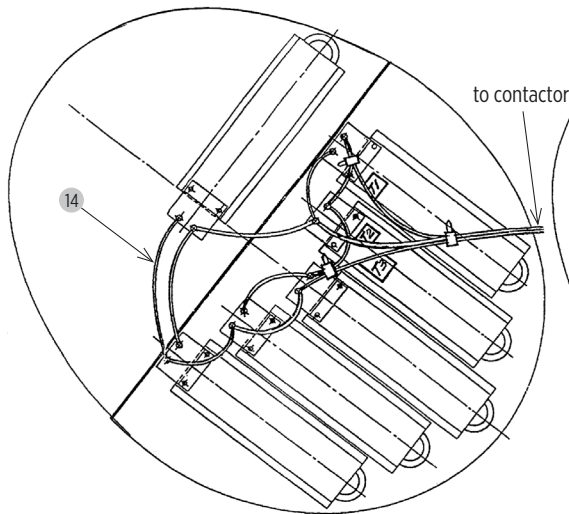
Item No.	Description	Qty	Part No.
1	Vent Cover Kit	2	1257152
2	Thermostat Housing	1	NLA
3	Transformer	1	4340100
4	Contactor	1	4343300
5	Terminal Block	1	4343900
6	Indicator Light	1	4600800
Thermostat Kit			1253800
7	Thermostat	2	
8	Thermostat Knob	2	
Heating Element Kit			1257144
9	Heating Element	6	
Valve Kit			1257153
10	Trough Assembly	1	
11	Gate Assembly	1	
12	Gate Cam	1	
13	Plastic Hand Knob (with stud)	1	
14	Lead Kit	1	1257125



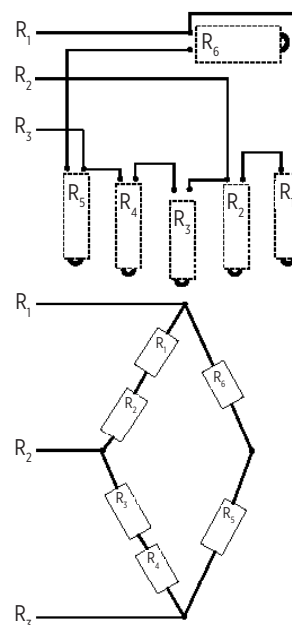
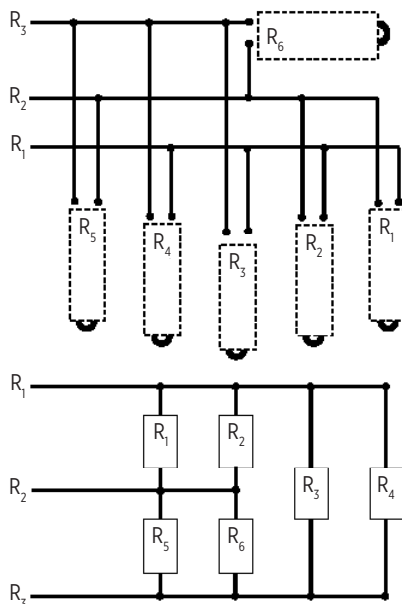
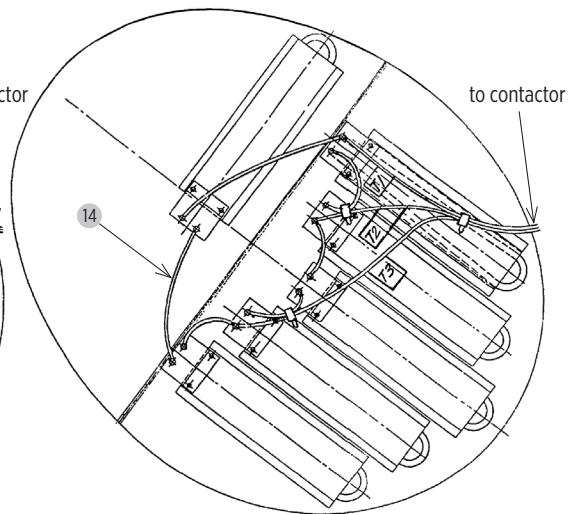
CAUTION

- 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.
- Disconnect power and make sure oven is cooled before opening or servicing unit.
- Hot Surfaces! Use extreme care to avoid possible burns or personal protective equipment is recommended.

Wiring Diagram for
Type 950FX Series 240V



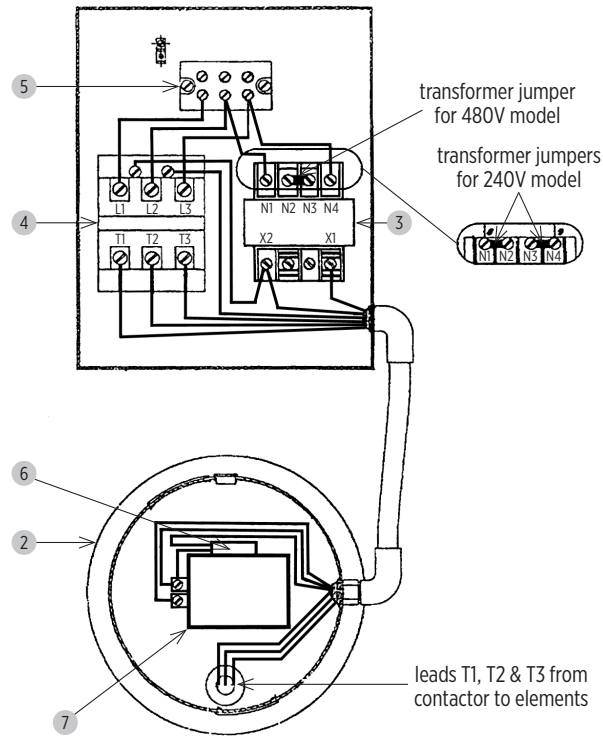
Wiring Diagram for
Type 950FX Series 480V



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.



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.

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.