

OPERATIONS MAINTENANCE MANUAL

COOK & HOLD OVEN SYSTEMS

WITTCO MODEL NUMBERS

1300-AD-SS

1300-AD-SS-SPLIT



LIMITED WARRANTY

Wittco warrants the Products that it manufactures to be free from defects in materials and workmanship, under normal use and service, for the periods indicated below from the date of purchase when installed and maintained in accordance with Wittco's written instructions. Buyer must establish the "Products" purchase date by returning Wittco's Warranty registration Card or by other means satisfactory to Wittco in its sole discretion.

Wittco warrants its Products to be free from defects in materials and workmanship from the date of purchase (subject to the foregoing conditions) for the period(s) of time and on the conditions listed below:

- a) **Ninety (90) days Labor Warranty**
- b) **One (1) Year Parts Warranty**

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT INFRINGEMENT. Without limiting the generality of the foregoing, **SUCH WARRANTIES DO NOT COVER:** Coated incandescent light bulbs or heat lamps, all glass components. Product misuse, tampering, misapplication, application of improper voltage, or recalibration of thermostats or high limit switches.

LIMITATION OF REMEDIES & DAMAGES

Wittco's liability and Buyer's exclusive remedy hereunder will be limited solely, at Wittco's option, to repair or replacement by a Wittco authorized service agency (other than where Buyer is located outside of the United States or Canada, in which case Wittco's liability and Buyer's exclusive remedy hereunder will be limited solely to replacement of part under warranty) with respect to any claim made within the applicable warranty period referred to above. Without limiting the generality of the foregoing, all portable Products, as defined by Wittco, shall be delivered by Buyer, at its sole expense, to the nearest Wittco authorized service agency for replacement or repair. Wittco reserves the right to accept or reject any such claim in whole or in part. Wittco will not accept the return of any Product without prior written approval from Wittco, and all such approved returns shall be made at Buyer's sole expense. WITTCO WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. INCLUDING BUT NOT LIMITED TO LABOR COSTS OR LOST OF PRODUCTS AND LOSS OF PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE PRODUCTS.



WITTCO TECHNICAL & PRODUCT SUPPORT

TECHNICAL SUPPORT & SERVICE INQUIRES MAY BE DIRECTED TO WITTCO BY:

1. CALLING DIRECTLY TO:

WITTCO FOODSERVICE EQUIPMENT TECHNICAL & SERVICE DEPARTMENT –
(800) 367-8413
8:00 AM - 4:30 PM (CENTRAL TIME)

2. FAXING DIRECTLY TO:

WITTCO FOODSERVICE EQUIPMENT TECHNICAL & SERVICE DEPARTMENT –
(414) 354-2821
DAILY 24 HOURS

3. MAILING DIRECTLY TO:

WITTCO FOODSERVICE EQUIPMENT INC.
7737 NORTH 81 ST. STREET
MILWAUKEE, WISCONSIN 53223 USA

WHEN DIRECTING INQUIRIES TO WITTCO PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE TO AVOID DELAYS

1. Wittco model number indicated on the equipment serial data plate located at the electrical connection.
2. Wittco serial number indicated on the equipment serial data plate. The equipment serial number will also have two (2) alpha characters immediately following the serial number. These alpha characters are part of the serial number.



INTRODUCTION

Wittco Foodservice Equipment's Cook and Hold Oven System is a basic unit of food preparation equipment. It has found wide acceptance in both institutional and commercial food service operations.

This manual has been produced to provide persons responsible for the operation and maintenance of the oven with a simple but comprehensive understanding of its proper use. We recommend that this manual be read and understood prior to placing the oven into operation.

As with any piece of food service equipment, this oven system will require a minimum of care and maintenance. Suggestions for this procedure are contained in this manual and should become a regular part of the operation of the unit.

NOTE: BEFORE USING THE OVEN IT SHOULD BE THOROUGHLY CLEANED IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THIS MANUAL.

It is recommended that prior to placing the oven system into operation that it be operated on the cook cycle for approximately two (2) hours at 250° F. to prep it for operation.

Should repair or adjustment of the unit become necessary, we suggest that procedures described in this manual be followed. The operator may also contact the authorized Wittco dealer who sold the product or an authorized Wittco service agency. If the needed repair occurs during the warranty period, prior authorization is required from Wittco by the service company before the work is commenced.

It is our sincere desire that you obtain the maximum benefit from your Cook and Hold Oven System. If at any time questions arise or additional information is required, contact Wittco at 800 3 67-8413.

DESCRIPTION

Operators have found that cooking foods utilizing low temperature methods reduces the amount of product shrinkage and increases the amount of product yield. This is because less moisture is cooked out of the food when it is prepared at 225° F. that when it is prepared at 350° F. Because of this fact, the operator will serve a product that has greater customer satisfaction because of the increased flavor and moisture this meat possesses.

UNCRATING

Each Wittco Foodservice Equipment oven is packed in a cardboard carton which, in turn, is banded to a wooden pallet. When the cabinet is received by the operator, the carton should immediately be inspected for any sign of visible exterior damage. If carton is

punctured or dented, it may be an indication that the cabinet has sustained concealed freight damage

It is very important that any evidence of damage be noted on the Bill of Lading at the time of receipt.

UNPACKING THE CABINET

1. Remove the banding material holding the carton to the pallet.
2. Remove the cardboard carton and the plastic bag covering the cabinet.
3. Carefully lift the cabinet off the carton bottom and pallet and place it on the floor.
4. Open the door and remove any packing materials which may have been used to hold the tray slides in place.
5. Heat the oven for approximately 2 hours before using.

CABINET LOCATION

PLACING THE OVEN IN THE PROPER LOCATION IS IMPORTANT FOR EFFICIENT OPERATION. CHOOSE A LOCATION FOR THE OVEN IN AN AREA WHICH WILL PROVIDE EASY LOADING AND UNLOADING WITHOUT INTERFERING WITH THE FINAL ASSEMBLY OF FOOD ORDERS. PROVIDE AT LEAST SIX INCHES OF SPACE ON EACH SIDE OF THE OVEN FOR PROPER AIR CIRCULATION AROUND THE OVEN

OPERATING CONTROLS

All operating controls are located on the front control panel. The oven is supplied with individual operating controls for each oven cavity. Each panel contains the power switch, the cooking and holding thermostats, the timer which sets the desired roasting time, and the operating indicator lights.

NOTE: IT IS RECOMMENDED THAT THE OVEN CONNECTION TO THE POWER SOURCE BE DONE BY A LICENSED ELECTRICIAN.

ELECTRICAL REQUIREMENTS

Witco Cook and Hold Ovens can be factory wired for 208/240 volts AC, single phase, 60 or 50 cycle service.

VERIFY THAT THE VOLTAGE AND PHASE OF THE POWER SOURCE IS IDENTICAL TO THE OVEN SYSTEM DATA PLATE BEFORE CONNECTING.

The oven must be adequately and safely grounded before operation. A separate disconnect switch or circuit breaker is recommended at a convenient location between the oven and power source.

TESTING THE OVEN

Each oven is completely checked and tested prior to shipment. However, it is a good practice to completely check the unit again after unpacking and installation.

1. Connect oven to power source. (Verify the power requirements.)
2. Rotate the timer knob to -0-, and set the roasting and holding thermostats at 140° F.
3. Turn the oven on and check that the low velocity interior circulating fans are running. At the same time check that the indicator lights under the on/off switch and the hold thermostat are illuminated.

NOTE: THE COOLING FANS MAY NOT OPERATE WHEN THE OVEN IS TURNED ON AS THEY WILL ONLY OPERATE WHEN THE THERMOSTAT TO WHICH THEY ARE CONNECTED REQUIRES IT.

4. Set the timer dial to 2 hours. (The holding indicator light will go out and the roast indicator light will be illuminated.)
5. Rotate the roast temperature knob to 250°. Check the interior rear of the oven cavity to determine that the oven is heating.
6. Rotate the timer knob to -0- and set the hold temperature knob at 250°. Check that the roast temperature indicator light has gone out and the hold light has come on. Check the interior rear of the oven to insure that the oven is heating.

If all of the functions perform satisfactorily, the oven is ready for operation.

CLEANING

The interior of the oven should be cleaned whenever a food spill occurs. Use a mild soap and water to clean. **Never use harsh chemicals or abrasive pads to clean the cabinet.**

CAUTION: AVOID SPLASHING WATER INTO THE UPPER AREAS OF THE CABINET TO PREVENT DAMAGE TO ELECTRICAL COMPONENTS OR CONNECTIONS. WIPE THE UPPER AREA WITH A DAMP CLOTH ONLY. DO NOT HOSE UNIT.

1. **DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the oven side racks and the rear air tunnel from the cabinet. Take them to a sink or dish washer for a thorough cleaning.
3. Clean the interior oven cavity with soap and water.

6. Reassemble the oven.

REPLACEMENT OF ELECTRICAL COMPONENTS

It is highly recommended that only Wittco Foodservice Equipment replacement parts be used to insure compatibility of component parts in the operation of cook and hold oven systems. All of the electrical components which may require servicing are in the control module top.

WARNING: DISCONNECT THE OVEN FROM THE POWER SOURCE BEFORE REMOVING THE CONTROL MODULE FROM THE OVEN CABINET.

TROUBLE SHOOTING

1. Pilot lights are illuminated but the cooling fans do not operate.

Solution: This condition is normal when the unit is cold. However, if the cooling fans do not operate when the oven cavity is above 150° F., the fan, the fan thermostat, or the connections are defective and must be repaired before further operation.

2. Oven compartment does not heat.

Solution: With the power switch turned on determine if the oven circulating fan is operating. If it is not, the fan or the associated wiring is probably defective and should be replaced. If the fan is running, proceed as follows:

- a. The timer knob needs to be set to -0-. (The power and the hold indicator lights will both be illuminated.)

- b. Rotate the hold thermostat knob to 250° F and check for heat at the rear of the oven compartment.

- c. If heat is present, turn the hold thermostat off by turning it counter-clockwise until it stop and rotate the roast thermostat knob to 250° F.

- d. Wait until the oven circulating fan begins to blow cool air into the rear of the oven compartment and rotate the timer knob to 2 hours. (The power and the roasting indicator lights will be illuminated.)

- e. Check the rear of the oven cavity for heat.

If heat is not present in one of the cycles, that indicates that the thermostat or the temperature probe for that cycle are defective. If no heat is present in either cycle, that indicates that the thermostats, the temperature probes, or the heating element are defective.

4. Oven temperature is incorrect.

Solution: The thermostats may require calibration or the temperature control knob may have slipped on the thermostat stem.

a. To determine if the thermostat knobs have slipped on the thermostat stem, turn both of them to the right until they stop. They should both indicate 250° F. If they indicate a higher or lower temperature, the knob has slipped and needs to be adjusted.

To adjust the position of the thermostat knob on the thermostat stem, loosen the "L-END" screws and rotate the pointer on the knob to 250° F and re-tighten the screws without moving the thermostat stem.

b. Turn the oven on, set the timer knob to -0-, and rotate both thermostat knobs to the identical temperature.

c. Install an accurate thermometer as close as possible to the oven circulating fan inlet.

d. Let the oven preheat for about 20 minutes or until the thermostats begin to cycle. (A "click" will be heard when the thermostats turn off and on.)

e. Compare the hold cycle thermostat setting to the thermometer reading to determine they are similar.

f. Rotate the timer to 1 hour and slowly move the roasting thermostat to the left and right to determine if it is cycling at the same setting as the hold thermostat.

Compare the roast cycle thermostat to the thermometer reading to determine if they are **similar**.

If either thermostat is cycling at a temperature different from the temperature reading on the thermometer, the thermostat needs to be calibrated.

The calibration procedure is as follows:

1. Remove the thermostat knob by loosening the "L-END" screws and sliding the knob off the thermostat stem.
2. Determine how much difference there is between the thermostat setting and the thermometer reading.
3. With a small screwdriver, turn the screw in the center of the thermostat stem clockwise to decrease the temperature and counter clockwise to increase the temperature. Do not allow the thermostat stem to move during this operation. One quarter turn will increase or decrease the temperature approximately 25° F.

After calibration has been made allow the oven to operate until the temperature has stabilized. Re-check to determine whether or not the process has corrected the problem. If adjusting the thermostat has not altered the temperature, the thermostat is defective and requires replacement.

CAUTION: THE MAXIMUM TURN OF THE CALIBRATION SCREW IS 1 1/2 TIMES.

ON/OFF SWITCH REPLACEMENT

- 1 DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement of all electrical leads and refer to the wiring diagram for reference. Remove the defective switch from the control panel.
4. Install the replacement switch and secure it to the control panel. Reconnect the electrical leads to the new switch.
5. Reinstall the heating module drawer in the oven.
6. Test the oven as described in the TESTING THE OVEN section.

COOK OR HOLD TEMPERATURE THERMOSTAT REPLACEMENT

- 1 DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement of all electrical leads and refer to the wiring diagram for reference.
4. Disconnect the electrical leads of the thermostat control needing replacement.
5. Remove the black thermostat knob by loosening the "L-end" screws that holds it to the temperature controller stem.

NOTE: PRIOR TO LOOSENING THE "L-END" SCREWS, TURN THE BLACK TEMPERATURE CONTROL KNOB COUNTER CLOCK-WISE UNTIL THE KNOB STOPS.

6. Remove the two screws on the front of the control panel that hold the thermostat control in place and remove it.
7. Install the replacement thermostat following the reverse of the above procedure.

NOTE: ONCE THE BLACK KNOB HAS BEEN REINSTALLED TURN IT COUNTER CLOCK-WISE UNTIL THE TEMPERATURE CONTROL SHAFT STOPS. LOOSEN THE "L-END" SCREWS AND REPOSITION

THE WHITE ARROW ON THE KNOB TO POINT TO THE SMALL SILVER DASH UNDER THE LOWEST TEMPERATURE SETTING.

8. Reinstall the heating module drawer in the oven.
9. Test the oven as described in the TESTING THE OVEN section.

INDICATOR LIGHT REPLACEMENT

- 1 DISCONNECT THE CABINET FROM ITS POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Disconnect the electrical leads to the indicator light and remove it.
5. Install the replacement indicator light by pushing it into the control panel until the retaining clips snap into place.
6. Reconnect the electrical leads to the indicator light.
7. Reinstall the heating module drawer in the oven.
8. Test the oven as described in the TESTING THE OVEN section.

COOK CYCLE TIMER REPLACEMENT

- 1 DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement and connection of all electrical leads to the timer and refer to the wiring diagrams for reference.
4. Remove the black timer knob from the front of the control panel, disconnect the electrical leads to the timer, and remove it.
5. Install the replacement timer.

TIMER REPLACEMENT (CON'T)

6. Reconnect the electrical leads to the timer.
7. Reinstall the heating module drawer in the oven.
8. Test the oven as described in the TESTING THE OVEN section.

COOLING FAN REPLACEMENT

1. **DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Disconnect the electrical leads and the retaining nuts to the cooling fan and remove it.
5. Install the replacement cooling fan.
6. Reconnect the electrical leads to the cooling fan.
7. Reinstall the heating module drawer in the oven.
8. Test the oven as described in the TESTING THE OVEN section.

COOLING FAN THERMOSTAT REPLACEMENT

1. **DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Disconnect the electrical leads to the cooling fan thermostat and remove it.
5. Install the replacement cooling fan thermostat.

COOLING FAN THERMOSTAT REPLACEMENT (CON'T)

6. Reconnect the electrical leads to the cooling fan thermostat.
7. Reinstall the heating module drawer in the oven.
8. Test the oven as described in the TESTING THE OVEN section.

OVEN BLOWER FAN ASSEMBLY REPLACEMENT

1. **DISCONNECT THE OVEN FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Disconnect the electrical leads to the blower assembly.
5. Remove the protective fan grill located on the bottom of the control module top exposing the blower cage.
6. Insert an "L-end" wrench into the set screw holding the blower to the motor shaft. Remove the cage from the blower motor.
7. Remove the three (3) hex nuts holding the blower motor housing to the oven and remove it.
8. Install the replacement blower motor by following the reverse of the directions above.
9. Reconnect the electrical leads to the blower assembly.
10. Reinstall the heating module drawer in the oven.
11. Test the oven as described in the TESTING THE OVEN section.

HEATING ELEMENT REPLACEMENT

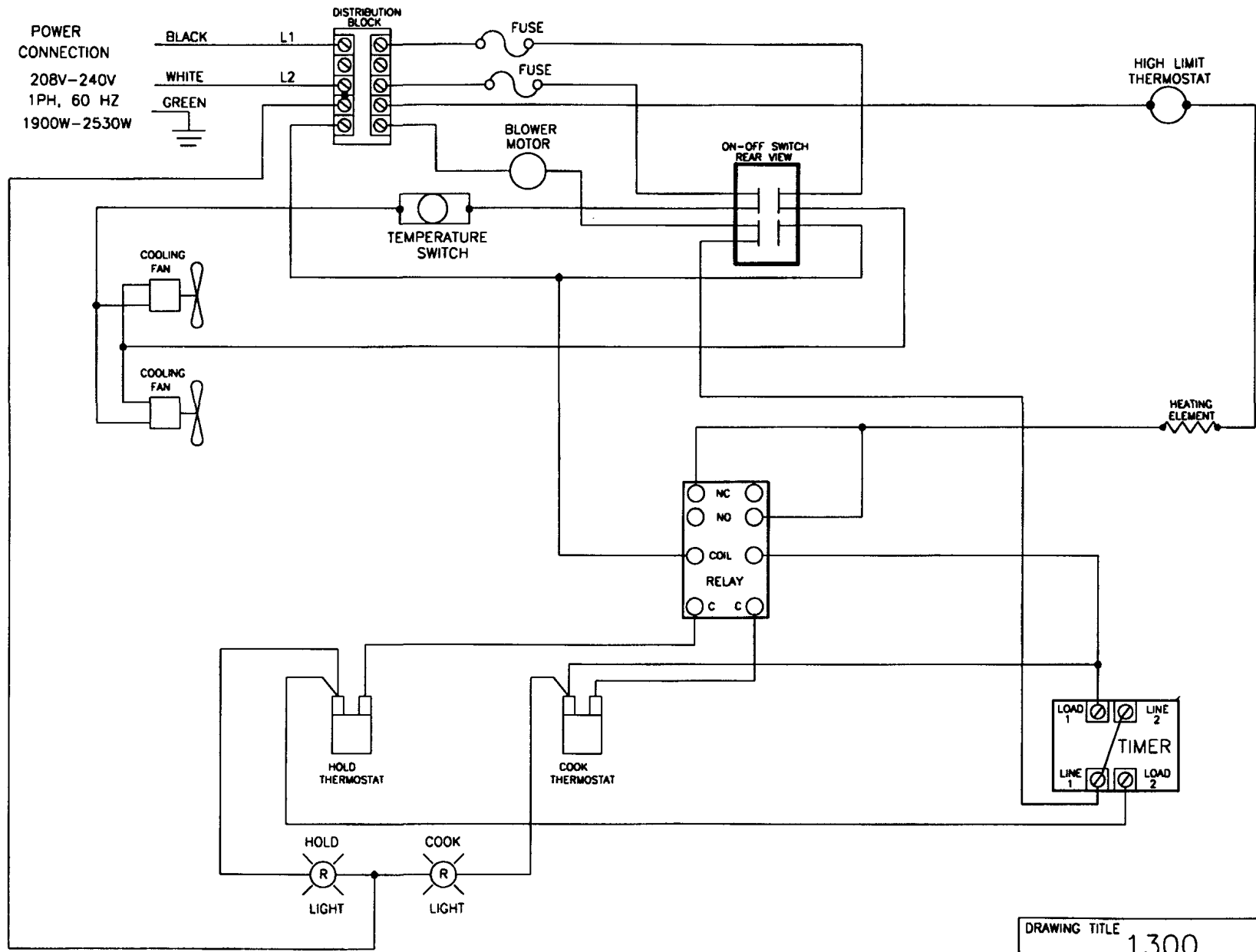
1. **DISCONNECT THE CABINET FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven. Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.

3. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Disconnect the electrical leads from the heating elements
5. Remove the nuts securing the heating element to the heating element compartment and remove it.
6. Install the replacement heating element by following the reverse of the above directions.
7. Reinstall the heating module drawer in the oven.
8. Test the oven as described in the TESTING THE OVEN section.

ELECTRICAL RELAY REPLACEMENT

- 1 DISCONNECT THE CABINET FROM THE POWER SOURCE.**
2. Remove the two screws securing the heating module drawer to the oven.
Pull the drawer out approximately 3/4 of the way, disconnect the wiring harness from the wire connectors, and remove the drawer from the oven.
3. Remove the defective relay but leave the wires attached. Notice the arrangement and connection of all electrical leads and refer to the wiring diagrams for reference.
4. Install the new relay and move the wires from the defective relay to the terminal screws on the replacement relay.
5. Reinstall the heating module drawer in the oven.
6. Test the oven as described in the TESTING THE OVEN section.

POWER CONNECTION
 208V-240V
 1PH, 60 HZ
 1900W-2530W



DRAWING TITLE
 1300
 208V-240V, 1PH, 60 HZ
 1900W-2530W

**WITTCO FOODSERVICE EQUIPMENT INC.
REPLACEMENT PARTS LIST**

WITTCO SERIES - COMMERCIAL COOK & HOLD OVENS

6/25/98

WITTCO PART NO.	PART DESCRIPTION	MODEL NUMBER AND QUANTITY REQUIRED	
		1300 - AD	1300/SPLIT
AD-301-2000-0	BLOWER MOTOR REPLACEMENT KIT 208-240 VOLT	4	-i
AD-266-0000-0	BLOWER MOTOR RETURN AIR GRATE	2	1
WP-114-5R	CASTER, 5" HEAVY DUTY RIGID	2	-)
WP-114-5S	CASTER, 5" HEAVY DUTY SWIVEL W/BRAKE	2	2
AD-312-1000-0	CONTROL PANEL DECAL (BLACK)	2	1
AD-161-2000-0	CORD, 6FT. 20S-240 VOLT (NO PLUG)	1	1
AD-263-4000-0	DOOR, W/OUT WINDOW (NO HARDWARE)	2	1
AD-263-5000-0	DOOR, W/WINDOW (NO HARDWARE)	2	1
AD-245	DOOR, GLASS ONLY	2	1
AD-134-1000-0	DOOR CATCH (NO HANDLE)	2	1
AD-134-0000-0	DOOR LATCH COMPLETE W/CATCH	2	1
AD-305-5000-0	DRAWER REPLACEMENT COMPLETE	2	1
AD-280-1000-0	ELEMENT, 1900 WATT 208-240 VOLT	2	1
AD-305-2000-0	FAN COOLING MOTOR 208-240 VOLT	4	2
AD-210-0000-0	FUSE HOLDER	4	2
W-360-15	FUSE, 15AMP	4	2
AD-142-1300-E	GASKET, ALUMINUM EXTRUSION	2	1
WP-302	GASKET, DOOR (BLACK) BY THE FT.	22'	11'
AD-142-1300-D	GASKET, DRAWER (ORANGE)	2	1
WP-111	HINGE, DOOR	4	2
WP-174	INSPECTION CAP, CHROME	1	1
AD-226-0000-0	LIGHT, INDICATOR ROUND 250 VOLT	4	2
AD-261-2000-0	RACKS, INT. SIDE	4	
AD-261-2000-0	RACKS, INT. SIDE		2
WP-305	RACK, INT. SIDE RETAINING BOLTS	16	8
AD-305-4000-0	RELAY - CONTACTOR	2	1
AD-420-0000-0	STRAIN RELIEF	1	1
AD-212-0000-0	SWITCH, ON/OFF ROCKER	2	1

WITTCO PART NO.	PART DESCRIPTION	MODEL NUMBER AND QUANTITY REQUIRED	
		1300 - AD	1300/SPLIT
AD-206-2000-0	TERMINAL BLOCK, INTERNAL DISTRIBUTION	2	1
AD-241-0000-0	THERMOSTAT	4	2
AD-242-0000-0	THERMOSTAT KNOB	4	2
AD-241-1000-0	THERMOSTAT (HI - LIMIT)	2	1
AD-251-0000-0	THERMOSTAT FOR COOLING MOTOR	2	1
AD-234-1000-0	TIMER 208-240 VOLT	2	1
AD-242-0000-0	TIMER KNOB	2	1
AD-267-4000-0	TUNNEL, AIR FLOW	2	1