

# Instructions for H, K, HS, KS, TnF-H & TnF-K Series Paragon Kilns

In addition to these instructions, you will need a Paragon instruction manual. For H- and K-series kilns, see the *A & B Series Instruction and Service Manual*. For HS-, KS-, TnF-H- and TnF-K-series kilns, see the *S, SnF & TnF Series Instruction and Service Manual*.

## Model Numbers

"A" at the end of a model number means a painted kiln; "B" means a stainless steel kiln. In this sheet, "H-series" will refer to H, HS and TnF-H models. "K-series" will refer to K, KS and TnF-K models.

## Setting Up

Skip over stand assembly instructions in your manual.

Check the circuit data plate on your kiln for electrical specifications.

## Furniture Kits

### H-16

2 C-15 Shelves; 1 C-15H 1/2 Shelf  
4 each - 1/2", 1", 2", 3", 4", 5", 6" Tri-Posts  
1 lb. Bag Kiln Wash  
Shpg. Wt.: 38 lbs.

### H-17, HS-17, TnF-H-17

3 C-17 Shelves; 1 C-17H 1/2 Shelf  
4 each - 1/2", 1", 2", 3", 4", 5", 6" Tri-Posts  
1 lb. Bag Kiln Wash  
Shpg. Wt.: 50 lbs.

### K-6, KS-6 & TnF-KS-6

8 C-20H 1/2 Shelves  
8 each - 1", 2", 3", 4", 5", 6" Square Posts  
1 lb. Bag Kiln Wash  
Shpg. Wt.: 145 lbs.

## Bottom Maintenance

### Kiln Wash

The bottom of your kiln should be covered with high fire kiln wash, because glaze may drip from ware onto the brick bottom during firing. When this happens, scrape off the glaze and apply more kiln wash to the spots. If the kiln bottom becomes slightly uneven, scrape off the old kiln wash and apply a new coat. The bottom should be kept even so posts will remain steady.

*When removing kiln wash, vacuum it from the kiln completely. Kiln wash falling into the grooves can ruin an element.*

### Filling Holes and Patching

A large hole can be filled by cutting the hole square and cementing in a matching brick. You can also patch the bottom by thinning repair cement to the consistency of coffee cream and mixing with coarse grog made from crushed insulating firebrick. When fired, this will leave a hard, durable surface. Do not use cement without grog for filling large holes, because it will crack and pull out. It will also cause hot spots.

### How to Reverse the Bottom

If the bottom becomes very uneven, you can turn it over and use the other side.

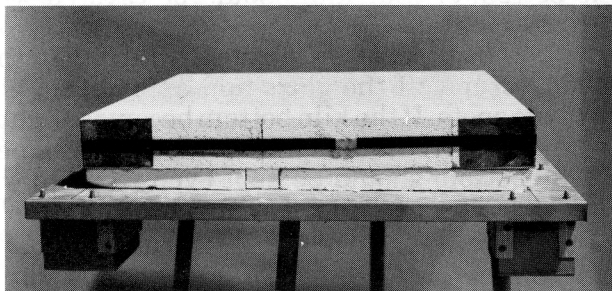
- 1 Remove the kiln lid.
- 2 Scrape all the kiln wash from the bottom and vacuum out the kiln.  
*If kiln wash falls in the firebrick grooves when you turn the kiln upside down, your elements may burn out.*
- 3 Gently turn the kiln upside down with a couple of helpers.
- 4 Remove the screws holding the steel base to the kiln case. Remove the base.
- 5 Remove the block insulation covering the firebrick bottom. Then lift the firebrick bottom out and turn it over.
- 6 Replace block insulation and steel base. Coat the bottom with kiln wash.

# Sidewall Maintenance

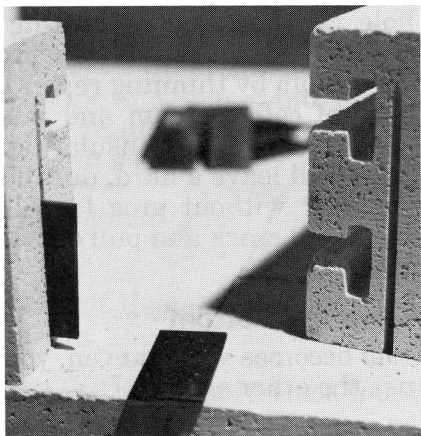
In the following sequence, we show you a new H-17A being built at the factory. Other H and K series kilns are assembled the same way.

In knowing how the kiln is assembled, you can dismantle it to repair brick sections. To dismantle the kiln, go back through the sequence in reverse order.

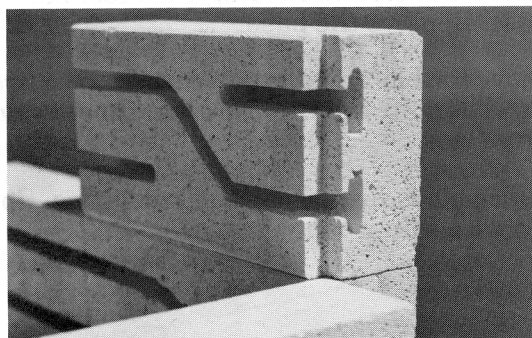
## Assembly Sequence



1 Place brick bottom on the steel base.

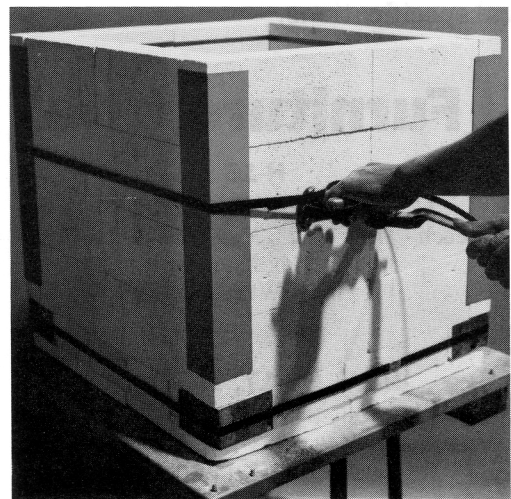
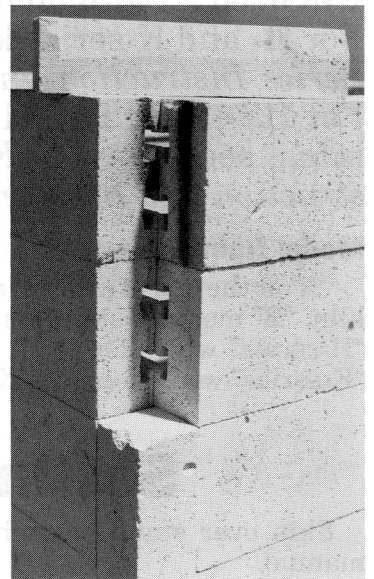


2 Begin stacking sidewall firebricks on the brick bottom. In the H-series kilns, each sidewall is two bricks wide. A steel retainer is inserted between the two bricks of each sidewall brick row. The steel retainer is slid into a slot in the sides of the bricks. In the K-series kilns, the sidewall firebricks are cemented together in sections. Each section spans the width of the sidewall. In both H and K series kilns, the bricks fit together in the corners with slots.



In the H-series kilns, each layer of sidewall firebricks contains one terminal wallbrick (for a total of four terminal bricks in the kiln). The terminal brick is where the element enters the firing chamber from the switch box. In the K-series kilns, each layer of sidewall firebricks consists of three straight grooved wallbrick sections and one terminal wall brick section (five layers total).

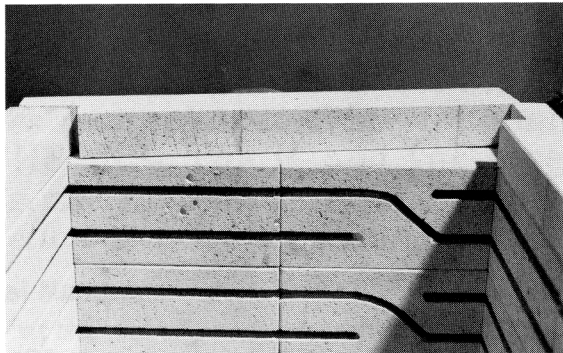
3 On the H-series kilns, place corner bricks in the sidewall corners. The corner bricks fill in the blank space. When ordering corner bricks, specify kiln model number.



4 Steel corner pieces are banded to the outside of the firebrick sidewalls. At the factory we use a banding tool (the type used to band shipping crates) and plastic banding to squeeze the sidewall firebricks tightly. This keeps the firing chamber correctly positioned until the steel case is fastened into place. You can use a banding tool like we use (borrow one if need be), or you can use a Paragon case tightener instead. If you use a banding tool, use plastic banding, not steel. If you use a case tightener, tighten the firing chamber and steel corner pieces. Then while everything is tight, tie heavy string around the firing chamber so that when the case tightener is removed, the string keeps the firing chamber tight.

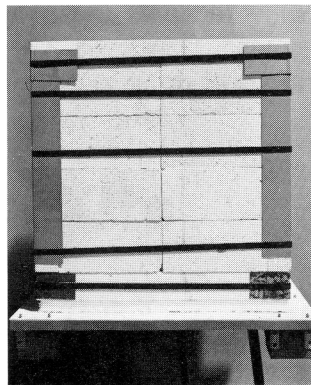
Tighten the bands fairly tight but not so tight that the firebricks are damaged.

Steel banding or wire is not recommended for tightening the sidewall firebricks. The reason is that if after many years of firing the steel banding slides down and works its way through the porcelain insulators, it could short out the elements.



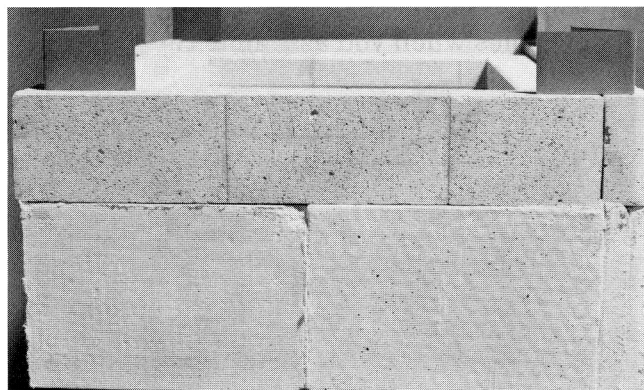
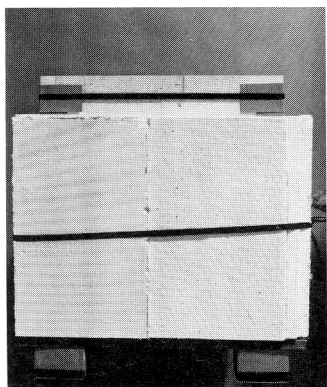
**5** For both H- and K-series kilns, add the top row of plain 2" firebricks. They are cemented together into sections and fit together in the corners with notches. Each kiln takes one section per wall, four all together.

**6** Tighten the top row of 2" wallbricks with metal corner pieces and plastic banding or string.



**7** Use a piece of grit cloth or coarse sandpaper wrapped around a piece of wood to smooth the top of the sidewalls.

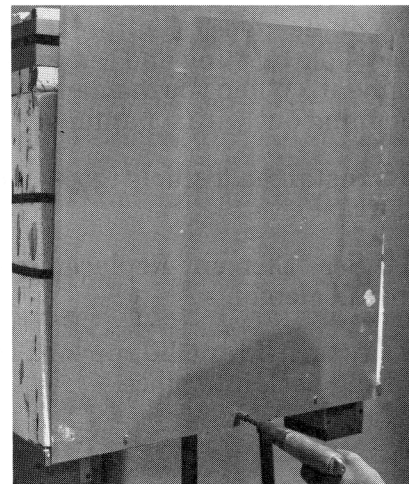
**8** Place the block insulation around the sidewalls. The insulation rests on the steel base. Use plastic banding or string to hold in place. (When you dismantle the kiln, make sure you mark where the block insulation went. When you reassemble the kiln, you won't have to drill new holes in the insulation if you place it where it went before.)



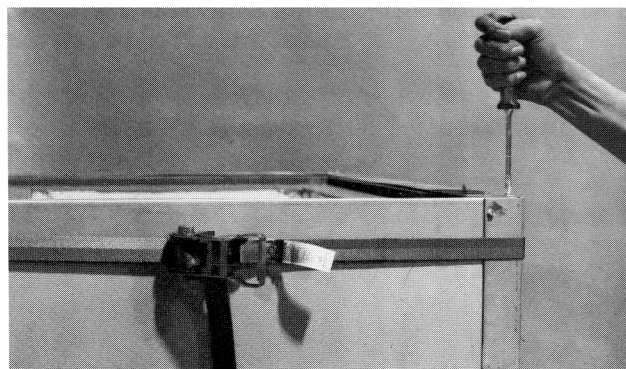
**9** Both H- and K-series kilns take a top row of firebrick that goes on top of the block insulation. This row of firebricks is cemented into sections, each section spanning the length of the wall. Cut the sections if need be to fit your kiln. Use a hacksaw blade. When in place, the outer top row of firebrick you just installed should be 1/2" higher than the inner top row of firebrick.

**10** Coat the top of the sidewalls with repair cement. Follow directions on the bag.

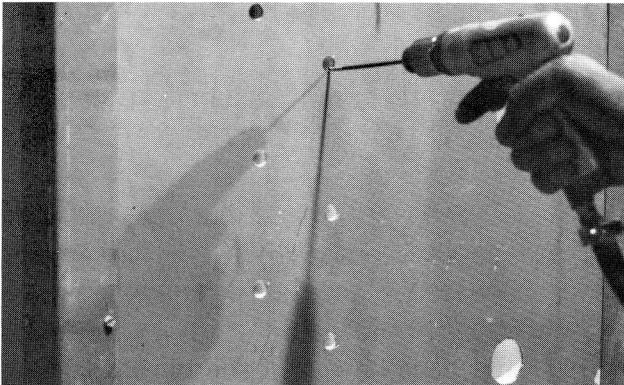
**11** Attach the four sides of the steel case. Each side fastens to the steel base with #8 screws.



**12** Hold the four sidewall edging pieces in place with a Paragon case tightener. To begin, the tightener should be fairly loose. Slide the top edging pieces inside the side edging pieces. Then tighten the case tightener and fasten the edging pieces in place with #8 screws. (If you mark the edging pieces



when you dismantle the kiln, you may not have to drill new holes when you assemble the kiln again.)



**13** Drill a 1/8" hole from the element holes in the outer case to the terminal bricks in the firing chamber. The elements will go through the sidewalls in these holes. You can start the holes either on the case side or the firing chamber side of the wall. It doesn't matter as long as the hole comes out of the terminal brick where the grooves begin. You may have to angle the drill bit.

**14** Drill a 1/2" hole in the firebrick where the peephole goes. Center the hole. Insert a new peephole bushing and cement into place with repair cement. (When you dismantle the kiln, break the old bushing out with a hammer.)

**15** Install heat shield (goes under the switch box on the case).

**16** See "Element Replacement" in your manual to install elements.

**17** Attach lid and lid support. Hook counter-balance spring back into place.

  
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