



## Type 300 Series Bench Electrode Stabilization Ovens

\*Please read all instructions, paying special attention to all cautions or warnings, before beginning any repairs.



MODEL	PART #	DESCRIPTION (All 50-60 Cycles)	TEMP RANGE**	INSULATION	CHAMBER SIZE	CAPACITY	WEIGHT & DIMENSIONS
<b>120/240 Volt Models with 10' Grounded Heavy-Duty Cord*</b> 							
16C	1200200	120/240V AC @ 1000 watt	100° to 550°F (38° to 288°C) +/-25°F (14°C)	2" fiberglass	18" diameter x 19" deep	400 lb (182 kg) of 18" electrodes	90 lb
16C	1200201	120/240V AC @ 1000 watts with door mounted thermometer installed					
16CST	1200202	120/240V AC @ 1000 watts with top stacking lugs installed					
16CST	1200203	120/240V AC @ 1000 watts with door mounted thermometer and top stacking lugs installed					
<b>240/480 Volt Models with 10' Grounded Heavy-Duty Cord (No Plug)*</b> 			Adjustable Thermostat Control with Indicator Light			Accepts electrodes up to 18"	29½" x 22½" x 22½"
15D	1200100	240/480V AC @ 1000 watts					
15D	1200101	240/480V AC @ 1000 watts with door mounted thermometer installed					
15DST	1200102	240/480V AC @ 1000 watts with top stacking lugs installed					
15DST	1200103	240/480V AC @ 1000 watts with door mounted thermometer and top stacking lugs installed					

\*Operation on Direct Current (DC) will damage oven and void warranty.

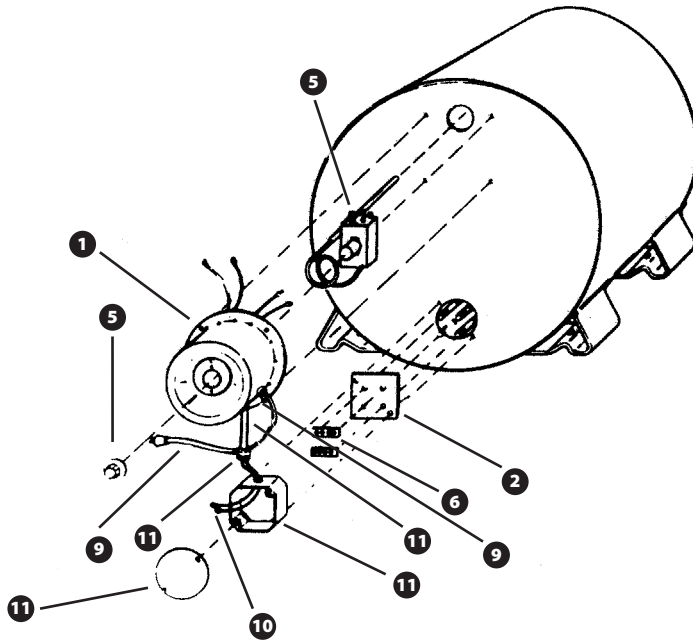
\*\*Average stabilized temperature @ 70°F ambient temperature.



### CAUTION:

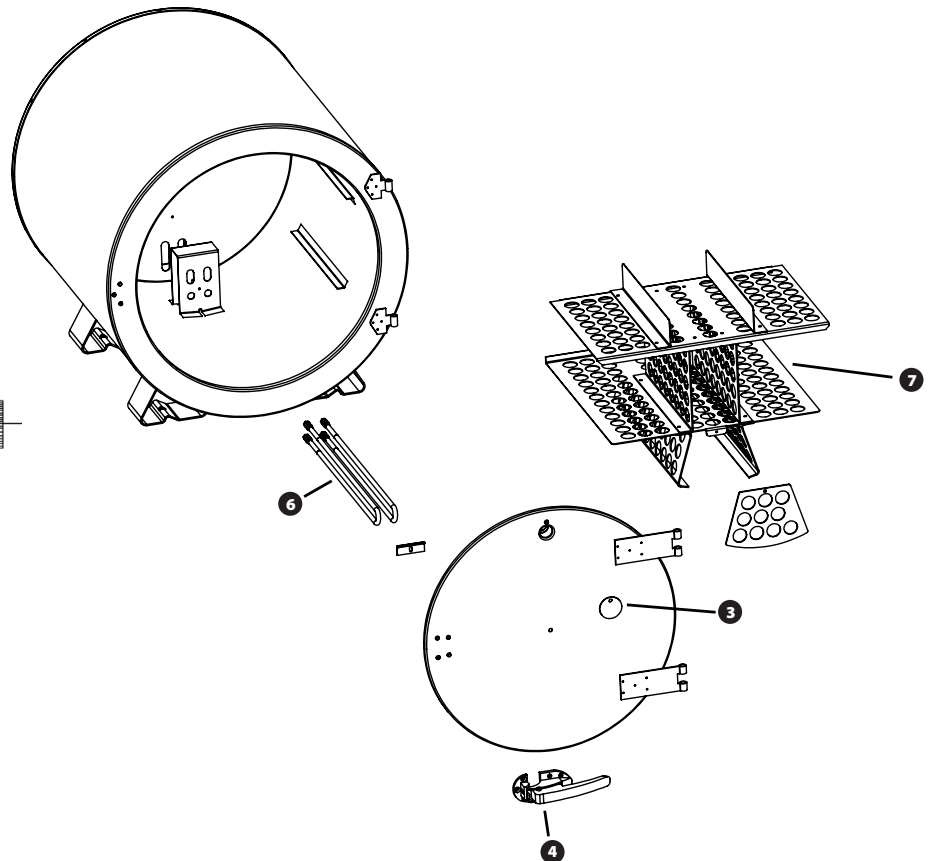
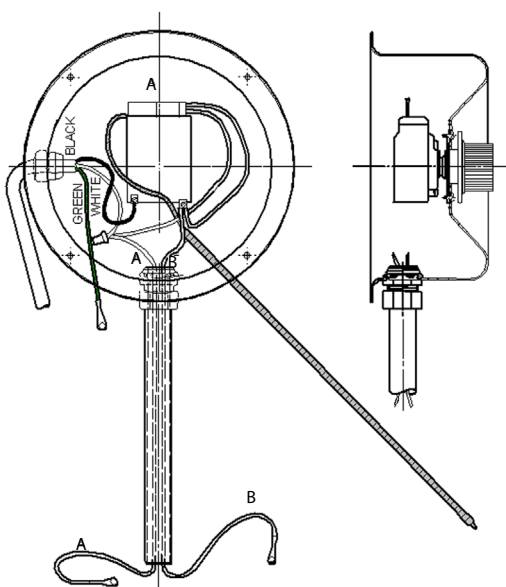
All wiring should be done by licensed electricians in accordance with state and local codes, as well as the NEC (National Electrical Code) Standards. Improper installation or use may result in serious injury. Always remove oven from power source before troubleshooting or repairing.

# REPAIR PARTS BREAKDOWN

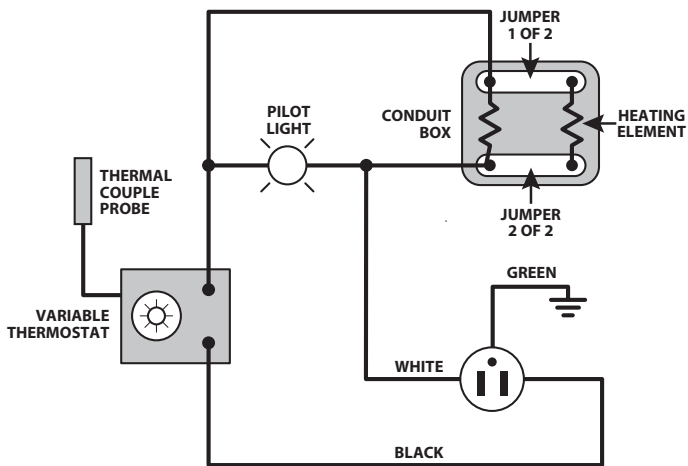


#	DESCRIPTION	QTY	OVEN VOLTAGE	
			120V (MODEL 16)	240V/480V (MODEL 15)
3	Vent Cover Kit (Includes two vent covers)	1	1257152	
4	Door Latch & Strike	1	1252200	
1	Thermostat Housing	1	2200200	
2	Insulation Block	1	1252400	
5	<b>Thermostat Kit</b>			
	Thermostat	1	1251100	1251200
	Thermostat Knob	1		
9	<b>Cord Kit</b>			
	Connection Cord	1	1257120	1257121
	Cord Grips (7W-2)	1		
6	<b>Heating Element Kit</b>			
	Element	2	1250500	1250600
	Jumper	2		
	Retainer	1		
10	<b>Lead Kit</b>			
	Lead	2	1257123	
7	<b>Shelf Assembly Kit</b>			
	Shelf Assembly	1	1255100	
	Cover Plate	1		
11	<b>Conduit Kit</b>			
	Conduit Box	1	1257151	
	Conduit Box Cover	1		
	Conduit (1/2")	1		
	Conduit Connectors (1/2")	2		
8	<b>Door Mounted Thermometer Kit</b>			
	Door Mounted Thermometer	1	1250300	
	Mounting Bracket	1		
	Cover	1		

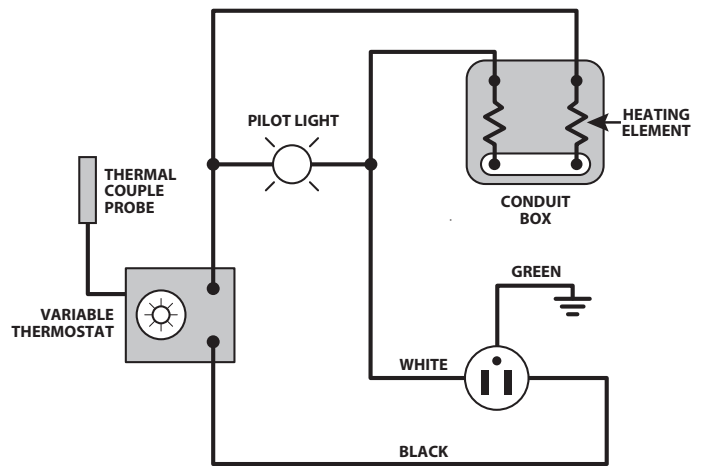
A. To Heating Elements  
B. Ground Wire



## CURRENT MODELS

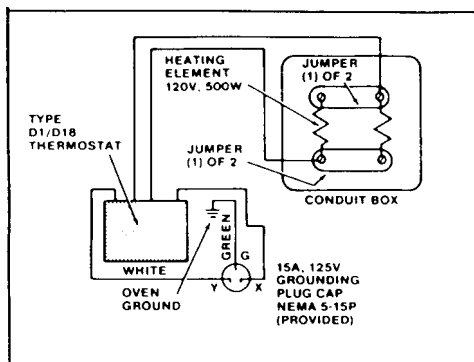


**WIRING DIAGRAM FOR:**  
Type 300 Series Model 16C 120V  
Type 300 Series Model 15D 240V

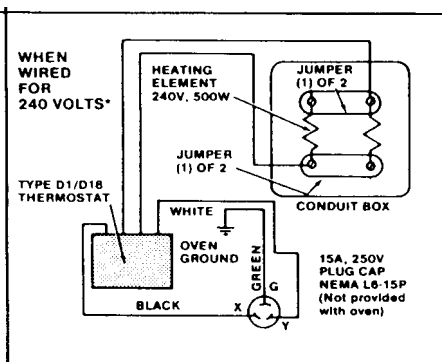


**WIRING DIAGRAM FOR:**  
Type 300 Series Model 16C 240V  
Type 300 Series Model 15D 480V

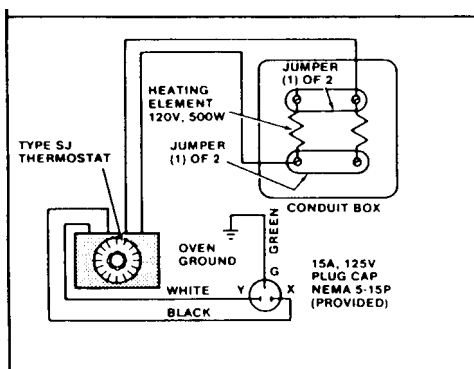
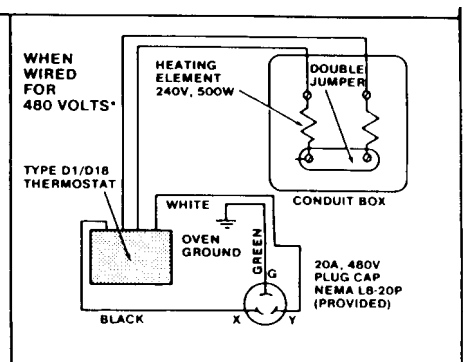
## FORMER MODELS



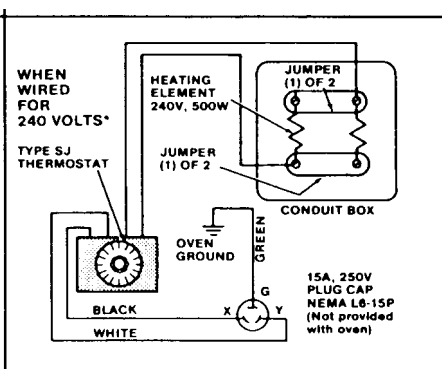
**WIRING DIAGRAM FOR:**  
Type 300 Series Model 16, 16ST 120V



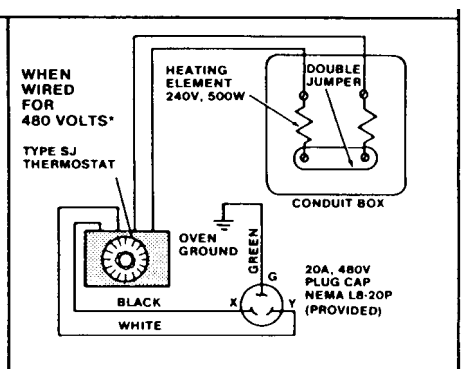
**WIRING DIAGRAMS FOR:**  
Type 300 Series Model 15, 15ST 240/480V



**WIRING DIAGRAM FOR:**  
Type 300 Series Model 16A, 16STA 120V



**WIRING DIAGRAMS FOR:**  
Type 300 Series Model 15A, 15STA 240/480V



The thermostat currently installed in your 120/240V Type 300 oven may be an obsolete type (D1/D18 or SJ) connected as in the former model wiring diagrams. If so, you will need to change the connections when installing the type K replacement thermostat in accordance with the wiring diagram of current models. (Identify the obsolete type thermostats by their four connection terminals in contrast with only two connection terminals on the currently supplied type K thermostats.)

The currently supplied type K thermostat can be installed interchangeably in any model of the Type 300 oven, except that for certain older models, a 1/4" hole must be drilled in the thermostat housing.

If the thermostat housing on your oven has the hole pattern shown in Figure 1, drill an additional 1/4" diameter hole for the pilot light as indicated in Figure 2 using the template to the right. Proceed to mount the replacement thermostat as instructed in Step 5.

Thermostat Kit		
Thermostat	1	1251100
Thermostat Knob	1	

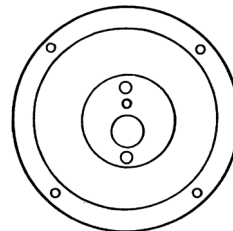


Figure 1

**Old Thermostat Housing  
Rear View**

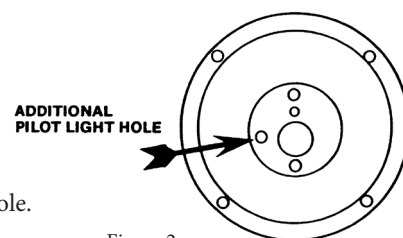
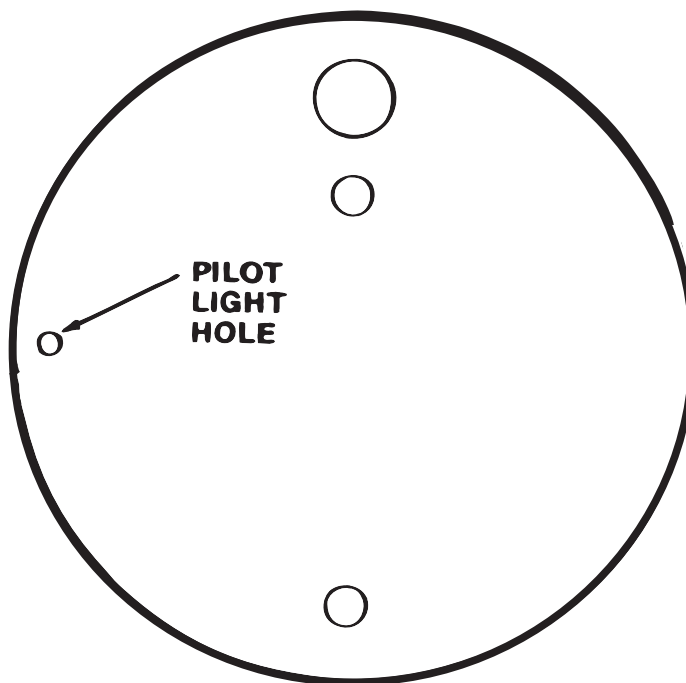


Figure 2

**New Thermostat Housing  
Rear View**

## TO USE DRILL TEMPLATE:

1. Place template (below) against outside surface of thermostat housing.
2. Line up holes in template with existing holes in housing.
3. Center punch through pilot light hole.
4. Drill 1/4" diameter hole and remove burr.
5. Mount the replacement thermostat in the housing so the pilot light is visible through the 1/4" hole.



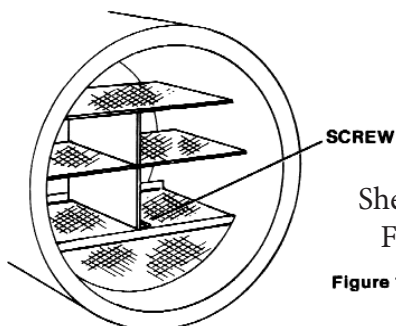
## SHELF ASSEMBLY KIT

Shelf Assembly Kit			
Shelf Assembly	1	1255100	
Cover Plate	1		

To take out upper shelf assembly in former models (Figure 1), remove screw indicated in drawing then lift out assembly. To then remove the lower shelf, push the shelf back slightly to disengage hooks at rear, then lift up and out.

To take out upper shelf assembly in more recent former models (Figure 2), remove screws A, B and C and lift out assembly. Lower shelf can then be removed by unfastening screw in rear. (See Figure 3).

Install new shelving by fastening the screw in same hole as shown in Figure 3. Cover plate to protect elements can then be attached (Figure 4).



Shelf Arrangement  
Former Models

Figure 1

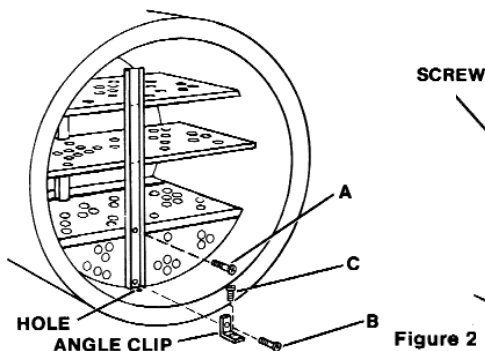


Figure 2

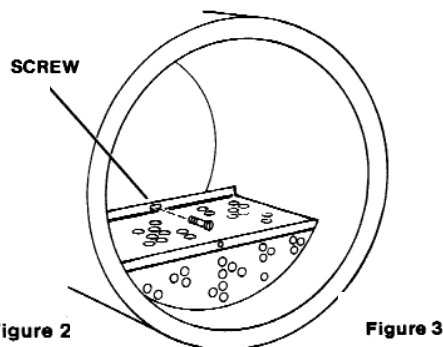


Figure 3

Shelf Arrangement  
Current Models

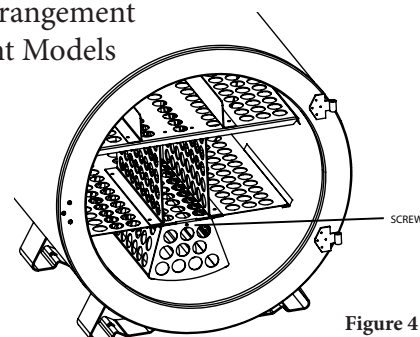
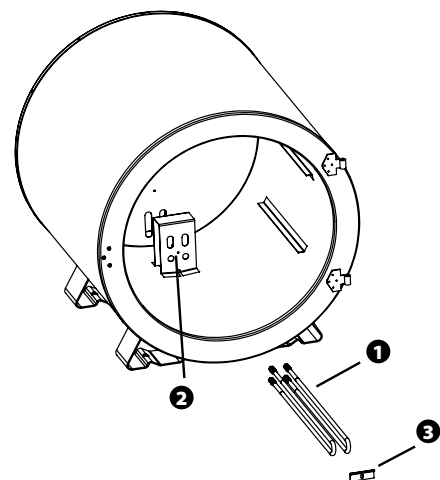


Figure 4

## HEATING ELEMENT KIT



Some previous models may have clamps to secure the heating elements in place. Current models hold the heating elements in place with two insulation blocks on the rear of the oven. We suggest that these insulation blocks be used in place of any clamp. Please refer to repair parts list for this separate part.

1. Remove defective elements from oven.
2. Insert new element (1) and check for proper fit. Legs of element must fit through the vertical slot (2) at rear inner wall of oven with one leg above element support (3) and one leg below. If slot is too narrow, drill or file the slot to 1/2" diameter.
3. Make terminal connections the same as before.
4. Repeat steps 2, 3 & 4 for the other element.

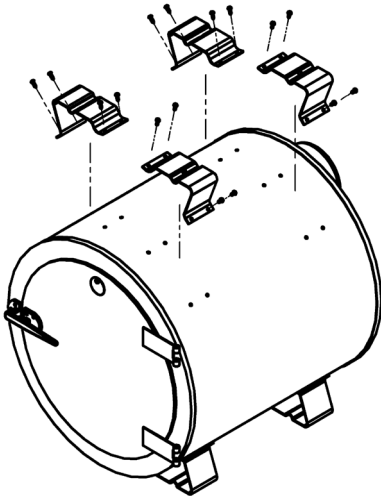
Heating Element Kit			
Element	2	1250500	1250600
Jumper	2		
Retainer	1		



### NOTE:

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

## STACKING FEET (FOR ST MODELS)

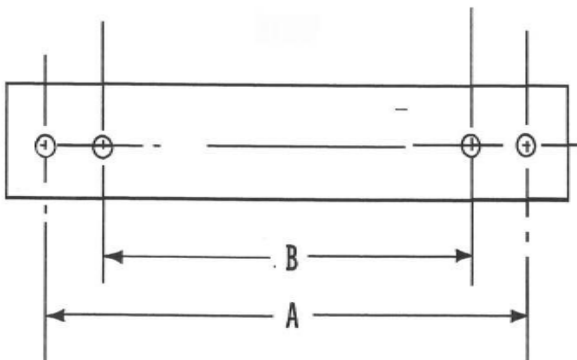


ST Models: Stacking provision for Type 300 ovens is available with original order. Stacking permits two Type 300 ovens to occupy the same floor space as one. For each stack, only **one** oven needs to be ordered with the stacking lugs. Stacking lugs (factory installed only) on lower oven bolt to feet of any Type 300 oven, whether in the field or newly ordered.

## STACKING STRAPS (FOR ST MODELS)

The Type 300ST DryRod® oven is specially made for stacking two-high as shown in the illustration. Each of these special models has four feet attached to the top in addition to the usual four feet on the bottom. The extra four feet on top of the oven allow a standard Type 300 to be stacked on top and conserve floor space. Each foot has a hole in it so the top and bottom ovens can be bolted together and to the supporting surface. Note: It is not recommended to stack ovens three-high for safety reasons.

If four or more ovens are to be grouped together, a more stable stack can be assembled by using the steel straps supplied with ST ovens. Two of these straps should be bolted between the feet of the top and bottom ovens, linking the two stacks' front and rear. The two remaining straps are then used as shims to level the top ovens and are mounted from front to rear feet as shown. For one stack two ovens high, bolt feet directly together and set aside straps for future use.



"A" mounting holes will fit oven feet from front to rear when strap is used as a shim to level oven top.

"B" mounting holes, when strap is used to link two stacks of ovens side by side, will provide 1" clearance between ovens.

It is suggested that you mount the bottom oven 18 to 24 inches above the floor to provide easy access to electrodes in both top and bottom ovens.

With each stacking oven, the following are supplied:

- 2 Steel straps
- 4 Hex. hd. cap screws 3/8-16 x 2" lg.
- 4 Hex. nuts 3/8-16
- 8 Flat washers

