

RHT.

500

Installation Instructions

Repair Parts List



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



Henkel, Inc.

P.O. Box 1322 * Hammond, Louisiana * 70404 * (985) 345-2171
www.keenovens.com

Model KHT-500 Oven Installation Instructions & Repair Parts List

One Year Limited Warranty

.....

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.

.....

Keen Ovens

Model KHT-500

Specifications

Capacity	475 lbs. / 18" rods
Volts	240 V
Watts	3000 W
Thermostat	Proportional Controller & Digital Read
Temperature	0°F-999°F
Insulation	4"
Exterior Dimensions	34" X 33" X 27"
Net Weight	203 lbs.
Shipping Weight	338 lbs.
Shipping Dimensions	39" X 40.5" X 36"

Recommended Spare Parts

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

**Heating Element Assembly
Contactor**

General Information

The model KHT-500 is a high temperature oven designed for rebaking electrodes. Temperatures range from 0° - 999° F. The diagonally compartmented shelf design allows greater capacity with less oven weight. These units are constructed of steel, treated, and then painted with a chemical resistant safety blue exterior finish and high temperature aluminum interior finish. All models 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.

Installation

Remove wooden crating material from upper portion of oven. Pallet material is removed by leaning oven slightly forward and backward, and removing bolts from underside using an adjustable or socket wrench. When oven is free from pallet, place bolts back into oven legs for leveling. Oven should be leveled with slight tilt to the back. Locate oven in an area free of flammable material and near appropriate electrical source.

Operation

Locate oven in an area free of combustible material and close to an appropriate electrical source. (Check name plate for voltage.) Operator should read enclosed 2110 Temperature Controller Users Manual before placing oven in operation. Note: The control 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 desired amount of electrode. Switch on power to oven. 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 KHT-500 oven is vented through two screened plugs at top rear of oven.

Functional Description

These high temperature ovens are designed for rebaking electrodes. After the rebaking process is complete, electrodes may be transferred to the job site, a holding oven, or stored in the high temperature oven an optimum temperature. The diagonal shelf design compartments also allow air to circulate freely throughout the oven.

Guide to Storage

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

Scheduled Maintenance

The manufacturer recommends that unit be unloaded and cleaned of debris and dust every six months. It is also recommended that a temperature probe be placed inside the unit next to the thermocouple, and the controller calibration checked at this time.

Troubleshooting: The Keen oven model KHT-500 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.

IF OVEN FAILS TO REACH SET POINT

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

Corrective Maintenance

CHANGING HEATING ELEMENTS

1. Disconnect oven from power source.
2. Remove back cover and insulation.
3. Remove electrical leads from elements and inspect leads for damage. When removing or installing leads on elements, use a back up wrench.
4. From inside of oven, remove element cover. Unscrew element brackets, and remove elements from oven.
5. Install and rewire elements, being sure all connections are tight and insulated.

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.

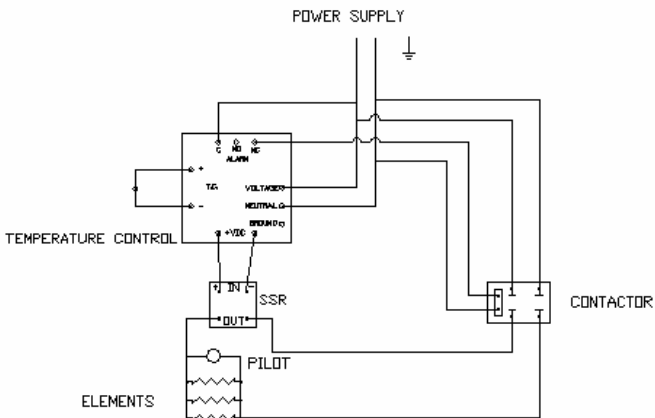
CHANGING THE CONTACTOR

1. Disconnect oven from power source.
2. Remove cover plate from control box.
3. Remove and tag electrical leads from contactor.
4. Unbolt and remove contactor from control box.
5. When replacing contactor, be sure it is of proper voltage and amperage.
6. Install new contactor and rewire as per wiring diagram. Check to be sure wiring is correct and terminals are tight.
7. Replace cover plate on control box.

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 thermometer sensing probe is placed next to controller thermocouple to achieve proper temperature reading.

KHT-500 240V WIRING DIAGRAM



KHT-500 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 KHT-500 Repair Parts List

ITEM #	QUANTITY	DESCRIPTION	PART NUMBER
1	1	Door Latch	430110
2	1	Large Grab Handle	430109
3	2	Vent Plugs	490108
4	2	Handy Box	301033
5	1	Pilot Light	240 V 301085 480 V 301101
6	1	Temperature Control	301001
7	1	14/3 SJ Power Cord	301017
8	3	Element	240V/ 1000W 301026 480V/ 1000W 301029
	1	Contactor	301008
	1	Solid State Relay	240 V 301096 480 V 301006

