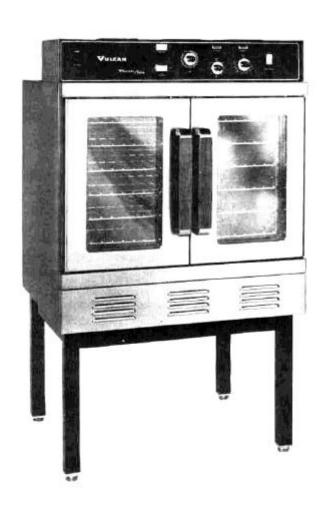


# INSTALLATION AND SERVICE AND PARTS MANUAL FOR SNORKEL GAS CONVECTION OVEN MODELS: SG-2, SG-10,



#### **IMPORTANT**

#### OPERATING, INSTALLING AND SERVICE PERSONNEL

Operating information for this equipment has been prepared for use by qualified and/authorized operating personnel.

All installation and service on this equipment is to be performed by qualified, certified, licensed and/ authorized installation or service personnel, with the exception of any part marked with a ? in front of the part number.

Service may be obtained by contacting the Factory Service Department, Factory Representative or Local Service Agency.

#### **DEFINITIONS**

#### **QUALIFIED AND/OR AUTHORIZED OPERATING PERSONNEL**

Qualified or authorized operating personnel are those who have carefully read the information in this manual and are familiar with the equipment's functions or have had previous experience with the operation of the equipment covered in this manual.

#### **QUALIFIED INSTALLATION PERSONNEL**

Qualified installation personnel are individuals, a firm, corporation or company which either in person or through a representative are engaged in, and are responsible for:

- 1. The installation of gas piping from the outlet side of the gas meter, or the service regulator when the meter is not provided, and the connection and installation of the gas appliance. Qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. Reference in the United States of America National Fuel Gas Code ANSI Z223.1 (Latest Edition). In Canada Canadian Standard CAN/CGA-B149.1 NAT. GAS (Latest Edition) or CAN/CGA-B-149.2 PROPANE GAS (Latest Edition).
- 2. The installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance. Qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. Reference: In the United States of America - National Electrical Code ANSI NFPA No. 70 (Latest Edition). In Canada - Canadian Electric Code Part 1 CSA-C22.1 (Latest Edition).
- 3. The installation of steam piping from the source of supply to the service inlet of the appliance. Qualified installation personnel must be experienced in such work, be familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.

#### QUALIFIED SERVICE PERSONNEL

Qualified service personnel are those who are familiar with Vulcan equipment who have been endorsed by the Vulcan-Hart Corporation. All authorized service personnel are required to be equipped with a complete set of service and parts manuals and stock a minimum amount of parts for Vulcan equipment.

## **IMPORTANT NOTES FOR ALL VULCAN APPLIANCES**

- 1. These units are produced with the best possible workmanship and material. Proper installation is vital if best performance and appearance are to be achieved. Installer must follow the installation instructions carefully.
- Information on the construction and installation of ventilating hoods may be obtained from the "Standard for the
  installation of equipment for the removal of smoke and grease laden vapors from commercial cooking equipment,"
  NFPA No. 96 (latest edition) available from the National Fire Protection Association, Battery March Park, Quincy
  MA 02269.
- 3. For an appliance equipped with a flexible electric supply cord, the cord is equipped with a three prong (grounding) plug. This grounding plug is for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. If the appliance is not equipped with a grounding plug, and electric supply is needed, ground the appliance by using the ground lug provided (refer to the wiring diagram).

#### (FOR GAS APPLIANCES ONLY)

- 4. Do not obstruct the air flow into and around the appliance. This air flow is necessary for proper combustion of gases and for ventilation of the appliance. Provisions for ventilation of incoming air supply for the equipment in the room must be in accordance with National Fuel Gas Code ANSI Z223.1 (latest edition).
- 5. Do not obstruct the flow of flue gases from the flue duct (when so equipped) located on the rear (or sides) of the appliance. It is recommended that the flue gases be ventilated to the outside of the building through a ventilation system installed by qualified personnel.
- 6. For an appliance equipped with casters, (1) the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (latest edition), and Addenda, Z21.69a (latest edition), and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 (latest edition), and Addenda, Z21.41a (latest edition) and Z21.41b (latest edition), and (2) adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement. If disconnection of the restraint is necessary, reconnect this restraint after the appliance has been returned to its originally installed position.
- 7. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.45 k Pa).
- 8. The appliance must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2 psig (3.45 k Pa).

## **CAUTIONS**

#### FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS EQUIPMENT OR ANY OTHER APPLIANCE.

- KEEP THE APPLIANCE FREE AND CLEAR FROM ALL COMBUSTIBLE SUBSTANCES.
- 2. IN THE EVENT A GAS ODOR IS DETECTED, SHUT UNIT(S) DOWN AT THE MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.
- 3. POST IN A PROMINENT LOCATION, INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION MAY BE OBTAINED FROM A LOCAL GAS SUPPLIER.

## **CAUTIONS (Continued)**

#### **CLEARANCE:**

FROM THE TERMINATION OF THE APPLIANCE FLUE VENT TO THE FILTERS OF THE HOOD VENTING SYSTEM, AN 18 INCH MINIMUM CLEARANCE MUST BE MAINTAINED.

REFERENCE: ANSI/NFPA 96-1980 4-1.2.2.2 OF THE NATIONAL FIRE PROTECTION ASSOCIATION, INC., BATTERYMARCH PART, QUINCY, MASS. 02269. AND NATIONAL BUILDING CODE 1976 SEC. 1015.7b (2) OF THE AMERICAN INSURANCE ASSOCIATION, ENGINEERING AND SAFETY SERVICE, 85 JOHN STREET, NEW YORK, N.Y. 10038.

#### LOADING:

BEFORE LOADING THE OVEN SET THE LOAD CONTROL DIAL TO THE PROPER SETTING FOR THE PRODUCT AND THE COOKING LOAD (SEE SEPARATE COOKING CHART).

#### **OPENING OVEN DOORS:**

BEFORE OPENING THE OVEN DOORS, PUSH THE AUXILIARY FAN SWITCH TO THE "OFF" POSITION. OPENING THE OVEN DOORS WILL AUTOMATICALLY CUT "OFF" THE FAN AND THE HEATING ELEMENTS, BUT IF THE FAN SWITCH IS NOT PUSHED TO THE "OFF" POSITION, HOT AIR GATHERED WITHIN THE OVEN CAVITY MAY BE PUSHED OUT WHEN THE DOORS ARE OPENED.

**CAUTION**: <u>DO NOT</u> STAND DIRECTLY IN FRONT OF THE OVEN WHILE OPENING DOORS.

WHEN OPENING THE DOORS, THE OPERATOR SHOULD PULL THE DOOR HANDLES OPEN WHILE SIMULTANEOUSLY STEPPING BACK AWAY FROM THE FRONT OF THE UNIT.

LOAD THE OVEN AS QUICKLY AS POSSIBLE TO CONSERVE HEAT. CENTER PANS ON THE RACKS.

#### HI LIMIT:

THE HI LIMIT IS A PROTECTION DEVICE WHICH SENSES THE TEMPERATURE OF THE UNIT TO PREVENT APPLIANCE OVERHEATING.

THE HI LIMIT OPERATES INDEPENDENTLY AND WILL AUTOMATICALLY CAUSE UNIT SHUTDOWN SHOULD THE PRIMARY CONTROL FAIL.

IF THIS SITUATION OCCURS., <u>DO NOT</u> ATTEMPT TO BYPASS THE HI LIMIT. SHUT THE UNIT DOWN AND CONTACT A SERVICE AGENCY.



# **WARNING:**

DO NOT SPRAY LIQUIDS OR VAPORS ON OR NEAR EQUIPMENT UTILIZING ELECTRICITY

# SNORKEL™ GAS CONVECTION OVEN INSTALLATION AND SERVICE MANUAL—

**INDEX** 

Your Vulcan Snorkel gas convection oven is produced with the best possible workmanship and material. Proper usage and maintenance will result in many years of satisfactory performance.

The manufacturer suggests that you thoroughly read this entire manual and carefully follow all of the instructions provided.

DESCRIPTION	PAGE
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REVISION SHEET	(Inside Back Cover)

Snorkel ranges are supplied with a 7 foot 3 wire supply cord. Appliances are equipped with a three prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle. **DO NOT** cut or remove the grounding prong from this plug.

This appliance is to be installed with a six inch clearance at the sides and rear adjacent to combustible construction. A rating plate is located on the lower panel stating the model number, type gas, serial number, voltage and amperage.

A complete set of wiring diagrams are packed separately in this unit.

A wiring decal may be found located inside the control panel compartment.

#### **GENERAL THEORY OF OPERATION**

#### **GENERAL THEORY OF OPERATION**

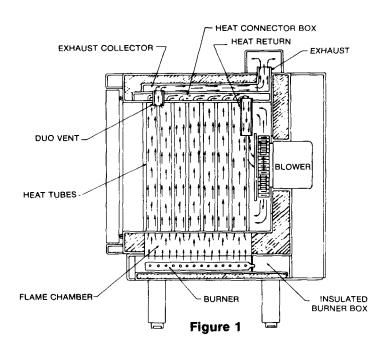
Figure 1 shows the air distribution and the path of the flue products in the Vulcan Snorkel oven. There are two tubular sheet metal burners which operate in an insulated combustion chamber with minimum air requirements. The flame chamber collects the heat generated by the burners and directs it through the heat exchanger tubes which are within the cooking compartment. The heated flue products are collected in a box above the oven compartment and directed to the blower inlet through the Snorkel tube. The oven compartment is heated indirectly via the heat exchanger tubes and directly with the flue products drawn into the oven by the Snorkel tube. A circulating fan also distributes heat throughout the oven evenly. The two vents in the top of the oven compartment evacuate moisture and also vent the oven flue products. The blower and solenoid operate independently of each other. The blower operates as long as the doors are closed or the Aux. Fan Switch is actuated. The solenoid is controlled by the thermostat and the Load Control. The thermostat must be On and the Load Control set to an operating position for the

Solenoid to come On and supply heat to the oven. Either the Thermostat or the Load Control Switch in Off position will shut off the Solenoid.

In order to provide protection against a pilot outage hazard, a safety valve controls the main flow of gas to the burner. As long as a pilot flame is present, the valve will remain open. In the absence of pilot heat, the valve closes, eliminating gas to the burner. Each burner has its own valve which allows them to operate independently of each other. A snap acting door switch, mechanically linked with the right hand door, shuts off both the heat and the blower when the door is opened and will automatically reset when the door is closed.

In ovens equipped with optional Aux. Fan Switch, the door interlock can be over-ridden by depressing the "Aux. Fan Switch." The over-ride affects the blower only (not the heat) and is intended for rapid cooling of the oven interior.

Under "Component Description and Replacement" section the detailed function of each component is explained.



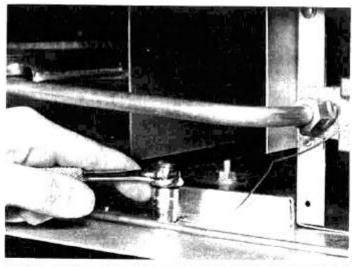
This appliance when installed must be electrically grounded in accordance with National Electrical Code ANSI C1-1981.

Vulcan ovens are produced with the best possible workmanship and material. Proper installation is vital if best performance and appearance is to be achieved. Please follow these instructions carefully.

- 1. Remove crating with care. Remove all wood blocking, packing material and accessories.
- 2. Each unit is factory equipped and electrically connected for use with type of gas and electric supply indicated on rating plate behind the lower panel. Check type of gas and electric supply available.
- 3. Secure oven to stand with two bolts at front (refer to Detail A).

Position unit as near to final location as possible.

4. Pipe Joint compounds used when connecting appliances to gas should be resistant to the action of L.P. Gases.



NOTE: ALTERNATE HARPER-WYMAN CONSTRUCTION SHOWN.

Detall A

- 5. Pipe Joints should be tested for leaks with a soap and water solution before operating the unit.
- 6. Connect oven to gas supply through shut-off valve and gas pressure regulator provided.

Units for use on natural gas are equipped with a regulator with a preset outlet pressure of 3.7" water column. Units for use on propane gas have a regulator with a preset outlet pressure of 10.0" water column. Regulator must be mounted horizontally to provide the preset outlet pressure. If regulator is mounted in any other position, the outlet pressure must be reset.

**Note:** Do not obstruct leak limiter on gas pressure regulator.

- 7. Connect oven to electric supply. 115 volts ovens single phase units are equipped with a 7 ft. 3 wire (including ground) supply cord. 115 volt appliances are equipped with a three prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle. **Do not** cut or remove the grounding prong from this plug. 208/240 volt units with a single or three phase motor are provided with a terminal block. 208/240 volt units must be electrically grounded at time of installation.
- 8. Install draft diverter if required. Either a draft diverter or low profile deflector is shipped with every oven. Low profile deflector is intended for use when oven is installed under canopy type hoods. When the oven is directly connected to a vent system, a down draft diverter must be used.
- 9. When mobile carriers or basket dollies are to be used, the standard oven racks and supports are left out. Mobile carriers or basket dollies are for use in SG-10, SG-10SM, only.
  - A. The cart used to transport mobile carriers and basket dollies has a guide and locking device to align runners on cart with runners on oven deck.

## **INSTALLATION INSTRUCTIONS (Cont'd)**

B. When using 18 x 26 pans with single rack carrier, the racks are not required. Engage 18 x 26 pan rim on rack carrier runners.

The oven deck height should now be adjusted to align with cart height.

**10.** Using a carpenter level placed on a rack, adjust the feet on the bottom of each leg, so that oven is level from front to back and side to side. This must be done with either standard rack supports or optional extra mobile carriers when used.

**(NOTE:** LEVEL OVEN WHEN IN PERMANENT POSITON ONLY.)

**11.** Turn on gas. Purge gas line to remove air. Check for leaks.

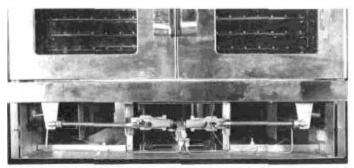
**Caution:** Use soap solution or similar means (do not check with open flame).

#### **12A. PILOT LIGHTING INSTRUCTIONS:**

Units with Standing Pilots (Ref. to Detail "B").

- 1. If pilot light is out, turn master switch off, open doors, then wait 5 minutes before relighting.
- 2. Light pilot with taper.
- 3. Turn Master Switch to On position.
- 4. Set thermostat control knob to desired temperature. (See Cooking Chart for ref.).
- 5. Set load control to proper setting. (See Cooking Chart for ref.)
- 6. For daily shutdown, turn master switch, thermostat knob, and load control knob to "Off" position.
- For seasonal shutdown, extinguish pilot, turn master switch, thermostat knob and load control knob to "Off" position.

**NOTE:** Pilot burner flames are preset at the factory before shipping approximately 1/2" high. Flame should impinge on sensing bulb located directly below each



NOTE: PHOTO SHOWS ALTERNATE HARPER-WYMAN SAFETY VALVE CONSTRUCTION.

Detail B

pilot burner. If pilot does not light, turn gas off, wait 5 minutes and repeat steps 1 thru 5 of 12A. It is not necessary to repeat pilot lighting everyday.

For units with electronic ignition, pilot lighting is not necessary. The main burners are ignited by spark when thermostat is turned on.

**B.** Units with electronic ignition:

No pilot lighting is necessary. Main burners are ignited by spark when thermostat is turned on.

**13.** To shut down unit, turn off master switch and turn off gas at the service valve. To relight repeat step 12A or 12B.

**Caution:** Fan must rotate clockwise when viewed through the oven door. On three phase motor units, fan rotation can be reversed by interchanging any two power supply leads. On single phase units with incorrect fan rotation, contact factory.

#### **FLUE CONNECTIONS**

Good ventilation, which includes flue connections and room drafts, is just as important for correct oven operation as adequate gas supply.

Generally speaking, ovens should never be directly flue connected, if a direct flue system can be avoided.

The ideal method of ventilating a Convection oven is the use of a properly designed hood. Hood should extend about 6" beyond all sides of the appliance. The hood should be connected to an adequate exhaust duct or system.

When ovens are installed in locations with low ceilings, care must be taken to insure proper clearance for the flue products. Lack of this clearance above outlet of rear flue piping will interfere with heat circulation in the oven and could create a fire hazard condition. Refer to NFPA #96.

Do not permit fans to blow directly at the oven and wherever possible, avoid open windows next to oven sides or back and wall type fans which create air cross currents within the room.

It is also necessary that sufficient room air should be allowed to enter the room to compensate for the amount of air removed by any ventilating system. Otherwise, a subnormal atmosphere pressure will occur, affecting oven operation adversely and causing undesirable working conditions.

A properly designed and installed hood will act as the heart of the ventilating system for the room or area in which the oven is installed, and will leave the oven independent of changing draft conditions.

## **INSTALLATION INSTRUCTIONS (Cont'd)**

# RECOMMENDED USE OF CONTROLS IN DETAIL C

#### (FOR ROAST AND HOLD OVENS)

#### 1. MOISTURE VENT DAMPER: (NOT SHOWN)

Pull damper knob out to open damper releasing excess moisture generated while cooking products with high moisture content. Close damper when dry products are being cooked. Intermediate adjustments permit selection for optimum performance.

#### 2. MASTER SWITCH - ITEM 2

Main on-off switch which converts elec. supply to oven controls.

#### 3. THERMOSTAT SINGLE LIGHT - ITEM 3

Light "On" indicates that oven is preheating or has not recovered in temperature to the dial setting during cooking cycle.

#### 4. THERMOSTAT - ITEM 4

The thermostat is a snap-acting on-off type control. The thermostat regulates the oven temperature from 200° thru 500°. Turn dial clockwise to increase temperature and control counter-clockwise to decrease temperature.

NOTE: All heating elements are under supervision of the thermostat.

#### 5. LOAD CONTROL LIGHT - ITEM 5

Light "On" indicates load control is operating in the range between the high and low settings.

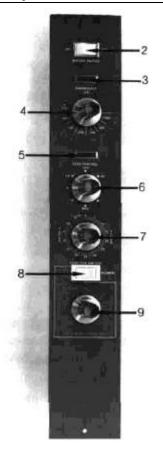
#### 6. LOAD CONTROL - ITEM 6

An infinite switch which permits variation of the heat input between off and 100 percent of the input.

DIAL SETTING	PERCENT OF FULL INPUT
Н	100%
HI-	83%
MED+	72%
MED	60%
MED-	48%
LO+	37%
LO	27%
OFF	0%

#### 7. ONE HOUR TIMER - ITEM 7

Select for any time interval up to one hour. At the end of selected interval, an electric buzzer will give a continuous signal. Turn timer to hold position to stop buzzer or when timer is not in use.



# 8. FUNCTION SWITCH - ROCKER SWITCH ITEM 8

Puts oven in normal or roast & hold mode.

# 9. ROAST TIMER — 5 HOUR (OPTIONAL 12 HR.) ITEM 9

Used to set the time interval for the roasting portion of the roast & hold cycle. When timer times out to "H", the timer switches the temperature control of the oven from the adjustable thermostat (main) to the fixed (160°) thermostat for the holding portion of the cycle.

#### 10. OVEN LAMP SWITCH - (NOT SHOWN)

Rocker switch controls interior oven lights. Turn on lights only when loading, unloading or checking product. Continual burning of lights will result in short bulb life. (Bulb replacement not covered under warranties).

#### 12. AUXILIARY FAN SWITCH - (NOT SHOWN)

Controls operation of fan when doors are in open position. This permits rapid cooling of oven. Use when next load is to be cooked at a much lower temperature than load just completed.

## TROUBLE SHOOTING — SERVICE

The following is intended to provide a guide for trouble shooting procedure and covers some of the more common problems with the equipment. The servicing personnel, as with any other equipment, need to become familiar enough with the circuit and the components in order to be able to follow a logical sequence of trouble-shooting, and repair malfunctions not mentioned in the following paragraphs.

The instruments necessary for trouble-shooting would be:

- A. A.C. Voltmeter to measure line voltages up to 480 volt.
- **B**. A.C. Amp-meter to measure line currents.
- **C**. Accurate Thermometer to measure oven temperature up to 500°F.

In the following paragraphs, the voltmeter is used to measure the voltage between 2 phases on 208, 240, 480 volt and between one phase and neutral on 220/380 and 240/415 volt supplies. Do not measure the voltage with respect to the chassis ground. For the sake of simplicity, the measured voltage is referred to 115 volt, assuming that the supply is 115 volt. When supply is 240 or 220, the measured voltage should also be 240 or 220—it is also assumed that the voltage rating of the oven matches exactly (within the allowable supply tolerance) that of the field supply. Refer to the appropriate wiring diagram at the end of this booklet for reference.

With the main power and oven circuit breakers "ON", the master switch turned to "ON" position and the oven door closed:

#### Problem: 1. No blower, no heat

**Procedure:** Depress the Oven Light switch or turn timer knob to "0" position. If the lights come On and the Buzzer sounds, follow step B. If not, follow step A.

Step A—Measure voltage between leads 93 and 94 (The supply side) of the Master Switch.

If no voltage check connection to Power Supply cord and verify power at wall socket.

If 115 volt, measure voltage across 21 and 22.

If no voltage, the Master Switch is defective.

If 115 volt, check for bad connection from the switch terminal to the Thermostat and motor connections.

Step B — Only the door switch can disable the blower and heat at the same time. While opening and closing the right hand door listen for a click near the top of the right hand door. If no click, the door switch requires adjustment. If the switch does click but no heat or blower, the switch may be defective.

# Problem: 2. The blower is "ON" (with aux. fan switch de-energized) but no heat.

**Procedure:** Turn thermostat knob to about 400°F. position. If oven signal light is turned "ON," follow step A; if not, follow step B.

Step A — Oven indicator light is "ON." This is an indication that the door switch, and the thermostat are functioning properly. The problem can then be related to the load control switch or the solenoid.

Turn the load control knob to "HI" position.

Check the voltage between terminals L1 & L2 of the load control switch.

If no voltage, check for bad connection or faulty lead to the switch.

If 115 volt, check voltage across H1 & H2 terminals of the switch.

If no voltage, the switch is defective.

If 115 volt, check for defective solenoid or faulty connection between the load control and the solenoid.

Step B — Oven Indicator Light does not come "On". This is an indication that the door switch, load control or thermostat could be defective. (Check for a bad connection between the master switch and the thermostat, defective thermostat or bad connection between the normally open contact of the door switches and leads going to the solenoids.

## TROUBLE SHOOTING—SERVICE (Cont'd)

Problem: 3. The oven heats up properly when empty, but as soon as the food is put in it, the temperature drops and the oven never recovers.

**Procedure:** Meals containing excessive moisture can cause the temperature to drop. Also, a cause of temperature drop is excess load.

Refer to the Cooking Chart to insure that the load is of the recommended capacity for the oven in use.

Problem: 4. The oven temperature keeps increasing beyond the setting of the thermostat.

**Procedure:** If the thermostat indicator light cycles on and off, check for defective solenoid.

If the thermostat light remains "ON" check for defective thermostat (contacts welding)

Problem: 5. The motor turns off and automatically comes back "ON" after a few minutes.

**Procedure:** The internal thermal protector of the motor is sensing a high temperature which is caused by:

A — Hi current. Check for clockwise rotation of shaft, for any binding on the shaft or the blower wheel (the wheel should be rotated freely by a hand touch.) If none of the above, the motor may be defective.

B—Hi ambient. Check for hot air leakage from inside the oven to the back through the light or motor housings. Check to see if hot air is blown to the motor from the adjacent equipment.

Check for proper ventilation in the area. 208-240 volt units note: Sometimes the over current affects the circuit breaker (15 amp breaker) before it does the thermal protector; and the circuit breaker keeps tripping to the "OFF" position.

## SERVICE REPLACEMENT

#### REPLACEMENT PARTS ORDERING

The following information must accompany a replacement parts order or it cannot be filled.

- A. Model and Style or Serial Number.
- **B.** Voltage and Phase.
- **C.** Appliance Finish: Permafinish, Stainless Steel, etc. (If applicable to part to be replaced.)

This information can be found on the instruction plate on the unit.

Parts may be ordered from your dealer, service agency, or the factory.

Orders to the factory should be addressed to: Vulcan-Hart Corporation, 3600 North Point Boulevard, Baltimore, MD 21222

**Warning:** Turn the Main Gas Valve and Power Disconnect Switch to OFF before servicing the equipment. Reconnect the leads of the replacing components exactly to the original position and reverse procedure for adding the new component.

#### 1. SWITCH PANEL

Remove two screws from rear flange of Switch Panel louvered cover. Push cover back exposing Switch Panel components.

# A. Replacing Rocker Switches and Indicator Lights

- Remove all wire connections to component. Make a note of terminal positions.
- Compress spring clips on top and bottom of component while forcing it out the front of the Switch Panel.
- Replace component in the original position by

Pushing through the front face of the Switch Panel until spring clips lock into place.

• Reconnect wires to proper terminals.

#### B. Replacement of Thermostat

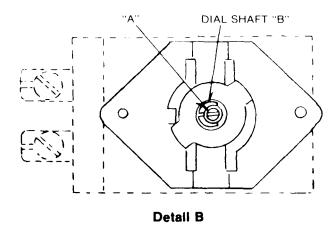
- Remove Rear Body Top.
- Remove the Thermostat Bulb from its (2) retaining clips located in the right rear corner of oven cavity.
- Push Bulb and Capillary Tube through Grommet in cavity top.
- Push Bulb and Capillary through hole in Switch Panel Compartment.
- Remove Silicone tubing from Capillary and save for reinstallation.
- Disconnect wires from Thermostat. Remove control knobs and mounting screws. Pull Thermostat off back of panel.
- When reinstalling Thermostat, reverse procedure listed above. Do not kink Capillary or place sharp bend in Bulb.

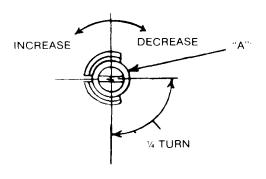
#### **Thermostat Calibration Check**

- Use a calibrated potentiometer with a thermocouple located in the center of the fan guard assembly.
- Set Thermostat Knob to a mid range temperature.
- Allow adequate time for the temperature to stabilize.

#### **Thermostat Calibration**

- Remove knob from dial shaft B. Detail B.
- Turn screw A clockwise to decrease temperature and counterclockwise to increase temperature. **Note:** 1/4 turn of screw A represents a temperature shift of 35 degrees F°.

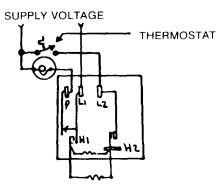




**Thermostat Calibration** 

## SERVICE REPLACEMENT (Cont'd)

**C. Load Control. A D.P.S.T.** cycling Switch varies, according to its setting, the percent on-time of the output as shown below:



**Load (Element Contactor or Solenoid)** 

Dial Setting	Percent On-Time
Hi	100
Hi	83
Med+	72
Med	60
Med	48
Lo+	37
Lo	27
Off	0

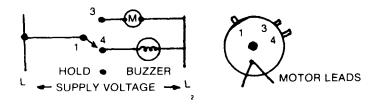
#### INFINITE LOAD CONTROL SWITCH

for different food products.

The Load Control, as shown schematically, is connected in series with the thermostat, thus providing variable rate of temperature rise to reach the thermostat setting, as well as maintaining at the final set temperature. Therefore, with load control set at Lo, it will take much longer to reach a desired temperature than with a setting of Hi. The cooking chart shows the necessary dial setting

To replace, remove the knob and the lock nut. To reinstall, make sure the dimples on the face of the switch fall in the slot of the switch panel in order to prevent it from rotating.

**D. Timer** (one or five-hour models). The normally open and common contacts of the electric timer are connected together, energizing the timer motor when the knob is set to the desired position. Once the timer completes its set interval (at zero mark) the common terminal disconnects from timer motor (shuts the motor off) and connects with the buzzer. The buzzer will continue to sound until the knob is manually turned to 'Hold' position where all contacts are opened (timer motor and buzzer turned off).



To replace, remove the knob and the lock-nut—reinstall same as Item C.

#### 2. BLOWER MOTOR

The Blower Motor has internal thermal protection, and its sealed bearings do not require any lubrication. The mounting of the Blower Assembly allows servicing from inside the oven as follows:

Remove Fan cover.

Loosen set screw on airotor with allen wrench.

Pull airotor forward off of the Motor Shaft with wheel puller.

Remove the (4) nuts holding the motor mounting plate.

Pull the motor assembly forward and rest on cavity bottom.

Remove the junction box cover and supply leads. Rest the motor on its back. Remove the (4) flat head screws, lockwashers, nuts and spacers used to fasten the Motor Mounting Plate to the Motor.

To install new motor reverse above procedure.

**Caution:** The motor is suitable for connection to two different voltage supplies. Check the connection instruction inside the Motor Junction Box Cover to assure proper connection for the available voltage supply.

The direction of rotation is clockwise as viewed from inside the Oven. The 1-phase Motors are internally designed for C.W. rotation. On 3-phase Motors, interchange any two supply leads to convert C.C.W. to C.W. rotation.

#### 3. OVEN LIGHTS

The two 50 watt, 115 volt bulbs are connected in series in the Electric and in parallel in the Gas Convection Ovens.

## SERVICE REPLACEMENT (Cont'd)

#### SHUT-OFF VALVE SERVICE

The gas shut off valve is located at the rear of the unit and should be used to shut the unit down when service is required to gas components. This valve should also be used to turn all gas off to the unit when the unit is being shut down for an extended period of time.

If the shut off valve requires service this may be accomplished only by turning off the gas supply upstream of the valve.

#### PRESSURE REGULATOR SERVICE

The pressure regulator is located at the rear of the unit downstream of the shut off valve. If the pressure regulator requires service, this may be accomplished by turning off the gas supply upstream of the shut-off valve and pressure regulator and then removing both of these parts.

Blockage of the pressure regulator leak limiter will result in erratic burner operation and pilot outage.

**Note:** Prior to replacing a pressure regulator, in an

effort to correct problems traced to this component, remove and clean the leak limiter.

#### **PILOT BURNER ADJUSTMENT**

Remove lower panel assembly (spring clip mounted) and light both pilot burners.

Adjust pilot flame heights to approximately 1/2".

Flame should impinge on flame switch sensing bulbs located directly above the pilot burner flames. See Detail B on page 5 for location of pilot. Both pilot valves are located in the front center of the burner compartment.

#### **AIR ADJUSTMENT**

Although main burner air is adjusted before shipment, it should be checked at the time of installation. Excessive air will cause flames to lift off a burner when cold or may cause flash-back during normal cycling of unit, particularly when propane gas is used.

Insufficient air will cause flames to burn with a yellow tip and result in carbon accumulation in the flame chamber and heat exchange tubes.

#### FOR ALL UNITS MANUFACTURED AFTER OCTOBER 1, 1983 **BURNER ORIFICE DATA**

MODEL	MAXIMUM INPUT PER BURNER	PRESSURE REG. SETTING	ORIFICE DRILL SIZE	GAS
SG.2SM. SG.22, SG.2	30,000	6" W.C.	#38	NAT.
SG.2SM, SG.22. SG.2	30,000	10.0" W.C.	#1/16	PROPANE
SG.10SM,	35.000	6" W.C.	#35	NAT.
SG.1010, SG-10				
SG-10SM	35,000	10.0" W.C.	#53	PROPANE
SG.1010. SG.10				

#### FOR ALL UNITS MANUFACTURED BEFORE OCTOBER 1, 1983 **BURNER ORIFICE DATA**

MODEL	MAXIMUM INPUT PER BURNER	PRESSURE REG. SETTING	ORIFICE DRILL SIZE	GAS
SG.2SM, SG 22	30,000	3.7" W.C.	#36	NAT.
SG.2SM, SG 22	30,000	10.0" W.C.	#1/16	PROPANE
SG.10SM, SG.1010	35,000	3.7" W.C.	#33	NAT.
SG.10. SG.1010	35.000	10.0" W.C.	#53	PROPANE

#### REPLACEMENT OF SOLENOID VALVE, REGULATOR, OR SHUTOFF VALVE FOR MODELS SG-2, SG-10

- Turn off gas supply upstream of unit.
- Break gas connection at shut off valve.
- Break compression fittings at front manifold.
- Remove (4) bolts (inside center chamber) to rear manifold support.
- Disconnect wires to solenoid at wire nuts.
- Pull manifold out back of unit.
- · Remount manifold by reversing procedure listed above.

### REPLACEMENT PARTS ORDERING

THE FOLLOWING INFORMATION MUST ACCOMPANY A REPLACEMENT PARTS ORDER OR IT CANNOT BE FILLED. A. MODEL AND STYLE NUMBER. B. TYPE OF GAS.

C. APPLIANCE FINISH, BLACK OR STAINLESS STEEL, (IF APPLICABLE TO PART TO BE REPLACED.)

THIS INFORMATION CAN BE FOUND ON THE RATING PLATE LOCATED INSIDE THE LOWER FRONT PANEL OF THE

UNIT
PARTS MAY BE ORDERED FROM YOUR DEALER, SERVICE AGENCY, OR THE FACTORY.

ORDERS TO THE FACTORY SHOULD BE ADDRESSED TO VULCAN.HART CORP., 3600 NORTH POINT BLVD. BALTIMORE, MD 21222.

## **COOKING CHART**

#### IMPORTANT

Recommended temperatures, times, number of racks and load control settings are intended as a guide only.

Adjustments must be made to compensate for variations in recipes, ingredients, installation and personal preference in product appearance.

RECOMMENDED TEMPERATURES, TIMES

AND LOADS FOR ROASTING

Meat roasting is most satisfactory at temperatures of 225° to 325° F. for Beef, Lamb, Poultry and Ham; 325° to 350° for fresh Pork as recommended by USDA and American Meat Institute.

A pan of water (approximately 12" x 20" x 1") may be placed in the oven bottom. This water supplies humidity to reduce shrinkage. Water should be added if necessary during roasting.

Roasting pans should be no deeper than necessary to hold drippings, usually 2" to 2 1/2".

Cooking time and shrinkage may vary with roasting temperature, cut and grade of meat and degree of doneness. Smaller cuts will generally show greater time savings than larger cuts at a given temperature.

#### **ROASTING TEMPERATURE CHART**

PRODUCT	TEMPERATURE	LOAD CONTROL SETTING	APPROXIMATE TIMES
Standing Rib Roasts—Oven Ready	250° F	HI	3 to 4 Hrs —Rare
			4 to 4 1/2 Hrs.—Med.
Rolled Rib Roasts—20 to 22 Lbs	275° F	HI	4 Hrs.—Med.
Veal Roast—15 Lbs	300° F	HI	3 Hrs —Med Well
Turkeys—15 to 20 Lbs	300° F	HI	3 Hrs.
Meat Loaf—8 to 10 Lbs	350° F	HI	45 to 60 Minutes

RECOMMENDEDTEMPERATURES, TIM	IES AND LOADS FO	OR BAKING (AI	LL SNORKEL MODELS)	
PRODUCT	TEMPERATURE	TIME IN MINU	ITES NO. OF RACKS	LOAD CONTROL
Cakes				
Sheet Cakes 18 x 26 x 1"			5	Med+ to Med
Scaled 41/2 to 6 Lbs. Per Pan	325° to 360°F	20 to 23	4	Med to Med-
Scaled 6 to 7 1/2 Lbs Per Pan	335° to 350°F	22 to 25	4	Med to Med-
Sheet Cakes 18 x 26 x 2" Pan Equals 2-12 x 18 x 2" Pans Scaled 10 to 12 Lbs Per 18 x 26 x 2" Pan or 5 to 6 Lbs Per 12 x 18 x 2" Pan	300° to 325° F	25 to 35	3	Med-
Angel or Sponge Cakes				
Sheet Pans 18 x 26 x 1" Scaled 5 to 6 Lbs Per	300° to 325° F	15 to 20	4	Lo+
Loaf or Tube Pans	315° to 340° F	20 to 30	3-4	Med-to Lo
Cup Cakes	350° to 400°	6 to 12	4	Med to Med-
Frozen Fruit Pies	350° to 375° F	30 to 45	4	Med to Med-
			3	Med-
Pumpkin or Custard Pies	300° to 350° F	30 to 45	4	Med to Med-
			3	Med- to Lo+
Cobblers				
12 x 18 x 2" or 12 x 20 x 2 1/2"	350° to 400° F	30 to 45	4	Med
			3	Med-
Meringue Pies	350° to 425° F	6 to 10	4	Med to Med-
			3	Med to Med-
			2	Med to Med-
Fruit Turnovers	350° to 375° F	15 to 25	5	Med to Med-
18 x 26 x 1" Pans			4	Med to Med-
			3	Med-to Lo+
Cookies	350° to 400° F	6 to 12	5	Med to Lo+
Rolled or Pressed			4	Med-to Lo+
			3	Lo+
Drop	350° to 400° F	6 to 15	5	Med to Med-
			4	Med-to Lo+
			3	Lo+
Brownies	350° F	12 to 20	5	Med to Med-
			4	Med-to Lo+
Rolls—1 Oz	350° to 400° F	5 to 10	4	Med to Med-
			3	Med-
<b>Rolls</b> —11/2 to 2 1/2 Ozs	350° to 400° F	8 to 15	4	Med to Med-
			3	Med- to Lo+
Loaf Bread—1 Lb	325° to 375°F	20 to 40	3 (30 Pans)	Med-
			2 (20 Pans)	Lo*

NOTE: Pies and Cobblers; Fruit, Custard and Pumpkin Pies in tins, should be placed on 18 x 26 x 1" Pans for Baking

 $\textbf{NOTE:} \ \text{This chart is for models: SG-2SM, SG-22, SG-10SM \& SG-1010}.$ 

# **COOKING CHART (Cont'd)**

#### RECOMMENDED TEMPERATURES, TIMES AND LOADS FOR BAKING (ALL SNORKEL MODELS)

PRODUCT Yeast Breads Note: Yeast Breads should be fully proofed for best results	TEMPERATURE	TIME IN MINUTES	NO. OF RACKS	LOAD CONTROL
Sweet Rolls & Danish Pastries	325° to 375° F	5 to 15	4 3	Med to Med- Med- to Lo <sup>+</sup>
Quick Breads Biscuits Rolled 1/2" Thick	350° to 400° F	5 to 15	4 3	Med to Med- Med- to Lo+
Muffins	325° to 375° F	6 to 18	4 3	Med- Med- to Lo*
Corn Bread 5 to 7 Lbs Per Pan Per 18 x 26 x 1" Pan	335° to 400° F	10 to 20	4	Med to Med-
3 to 20 Lbs. Per 18 x 26 x 2"	335° to 400° F	15 to 25	4 3	Med to Med- Med- to Lo*
Corn Muffins	335° to 385° F	10 to 20	4 3	Med to Med- Med to Lo*
OVEN BROILING OR FRYING				
<b>Hamburger Patties</b> 8 Per Lb Med Well Done	400° to 450° F	5 to 6	4 to 6 2 & 3	Hi- to Med* Med* to Med
6 Per Lb	400° to 450° F	7 to 10	4 to 6 2 & 3	Hi to Hi- Hi- to Med*
4 Per Lb	375° to 450° F	8 to 12	4 to 6 2 & 3	Hi Hi- to Med*
Fish Sticks & Portion—Frozen Breaded 1 Oz	350° to 400°F	6 to 10	4 2 & 3	Hi- to Med Med* to Med-
2 1/2 to 3 Ozs	350° to 375° F	8 to 15	4 2 & 3	Med* to Med Med to Med-
Chicken Pieces—Broiler or Oven Fried 2 to 2 1/2 Lb Bird	375° to 425°F	8 to 15	4 to 5 2 & 3	Hi- to Med Med* to Med-
2 1/2 to 3 Lb Bird	350° to 400° F	15 to 25	4 2 & 3	Med* to Med Med to Med-
Lobsters—1 to 1 1/2" Lb.	400° to 450°	8 to 14	2 to 4	Hi to Med
Lobster Tails—Frozen 1/2 to 3/4 Lb	350° to 400° F	10 to 15	2 to 4	Hi- to Med
REHEATING PREPARED FOODS				
Frozen French Fries	400° to 450° F	6 to 8	4 2 to 3	Hi- to Med Med* to Med-
Frozen Lunches (TV Dinners)	350° to 400° F	10 to12	4 to 5 2 to 3	Hi to Med Med* to Med-
Frozen Entrees (3/4" to 1" Thick)	300° to 350° F	10 to 20	2 to 5	Hi to Med
Frozen Meals (8 Oz ) Foil Pkg	350° to 400° F	20 to 30	2 to 5	Hi
CASSEROLES				
Food Service Pans 2" to 3" Deep 3"to 4" Deep	325° to 375° F 325° to 375° F	15 to 25 20 to 35	2 to 4	Med* to Med-
Ramikins or Foil Pans Up to 1 1/2" Deep *(Frozen 10 to 15 Minutes)	350° to 400° F	5 to 6	4 to 5 2 to 4	Hi to Med* Med+ to Med
RECOMMENDED TEMPERATURES, TIMES AND LOADS MI	SCELLANEOUS PROD	UCTS		
Baked Potatoes		20 to 25	2 40 5	Hi- to Med
120 Count Per 50 Lbs	400° to 450° F 400° to 450° F	20 to 25 25 to 40	2 to 5 2 to 5	Med+ to Med
100 Count Per 50 Lbs. 80 Count Per 50 Lbs	400° to 425° F	30 to 50	2 to 5	Med+ to Med-
Pizzas—Frozen or with Prebaked Crust	425° to 475° F	5 to 10	42&3	Hi- to Med Med to Med-
Melted Cheese Sandwiches	400° to 425° F	8 to 10	4 2 &3	Hi- to Med Med+ to Med-

#### NOTES ON SPECIAL PROCEDURES FOR BAKING

**Yeast Bread:** Cooking starts immediately in the convection oven. Yeast Breads do not usually rise as much in the convection oven as in a conventional oven. It is. therefore, usually necessary to allow fuller proof. 2 1/2 to 3 times increase in volume for the best results,

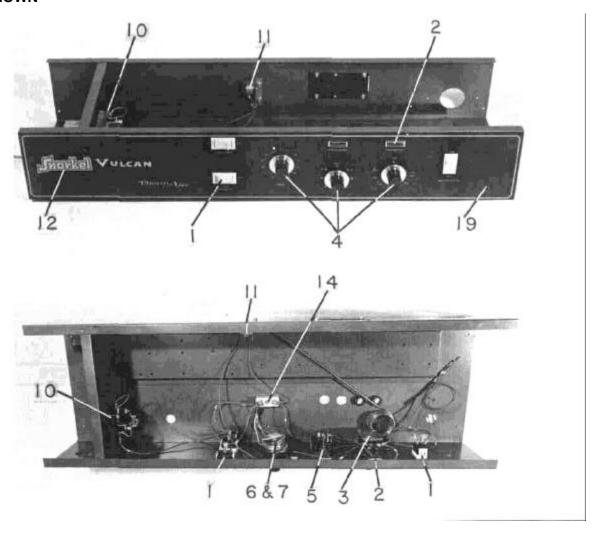
**Pies:** When baking pies in your convection oven. 3 or 4 pies should be put on an 18 x 26" sheet or bun pan. This procedure helps the bottom crust to bake. makes handling easier and reduces the possibility of boil over spoiling the appearance of the pies on the lower racks-

NOTE: This chart is for models: SG-2SM, SG-22, SG-10SM & SG-1010.

### **120V TOP MOUNT**

ITEM			QUANTITY	,	QUANTITY
NUMBER	DESCRIPTION	SG-2	SG-2	SG-10	SG-10
1	ROCKER SWITCH	111496-B1	3	111496-B1	3
2	SIGNAL LIGHT	111496-E4	2	111496-E4	2
3	THERMOSTAT	111506-3	1	111506-3	1
4	CONTROL KNOB	111242-1	3	111242-1	3
5	INFINITE SWITCH	111503-1	1	111503-1	1
6	TIMER 60 MIN.	111690-1	1	111690-1	1
7	TIMER 5 HOUR. (OPTIONAL) NS	111690-3	1	111690-3	1
8	5 HR. TIMER DECAL (OPTIONAL) NS	111693-1	1	111693-1	1
10	RELAY	111497-A1	1	111497-A1	1
11	BUZZER	111499-2	1	111499-2	1
12	SNORKEL NAMEPLATE	113632-1	1	113632-1	1
14	PORCELAIN BLOCK	414881-1	2	00081	2
19	MYLAR CONTROL PLATE	111903-7	1	111903-7	1

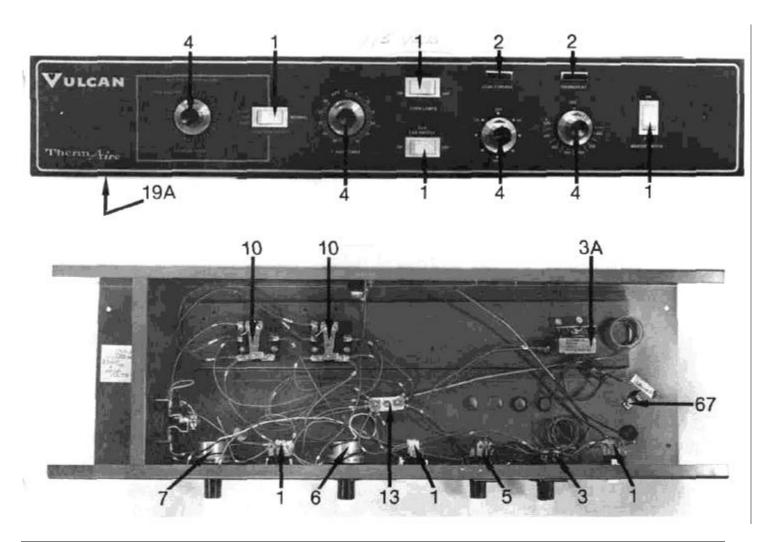
#### **NS—NOT SHOWN**



## **ROAST & HOLD 115V**

ITEM NO.	DESCRIPTION	PART NUMBER SG-2 & SG-10	QUANTITY
1	ROCKER SWITCH	111496-B2	4
2	SIGNAL LIGHT	111496-E4	2
3	THERMOSTAT	111506-3	1
3A	THERMOSTAT	113764-1	1
4	CONTROL KNOB	111242-1	4
5	INFINITE SWITCH	111503-1	1
6	TIMER 60 MINUTE	111690-1	1
7	TIMER 5 HOUR	111690-3	1
10	RELAY	111497-A1	3
11	BUZZER	111499-2	1
12	SNORKEL NAMEPLATE (NS)	113632-1	1
13	PORCELAIN BLOCK	00081	1
19A	MYLAR CONTROL PLATE ROAST & HOLD	113950-4	1
67	GROUND LUG	3.1500/06089	1

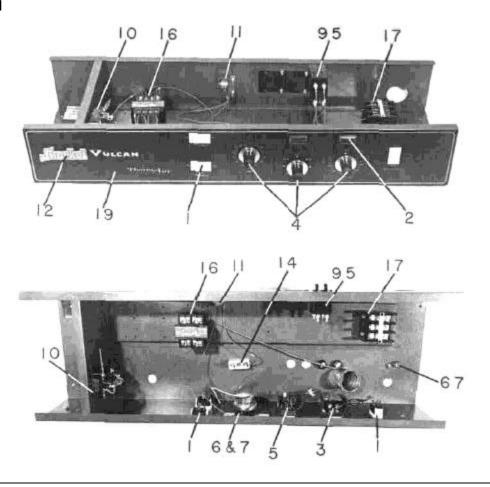
## NS = NOT SHOWN



## **208V & 240V TOP MOUNT**

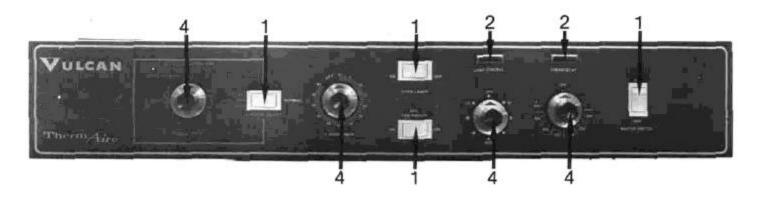
ITEM NUMBER	DESCRIPTION	SG-2	QUANTITY SG-2	SG-10	QUANTITY SG-10
1	ROCKER SWITCH	111496-B1	3	111496-B1	3
2	SIGNAL LIGHT	111496-E4	2	111496-E4	2
3	THERMOSTAT	111506-3	1	111506-3	1
4	CONTROL KNOB	111242-1	3	111242-1	3
5	INFINITE SWITCH	111503-1	1	111503-1	1
6	TIMER 60 MIN.	111690-2	1	111690-2	1
7	TIMER 5 HR. (OPTIONAL) NS	111690-4	1	111690-4	1
8	DECAL FOR 5 HR. TIMER NS	111693-1	1	111693-1	1
10	RELAY	111497-A1	1	111497-A1	1
11	BUZZER	111499-1	1	111499-1	1
12	SNORKEL NAMEPLATE	113632-1	1	113632-1	1
14	PORCELAIN BLOCK	00081	1	00081	1
16	TRANSFORMER	111500-6	1	111500-6	1
17	TERMINAL BLOCK (3 POLE)	110472-8	1	110472-8	1
19	CONTROL PLATE MYLAR	111903-7	1	111903-7	1
67	GROUND LUG	3.1500/06089	1	3.1500/06089	1
95	BREAKER	111501-5	2	111501-5	2

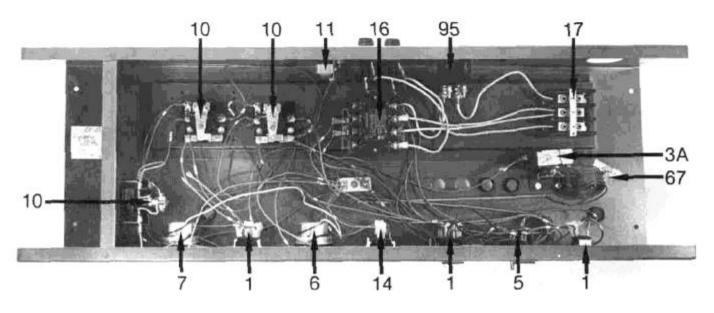
#### **NS—NOT SHOWN**



## 240 VOLTS ROAST & HOLD

ITEM NO.	DESCRIPTION	PART NUMBER SG-2 & SG-10	QUANTITY
1	ROCKER SWITCH	111496-B2	4
2	SIGNAL LIGHT	111496-E4	2
3	THERMOSTAT	111506-3	1
3A	THERMOSTAT	113764-1	1
4	CONTROL KNOB	111242-1	4
5	INFINITE SWITCH	111503-1	1
6	TIMER 60 MINUTE	111690-1	1
7	TIMER 5 HOUR	111690-3	1
10	RELAY	111497-A1	3
11	BUZZER	111499-2	1
12	SNORKEL NAMEPLATE	113632-1	1
14	PORCELAIN BLOCK	00081	1
16	TRANSFORMER	111500-6	1
17	TERMINAL BLOCK	110472-8	1
19A	CONTROL PANEL MYLAR	113950-4	1
67	GROUND LUG	3.1500/06089	1
95	BREAKER	111501-5	1

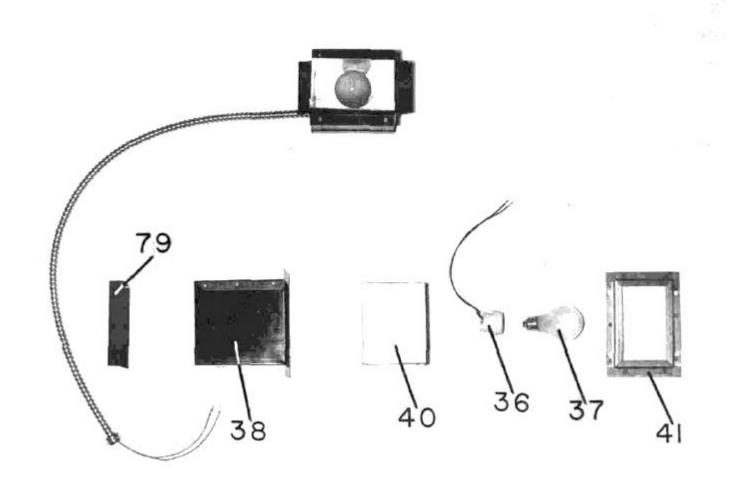




# OVEN LAMP ASSEMBLY

ITEM NUMBER	DESCRIPTION	SG-2	QUANTITY SG-2	SG-10	QUANTITY SG-10
36	LAMP SOCKET	21201-20	2	21201-20	2
37	LIGHT BULB 155V 50W (FROSTED)	107793-2	2	107793-2	2
38	LAMP BOX HOUSING ASSEMBLY	111395-G1	2	111395-G1	2
39	LAMP BOX GASKET NS	111206-1	2	111206-1	2
40	LAMP BOX ASSEMBLY	111394-G1	2	111394-G1	2
41	LAMP WINDOW ASSEMBLY	111175-G1	2	111175-G1	2
79	REAR CLOSURE	112827-1	2	112827-1	2

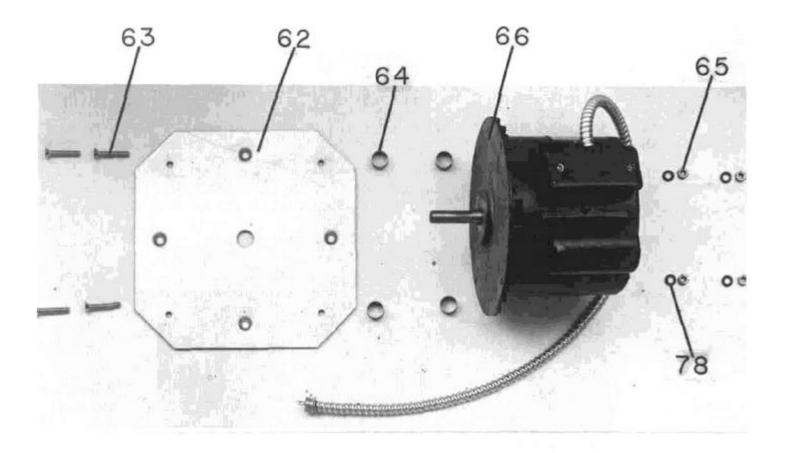
#### **NS—NOT SHOWN**



# **MOTOR**

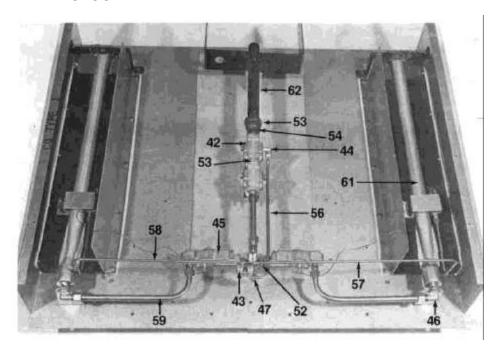
ITEM NUMBER	DESCRIPTION	SG-2	QUANTITY SG-2	SG-10	QUANTITY SG-10
62	MOTOR MOUNT	112629-1	1	112629-1	1
63	MOUNTING BOLT	102085-20	4	102085-20	4
64	MOTOR SPACER	112630-1	4	112630-1	4
65	LOCK NUT	104084-9	4	104084-9	4
66	MOTOR 120V OR 208/240 1 PH	111205-5	1	111205-5	1
	Motor 480V 3 PH OR				
	208/240 3 PH OPTION	111205-8	1	111205-8	1
78	LOCKWASHER NS	3.0201/102524	4	3.0201/102524	4

## NS-NOT SHOWN



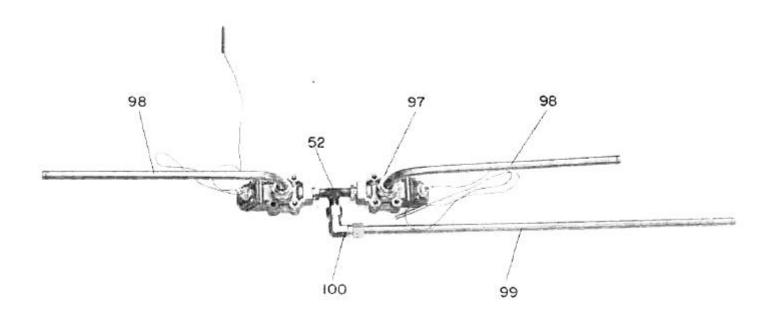
ITEM NO.	DESCRIPTION	PART NUMBER SG-2	QUANTITY SG-2	PART NUMBER SG-10	QUANTITY SG-10
42	SOLENOID VALVE	111497-F1	2	111497-F1	2
43	DOUBLE PILOT VALVE	109557-4	1	109557-4	1
44	ELBOW 1/8M TO 1/4CC	13178	1	13178	1
45	OVEN SAFETY	114613-1	2	114613-1	2
46	BURNER NOZZLE	104079-F	2	104079-F	2
47	FITTING ELBOW				
	1/8FM x 1/4CC (NS)	114678-2	1	114678-2	1
48	3/4 CLOSE NIPPLE (NS)	113500-E11	1	113500-E11	1
49	SHUT-OFF VALVE (NS)	111420-1	1	111420-1	1
50	REGULATOR 3.7 RV43A				
	(NAT.) (NS)	108279-1	1	108279-1	1
50A	REGULATOR 10 RV-43				
	(L.P.) (NS)	108279-3	1	108279-3	1
52	7/16CC TEE	114614-1	1	114614-1	1
53	COUPLING 3/4 x 3/8	114782-3	1	114782-3	1
54	3/8 CLOSED NIPPLE	113500-C6	2	113500-C6	2
55	MAIN GAS SUPPLY				
	7/16 TUBE (NS)	114624-1	1	114624-1	1
56	TUBING SOLENOID TO				
	ADJ. VALVE	112722-2	1	112722-2	1
57	RIGHT PILOT TUBE 3/16	114633-2	1	114633-2	1
58	LEFT PILOT TUBE 3/16	114633-1	1	114633-1	1
59	LT. & RT. NOZZLE TUBES 7/16	114619-1	2	114619-1	2
60	BURNER SPUD (NS)	10901-36	2	10901-33	2
60A	BURNER SPUD (NS)	10901-1/16	2	10901-53	2
61	BURNER ASSEMBLY	112709-G1	2	112709-G1	2
62	REAR MANIFOLD ASSEMBLY	111872-G4	3	111892-G3	3

#### NS — NOT SHOWN IN PHOTOGRAPH



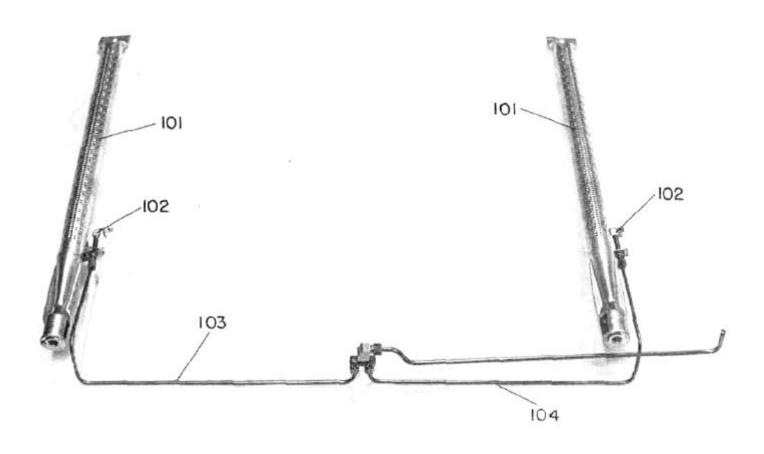
NOTE: PHOTO SHOWS ALTERNATE HARPER-WYMAN SAFETY CONSTRUCTION.

ITEM NUMBER	DESCRIPTION	PART NUMBER SG-2	QUANTITY SG-2	PART NUMBER SG-10	QUANTITY SG-10
97	OVEN SAFETY	114644-1	2	114644-1	2
98	LEFT & RIGHT SUPPLY TUBE	114635-1	2	114635-1	2
99	MAIN GAS SUPPLY TUBE	114620-1	1	114620-1	1
52	TEE 7/16 CC	114614-1	1	114614-1	1
100	ELBOW 7/16 CC	103638-3	1	103638-3	1



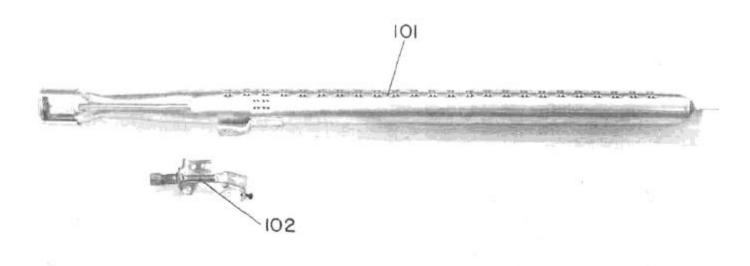
FOR USE WITH ROBERTSHAW SAFETY SYSTEM

ITEM NUMBER	DESCRIPTION	PART NUMBER SG-2	QUANTITY SG-2	PART NUMBER SG-10	QUANTITY SG-10
101	BURNER	114646-1	2	114646-2	2
102	OVEN PILOT	114645-1	2	114645-1	2
103	LEFT HAND PILOT TUBE	114658-1	1	114658-1	1
104	RIGHT HAND PILOT TUBE	114658-2	1	114658-2	1



FOR USE WITH ROBERTSHAW SAFETY SYSTEM

ITEM NUMBER	DESCRIPTION	PART NUMBER SG-2	QUANTITY SG-2	PART NUMBER SG-10	QUANTITY SG-10
101	BURNER	114646-1	2	114646-2	2
102	OVEN PILOT	114645-1	2	114645-1	2

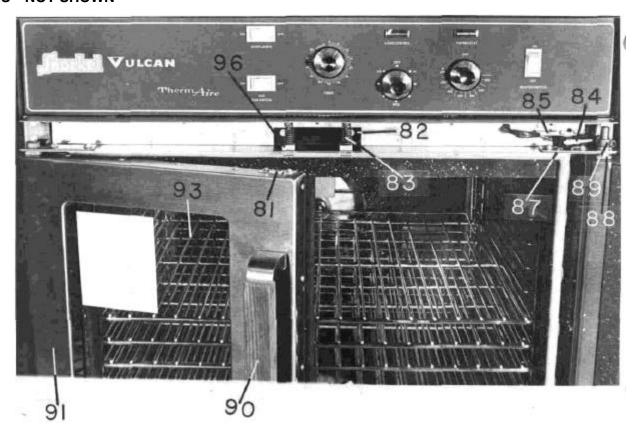


FOR USE WITH ROBERTSHAW SAFETY SYSTEM

# DOOR ASSEMBLY & MECHANISM

ITEM NUMBER	DESCRIPTION	SG-2	QUANTITY SG-2	SG-10	QUANTITY SG-10
81	DOOR STRIKE	111170-1	2	111170-1	2
82	DOOR CATCH PLATE	111934-1	1	111923-1	1
83	COMPRESSION SPRING	20707-23	2	20707-23	2
84	MICRO SWITCH	111496-F1	1	111496-F1	1
85	MICRO SWITCH SUPPORT	110619-1	1	110619-1	1
86	MICRO SWITCH INSULATION				
	(3"LONG)NS	111365-1	2	111365-1	2
87	DOOR ADJ. BRACKET	111939-1	4	111939-1	4
88	HINGE PIN BEARING	104629-2	4	104629-2	4
89	COLLAR HINGE PIN 1/2"	3.0209-2	1	3.0209-2	1
90	DOOR HANDLE ASSEMBLY	113030-G1	2	113030-G1	2
91	DOOR PANEL ASSEMBLY	112606-G2	2	112606-G2	2
93	DOOR WINDOW	111294-2	2	111294-2	2
94	PLUG BUTTON NS	3.0317-8	4	3.0317-8	4
96	DOOR CATCH	111794-1	2	111794-1	2

### **NS—NOT SHOWN**



# **OVEN CAVITY**

ITEM Number	DESCRIPTION	SG-2	QUANTITY SG-2	SG-10	QUANTITY SG-10
19	FAN COVER ASSEMBLY	111136-G2	1	111136-G2	1
19A	FAN COVER ASSEMBLY (SS)	111136-G4	1	111136-G4	1
21	OVEN RACK	111265-2	6	111265-1	6
22	RIGHT HAND RACK SUPPORT	111430-2	1	111430-3	1
23	LEFT HAND RACK SUPPORT	111430-1	1	111430-4	1
24	DRIP TRAY GUIDE NS	112845-1	2	112845-2	2
26	DRIP TRAY NS	111429-1	1	111429-3	1
26A	DRIP TRAY SS NS	111429-2	1	111429-4	1
27	RIGHT HAND SIDE LINING	112697-1	1	112697-5	1
28	LEFT HAND SIDE LINING	112697-2	1	112697-6	1
29	RIGHT HAND SIDE LINING SS	112697-3	1	112697-1	1
30	LEFT HAND SIDE LINING SS	112697-4	1	112697-8	1
31	DOOR GASKET	111688-1	1	111688-1	1
32	TOP & BOTTOM DOOR GASKET				
	SHIM NS	111339-1	2	111339-1	2
33	SIDE DOOR GASKET SHIM NS	111339-2	2	111339-2	2
34	AIROTOR 10"	3.1300-3	1	3.1300-3	1
35	SNORKEL TUBE ASSEMBLY	114296-G1	1	113585-G1	1

## **NS—NOT SHOWN**

