

KEHF. 600 Instructions Repair Parts List



Henkel, Inc.
P.O. Box 1322
Hammond, LA
70404
(985) 345-2171
www.keenovens.com



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Model KHTF-600 Re-bake Flux Oven Installation Instructions & Repair Parts List

One Year Limited Warranty

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Henkel, Inc. warrants its products against defects in material and workmanship. Henkel, Inc. will either repair or replace without charge any properly installed product which fails under normal operating conditions within one year from date of installation, provided it is returned to our factory, transportation prepaid, and our inspection determined it to be defective under the terms of this warranty. The warranty covers only equipment manufactured by Henkel, Inc., and does not extend to transportation, installation, or replacement charges at the buyers' facility; nor does it apply to any other equipment of another manufacturer used in conjunctions with Henkel, Inc. equipment. No other warranty, expressed or implies exists beyond that included in this statement.

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Keen Ovens

Model KHTF-600

Specifications

Capacity	600 lbs. flux
Volts	240 V
Watts	2000 W
Thermostat	Proportional - Intergrated
Temperature	0°F-999°F
Insulation	4"
Exterior Dimensions	24" X 24" X 64" sloped bottom
Net Weight	250 lbs.
Shipping Weight	283 lbs.
Shipping Dimensions	36" X 30" X 70"

* 480V Single Phase Available

Recommended Spare Parts

**When it is critical to have continuous operation of this unit;
we suggest having the following spare parts on hand:**

**240 V –1 Set of Elements, 1 Contactor
480 V – 1 Set of Elements, 1 Contactor, 1 Transformer**

General Information

The KHTF-600 is the most energy efficient flux oven on the market, using one-third the electricity and one half the stabilizing time. The bottom unloading design and slide valve allows for easy dispensing of flux. The unit is made from steel, treated, and then painted with a chemical resistant blue finish. All Keen ovens are Mercury free.

Safety Precautions

Read all instructions completely before attempting to operate this unit.

***** SAVE THESE SAFETY INSTRUCTIONS *****

To reduce the risk of electrical shock, fire, or personal injury follow the guidelines below:

- Before connecting unit to a power source, be sure the voltage supplied is the same as that specified on the name plate of the unit.
- Check outlet to ensure proper grounding of the electrical cable. Have a licensed electrician check the A/C power outlet if you are not sure.
- Use this unit for its intended purpose as described by literature.
- Make sure power cord is located so that it will not be stepped on, tripped over, or otherwise subjected to stress of heat, oil, or sharp edges. Do not close doors on the cord.
- To reduce the risk of damage to the electric plug and cord, disconnect by plug rather than by the cord.
- Do not use this unit if cord or plug is in poor condition. If it has been exposed to weather or immersed in water, have a qualified serviceman inspect and replace parts as necessary.
- **WARNING! NEVER HANDLE PLUG, CORD, OR UNIT WITH WET HANDS OR WHILE STANDING IN WATER.**

- Use special care when moving heavily loaded units.
- Do not store combustible material on or around the unit.
- Do not operate this unit empty.
- When using the unit at a distance where an extension cord becomes necessary, a 3-conductor grounding cord of adequate size must be used for safety, and to prevent loss of power and overheating. Use only a UL listed extension cord suitable for outdoor use. Make certain wire size is large enough for A/C amperage rating of unit.

Operation

Locate oven in an area free of combustible material and close to an appropriate power source. (Check name-plate for voltage.)

****Operator should read the enclosed “2110 Temperature Controller User’s Manual” before placing oven in operation. Note**** The controller has been pre-configured prior to shipping. However fine tuning may be done in field. ******

Wire oven to a fused disconnect of proper voltage and amperage. Load oven with flux and switch on power. Adjust temperature control set point to desired temperature. Note: Alarm option has been wired to act as an over-temperature control. See user manual configuration menus.

*****CAUTION: DO NOT USE ON D/C POWER SUPPLY!*****

Venting

The KHTF-600 is designed to vent around the perimeter of the lid while still maintaining temperature.

Guide to Storage

See the enclosed guide to storage. This guide may be used in the absence of storage information from the flux manufacturer. In critical situations, contact your flux manufacturer.

Scheduled Maintenance

The manufacturer recommends that after each use the operator clean all flux residue from elements and element brackets. Flux build-up on elements may cause hot spots and shorten element life. Note: For 480 V models, see the attached supplement.

Troubleshooting: The Keen oven model KHTF-600 requires a minimal amount of electrical knowledge to repair if necessary.

IF OVEN FAILS TO OPERATE – NO HEAT

1. Check power source.
2. Check power cord continuity. Replace cord assembly if faulty.

3. Check output side of fuse block for proper voltage. If fuses are bad, inspect oven wiring and components for damage. Replace fuses.
4. Check input and output voltages on temperature controller for proper voltage. If input voltage is not present, check wiring. If input voltage is present and there is no output voltage, replace or repair controller.
5. If output voltage is present, check for voltage at contactor coil. If voltage is not present, check wiring. If voltage is present at coil and contactor is in the open position, replace contactor. If the contactor is in the closed position and there is no output voltage present, replace contactor.
6. If the over temperature contactor is functioning, next check the relay operated by the temperature controller for proper control voltage and proper load voltage on the input and output sides of the relay.
7. If there is no control voltage present at the relay, check wiring to the temperature controller and temperature controller output voltage.
8. If control voltage is present at relay, check voltage between relay output and common. If no voltage is present between relay output and common, replace relay.
9. If voltage is present between relay output and common, check wiring to elements, and element continuity. Replace faulty wiring or elements.

NOTE: Temperature controller is equipped with an open sensor indicating light located in the digital display area.

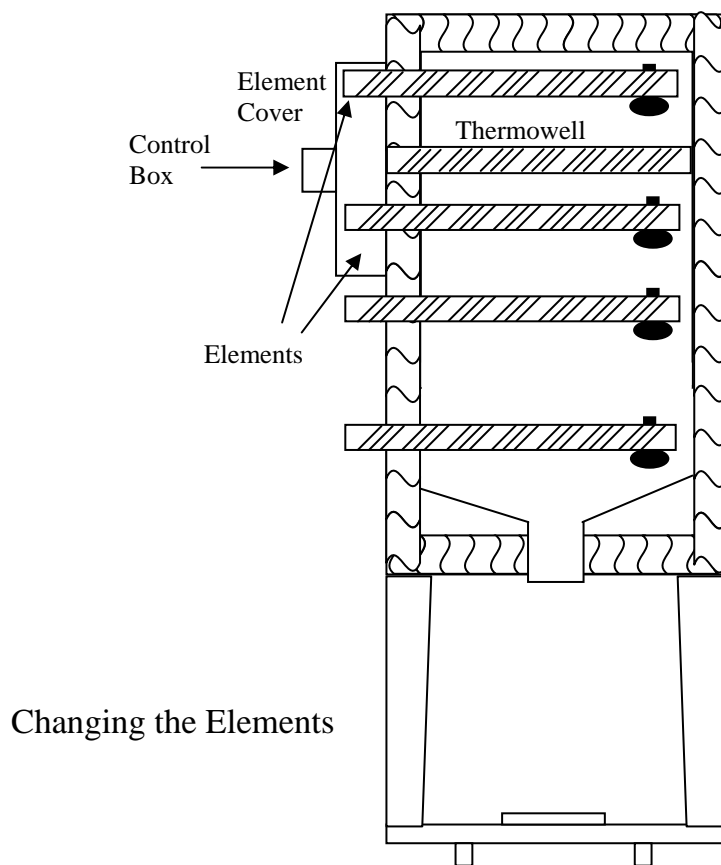
IF OVEN HEATS BUT DOES NOT REACH TEMPERATURE

One or more elements may be faulty. Check continuity and replace faulty elements.

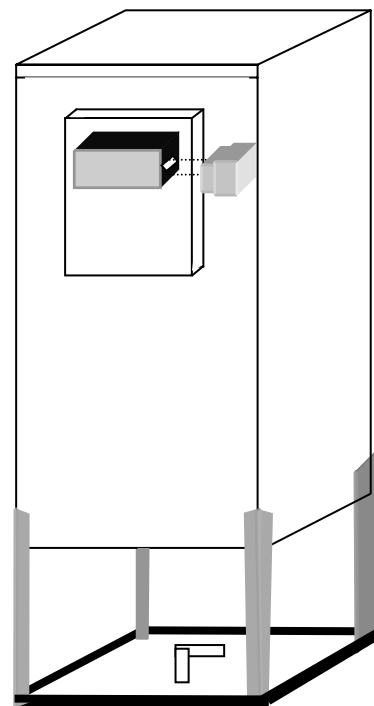
Corrective Maintenance

CHANGING HEATING ELEMENTS

1. Disconnect power source and empty oven of flux.
2. Remove control box cover plate and remove wire connectors from element leads.
3. Element cover may now be removed with control box still attached. Note that the thermocouple lead will pull from the thermowell. When replacing element cover, be sure thermocouple is replaced in wall.
4. To remove wiring leads from elements place a one-fourth inch open-end wrench on square portion of element terminal for a back up. Remove 10/32 hex nuts, washers and wiring leads.
5. From interior of oven, remove stove bolts, nuts, washers and wiring leads.
6. Install new elements and element hardware in oven, being sure element terminals are clear of oven wall. Check wiring diagram or parts list for proper replacement elements.
7. Reattach wiring leads to elements being sure to use a back up wrench when tightening.
8. Replace element cover on oven being sure thermocouple is replaced in well and element leads are pulled through control box access.
9. Reconnect element leads as per wiring diagram and replace control box cover plate.



Changing the Elements



Changing the Controller

CHANGING THE CONTROLLER

1. Disconnect from the power source and remove cover plate from control box.
2. Tag and remove leads from back of controller.
3. The controller is held in place by mounting brackets on either side of controller. From the rear, loosen mounting bracket screws, remove mounting brackets and slide controller from control box.
4. To reinstall, slide controller into control box, attach mounting brackets and tighten set screws.
5. Replace electrical leads on controller terminals as per wiring diagram. Note: When attaching thermocouple leads to controller, the negative lead wire has red insulation and the positive lead wire has white insulation.
6. Check to be sure all electrical leads are on proper terminals and are secure. Replace control box cover plate.

CALILBRATION INSTRUCTIONS

For calibration procedure refer to the "Controller User's Manual". When using a remote thermometer to check oven temperature against controller display, be sure the thermometer-sensing probe is placed next to controller thermocouple to achieve proper temperature reading.

KHTF- 600 ACCESSORIES LIST

** Please state model number and serial number and specify voltage and wattage when ordering repair parts, spare parts, or accessory parts. All necessary attaching hardware is supplied with each part ordered.

(Item numbers refer to pictorial drawings below for repair parts.)

Model KHTF-600 Repair Parts List

ITEM #	QUANTITY	DESCRIPTION	PART NUMBER
5	8	Element Assembly 240V/1000W	301026
		480V/1000W	301029
3	1	Power Cord 240 V	301018
		480 V	301018-A
4	2	Handles	430102
2	1	Temperature Control 240 V	301001
1	1	Neon Pilot 240 V	301085
		480 V	301085-A

