



# OT-300 OWNERS MANUAL



YieldKing Manufacturing • 472 South Mill Street • Alamo, TN 38001  
Sales: 888-273-4456 • Service: 888-273-3175 • Plant Phone: 731-696-3175  
fax: 731-696-3180 • [info@oltennessee.com](mailto:info@oltennessee.com)



**Please read this Instruction Manual carefully prior to installation and operation of your OT300 pit. Proper installation, operation, cleaning and maintenance are essential for your satisfaction and safe operation.**

***KEEP THIS MANNUAL FOR REFERENCE***

**TABLE OF CONTENTS**

|                |  |
|----------------|--|
| <b>3.....</b>  | <b>Safety Information</b>                      |
| <b>4.....</b>  | <b>Diagram of Controls &amp; Components</b>    |
| <b>5.....</b>  | <b>Operating Instructions</b>                  |
| <b>7.....</b>  | <b>Cleaning Instructions</b>                   |
| <b>8.....</b>  | <b>Maintenance Schedule</b>                    |
| <b>9.....</b>  | <b>Electrical Instructions</b>                 |
| <b>9.....</b>  | <b>Wiring Schematic</b>                        |
| <b>10.....</b> | <b>Items to check before firing burner</b>     |
| <b>10.....</b> | <b>Burner Specification &amp; Instructions</b> |
| <b>11.....</b> | <b>Gas Piping Instructions</b>                 |
| <b>12.....</b> | <b>Replacement Parts List</b>                  |
| <b>12.....</b> | <b>Warranty</b>                                |

# SAFETY INFORMATION

## FOR YOUR SAFETY

### IF YOU SMELL GAS . . .

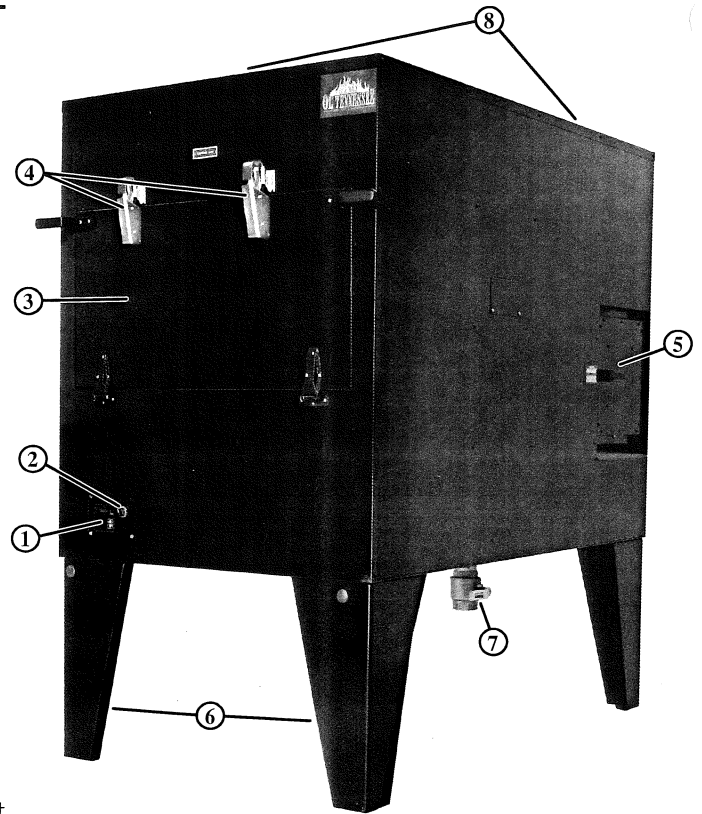
1. Open windows.
2. Do not touch electrical switches.
3. Extinguish any open flames.
4. Immediately call your gas supplier.

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCES.**

1. The pit area **MUST** be kept clear and free of combustible materials, gasoline and other flammable vapors and liquids.
2. The flow of combustion and ventilating air **MUST NOT** be obstructed from reaching the pit.
3. The frame of the unit **MUST** be electrically grounded at all times. See "Electrical Instructions".
4. Caution should be used when opening and closing the Firebox Door. The door is **HOT** during operation.
5. **DO NOT** remove service compartment access panels when unit is in operation, or leave off during operation.
6. Gas burners require the services of an experienced mechanic for proper setting and adjustment. If the burner does not appear to be operating properly, **DO NOT ATTEMPT TO ADJUST THE BURNER YOURSELF**, but call in a competent serviceman or contact Southern Pride.
7. **DO NOT** allow unqualified personnel to perform service work or adjustments on this unit. To do so, will **VOID WARRANTY** and could result in a hazardous condition.
8. Be sure any new employees, who might operate the unit, are instructed on operation and safety information prior to operating the unit.
9. Caution: Ashes removed from the Firebox should be stored in a non-combustible container with a sealed lid only. Store ashes in a well ventilated area. **FUMES COULD BE HAZARDOUS.**
10. **WARNING: IT IS EXTREMELY IMPORTANT TO FOLLOW DAILY CLEANING INSTRUCTIONS. GREASE OR BUILDUP OF SOLIDS INSIDE THE PIT COULD RESULT IN A FIRE HAZARD.**
11. **KEEP THIS INSTRUCTION MANUAL FOR REFERENCE.**

# OT300 CONTROLS AND COMPONENTS

- 1. CONTROL THERMOSTAT/THERMOMETER-**  
Adjustable temperature setting (140-325° F) with OFF position. Maintains desired Pit temperature by controlling the Gas Burner and shows current temperature inside the oven.
- 2. MAIN POWER SWITCH -** Activates the Rotisserie, Optional Convection Fan, Thermostat, and Red Indicator Lamp. (The Red Indicator Lamp on the Main Power Switch indicates when the switch is ON.)
- 3. MEAT LOADING DOOR -** For access to Racks and Pit interior.
- 4. MEAT LOADING DOOR LATCHES -** Latch applies positive pressure and seals the door.
- 5. FIREBOX DOOR -** Provides access for loading wood in the Firebox Chamber.
- 6. CABINET LEGS -** Provide adjustment for leveling of the unit.
- 7. DRAIN VALVE -** Is opened after each cooking to drain grease.
- 8. FLUE COLLAR -** 4" x 12" exhaust vent in the front and rear - blank off plate provided to cover the unused vent.



## CAUTION

This pit is designed to operate on a controlled air intake system in order to control the combustion of the wood in the firebox.

### DO NOT OPERATE PIT UNDER ANY OF THE FOLLOWING CONDITIONS:

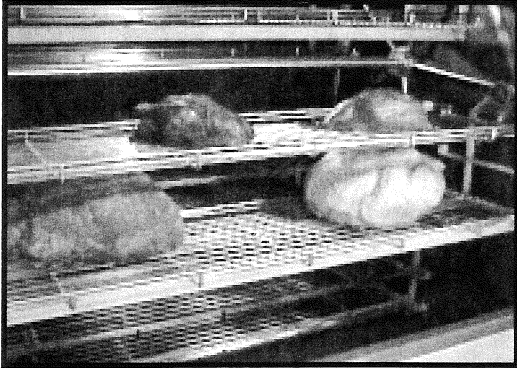
- 1. DO NOT** operate pit unless the Firebox Door and Meat Loading Door Latch is secured in the closed position.
- 2. DO NOT** leave Firebox Door or Meat Loading Door open while pit is unattended.
- 3. DO NOT** use aluminum foil or any other protective material on inner liner surfaces or food racks of pit.
- 4. DO NOT** open Drain Valve while pit is in operation.
- 5. DO NOT** operate pit unless daily cleaning procedures have been performed to remove the buildup of solids inside the pit.
- 6. DO NOT** operate pit unless operator has been thoroughly trained on operation, safety and cleaning procedures.

### WARNING

**FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN A FIRE HAZARD**

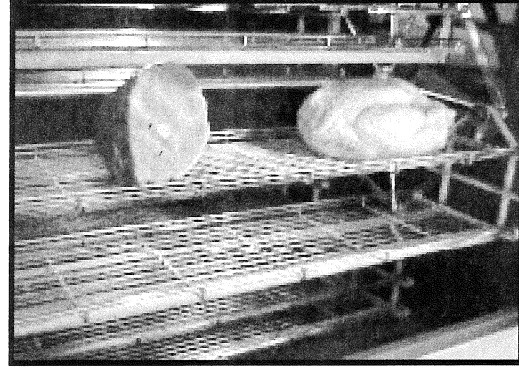
## OPERATING INSTRUCTIONS

1. Load meat on the food racks. Always load bottom rack first and distribute the weight evenly on all four sets of food racks. **DO NOT LET THE MEAT EXTEND BEYOND OR HANG OVER THE EDGE OF THE RACKS.**



### **CORRECT**

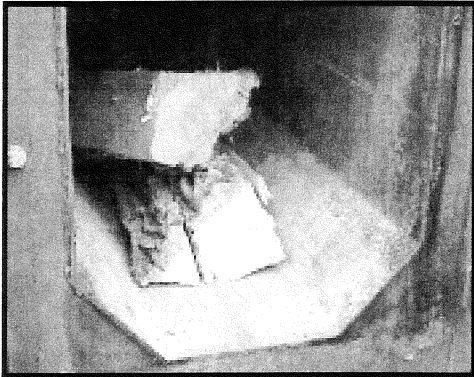
**Load meat on bottom rack first.**



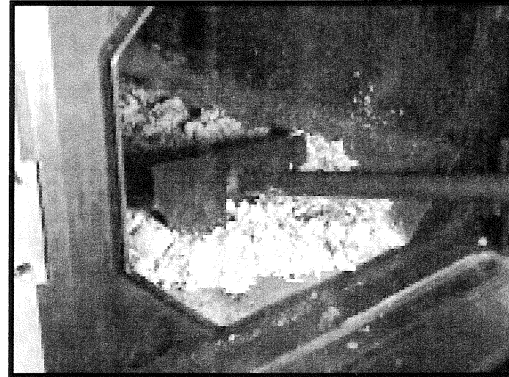
### **INCORRECT**

**May cause food to tip and meat to fall. This could cause the Rotisserie to jam.**

2. To advance the racks with the Meat Doors open, depress the Rotisserie Advance Foot Switch until the racks advance to the next position.
3. After the meat is loaded, depress the Rotisserie Advance Foot Switch and allow the rotisserie to make one complete revolution. Check meat clearances to cabinet and all racks. If necessary, reposition meat on racks for maximum clearances.
4. Put a small amount of wood in the Firebox. Use 1-2 logs, that are 4-6 inches in diameter, 12-15 inches long. Use green or slightly seasoned hardwoods only.



**Correct way to load wood. Use 1-2 hardwood logs, 4-6 inches in diameter, 12-15 inches long.**



**Use Ash Scraper to aid in the removal of ashes.**

### **CAUTION**

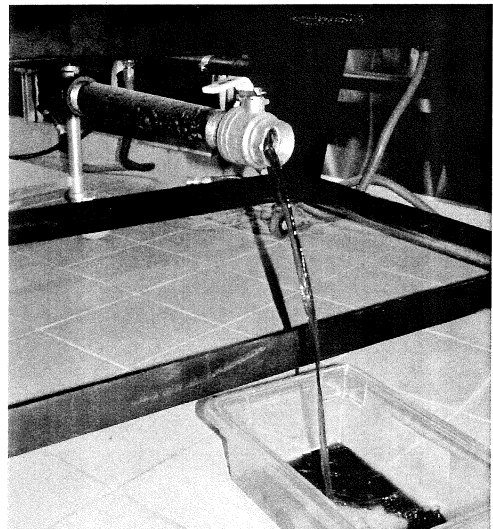
**DO NOT USE DRY WOOD OR KINDLING. DO NOT OVERLOAD FIREBOX. TOO MUCH WOOD CAN CAUSE OVER-HEATING OF THE PIT.**

**COALS AND ASHES FROM PREVIOUS COOKING MUST BE REMOVED BEFORE LOADING WOOD. DO NOT ALLOW ASHES IN OR NEAR THE BURNER OPENING. KEEP ALL LOGS AT LEAST 6 INCHES FROM THE BURNER.**

5. Be sure Firebox Door and Meat Loading Door Latch is secured in the closed position.
6. Turn the Main Power Switch to the **ON** position. Set the Thermostat to the desired temperature setting. The wood will be ignited and cooking temperature will be maintained automatically. (The red lamp on the Main Power Switch indicates when the switch is **ON**.)
7. When the meat is cooked, turn the Main Power Switch to the **OFF** position. To unload racks depress the Rotisserie Advance Foot Switch until the racks advance to an unloading position.
8. After each cooking, remove the remaining wood and hot coals from Firebox (see cleaning instructions on next page for ash handling) , then open Drain Valve and drain grease while the pit is still warm.

**CAUTION: BE SURE MEAT LOADING DOORS AND FIREBOX DOOR ARE SECURED IN THE CLOSED POSITION IMMEDIATELY FOLLOWING A COOKING AND DURING NON-USE PERIODS.**

**WARNING: DO NOT OPEN DRAIN VALVE WHILE PIT IS STILL IN OPERATION OR WHILE BURNING WOOD AND HOT COALS ARE STILL IN FIREBOX.**



### **IMPORTANT**

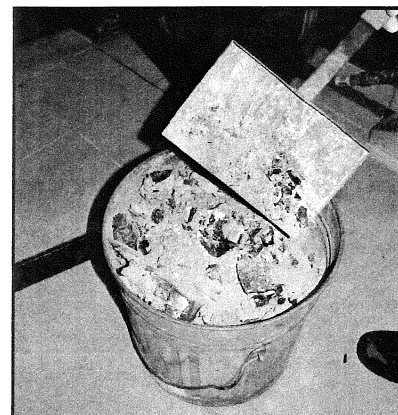
The Gas Burner is equipped with an automatic ignition system. To Ignite; turn the Main Power Switch to the **ON** position and set the thermostat to the desired temperature. To shut the burner off turn the power switch to the **OFF** position or press the down arrow of the thermostat until **OFF** appears on the LED display

## CLEANING INSTRUCTIONS

1. Remove ashes and coals from Firebox after each cooking.

**Ash Disposal:** Ashes should be placed in a non-combustible container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor well away from all combustible material, pending final disposal.

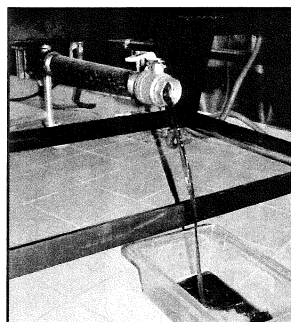
Use Ash Scraper to aid in the removal of ashes and coals from the Firebox.



**CAUTION:** Fumes could be hazardous.

2. Drain grease. (Be sure hot coals and wood are removed from the Firebox before opening drain valve.)

Open Drain Valve and drain Grease.



3. Remove food racks and clean thoroughly. (Racks simply lift out of the brackets on the hangers.)
4. Thoroughly clean complete interior of pit. Use food service degreaser. Spray degreaser on the interior of the pit and allow to set for 5-10 minutes. Rinse thoroughly with water hose or pressure washer. Drain through Drain Valve.

NOTE: With all commercial cleaners, follow manufacturers instructions for use and safety.

### WARNING

IT IS EXTREMELY IMPORTANT TO FOLLOW THE ABOVE **DAILY** CLEANING PROCEDURES. BUILDUP OF GREASE OR SOLIDS INSIDE THE PIT COULD RESULT IN A **FIRE HAZARD**.

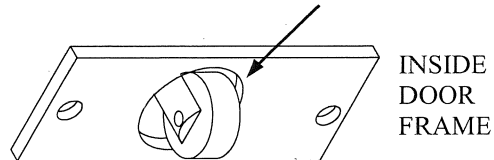
## MAINTENANCE SCHEDULE

### DAILY:

Remove and clean all of the food racks. Thoroughly clean the complete interior of the oven, using a food service degreaser (follow instructions on degreaser) and rinse with a water hose or pressure washer. Drain through the drain valve

### WEEKLY:

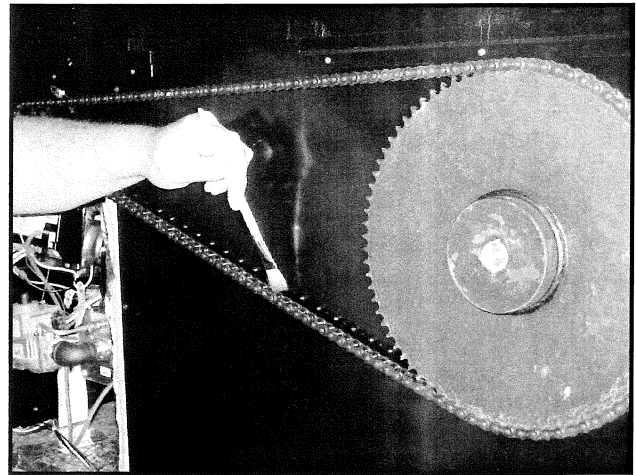
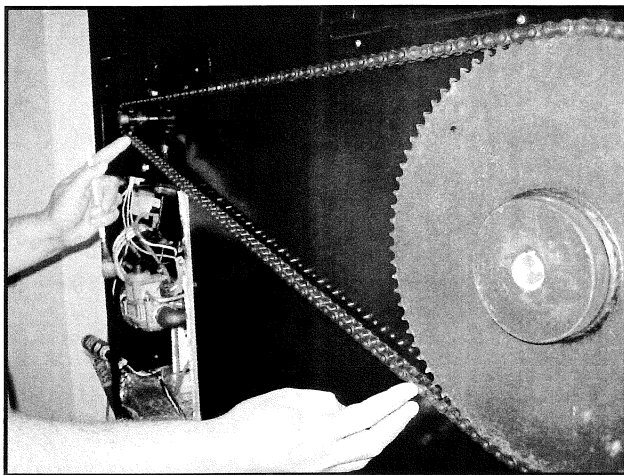
1. Inspect Burner Head for accumulation of ashes and creosote. Clean as needed.
2. Inspect Convection Fan Blade for buildup of solids, or out of balance condition. Clean or replace as needed.
3. Inspect meat Loading and Firebox Door Gaskets. Replace if damaged or leaking.
4. Inspect the Interlock Switch to be sure the Plunger and Roller move freely. Lubricate with WD-40 or equivalent as needed.



### ANNUALLY

#### Drive Chain lubrication instructions

1. To lubricate the Drive Chain, disconnect the power supply to the oven and remove the Drive Cover.
2. Use only quality SAE 20 oil for lubricating the Drive Chain.
3. The drive chain for the OT-300 Oven should be lubricated once each year.
4. Use a clean brush to apply oil to the slack side of the Drive Chain.





# ELECTRICAL INSTRUCTIONS

## ELECTRICAL REQUIREMENTS:

120 Volts A.C., 60 Hz., • 2 wire, single phase, • 15 amp wiring required. Power cord provided.

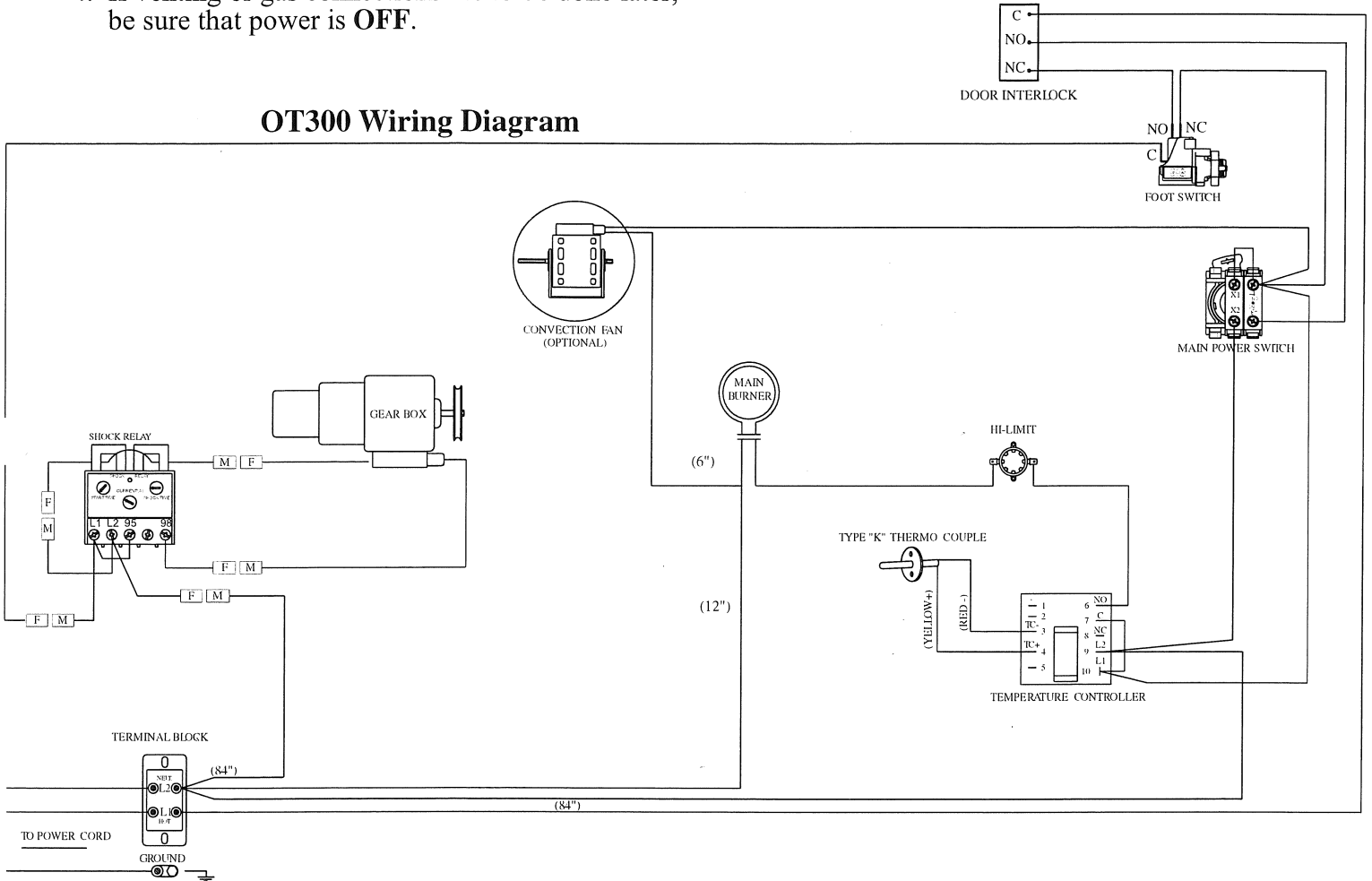
## WARNING:

**CHASSIS MUST BE GROUNDED TO PREVENT POSSIBLE SHOCK HAZARD. DO NOT ASSUME A PLUMBING LINE WILL PROVIDE SUCH A GROUND.**

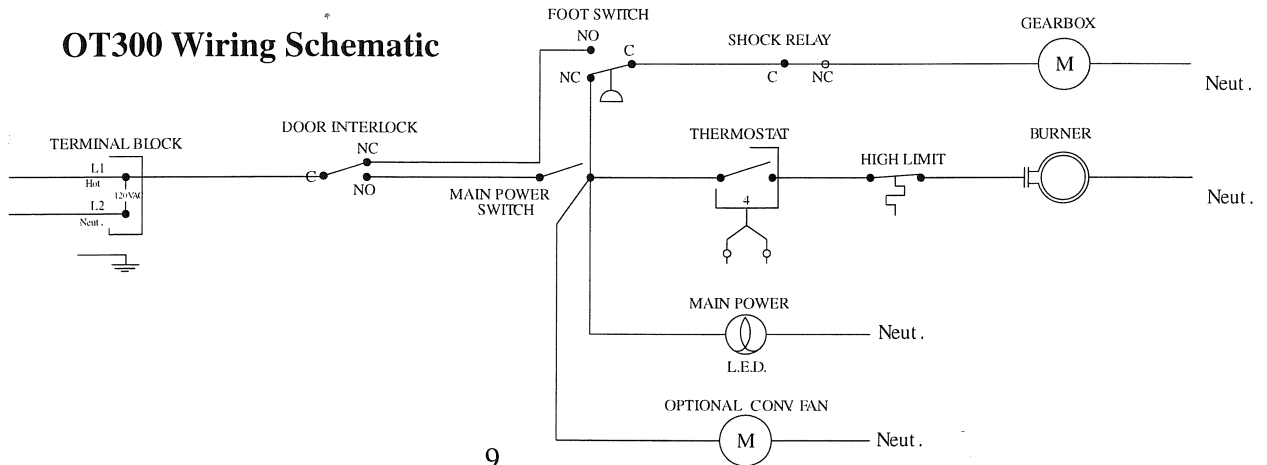
**WARRANTY IS VOID IF UNIT IS CONNECTED TO ANY VOLTAGE OTHER THAN SPECIFIED ABOVE AND ON NAMEPLATE.**

1. Electrician must provide the conduit and receptacle for hookup.
2. Power is to be left OFF throughout installation.
3. Electrical Service is connected via the factory supplied power cord located on the back of the oven.
4. If venting or gas connections are to be done later, be sure that power is OFF.

### OT300 Wiring Diagram



### OT300 Wiring Schematic



# ITEMS TO CHECK BEFORE FIRING BURNER

## IMPORTANT

**WARNING: IMPROPER GAS HOOKUP WILL VOID WARRANTY AND COULD RESULT IN A HAZARDOUS CONDITION.**

1. Gas line **MUST** be installed by a competent technician and in accordance with this Manual.
2. Gas line **MUST** include an easily accessible manual shutoff valve, drip leg, and pressure gauge port.
3. Gas pipe size **MUST** be in accordance with the Pipe Capacity Chart in this Manual.
4. Gas line **MUST** be tested for leaks under pressure.
5. Gas Line **MUST** be purged to remove any air in the system.
6. Gas line pressure **MUST** be checked and **MUST NOT** exceed the maximum pressure specified in the Burner Specifications in this Manual.
7. Burner Orifice **MUST** correlate with the type of gas being supplied, as specified in the Burner Specifications in this Manual.

## BURNER SPECIFICATIONS

**Burner Model:** Wayne P250-EP

**Firing Capacity:** Maximum Input 50,000 BTU/HR

**Fuels:** Natural and L.P. Gases

**Electrical:** 120 V.A.C., 60 hz, 1 phase

**Orifice Sizes:** Natural Gas - #30 (.128)      L.P. Gas - #45 (.082)

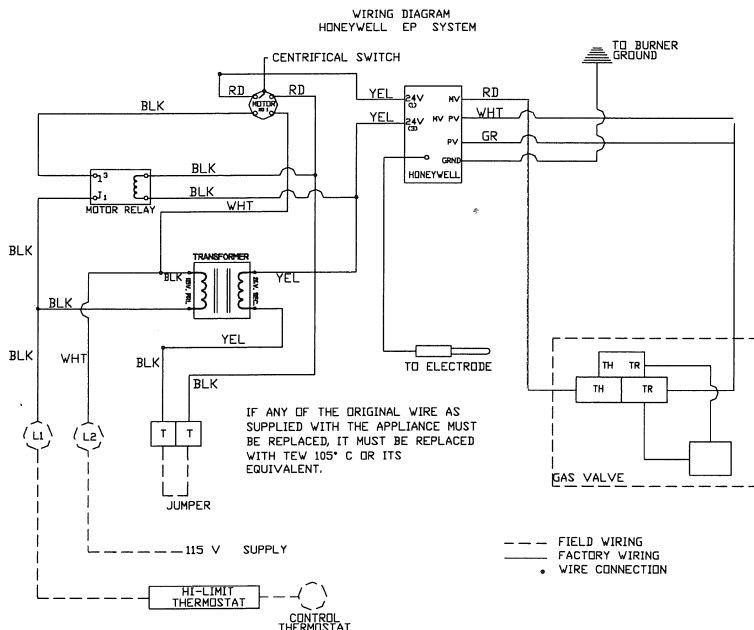
**NOTE:** Orifice and valve setting must correlate with type of gas being supplied.

**Gas Supply Line Pressure:** Natural - 4.5" W.C. Minimum      L.P. - 11.0" W.C. Minimum  
10.0" W.C. Maximum      13.0" W.C. Maximum

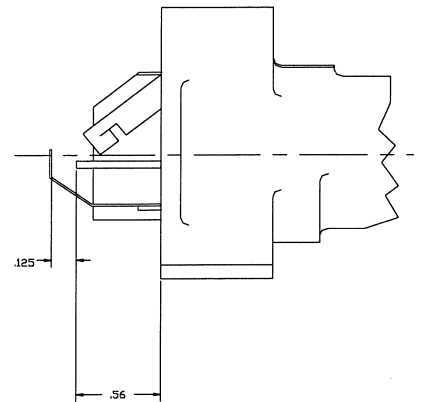
**MANIFOLD PRESSURE:** Natural - 3.5" W.C.      L.P. - 10.0" W.C.

**GAS VALVE:** Control Knob must be **ON**.

WIRING DIAGRAM FOR GAS BURNER



P-250EP THERMOCOUPLE PILOT LOCATION



# GAS PIPING INSTRUCTIONS

1. READ ALL GAS PIPING INSTRUCTIONS CAREFULLY BEFORE MAKING GAS CONNECTIONS.

**WARNING: IMPROPER GAS HOOKUP WILL VOID WARRANTY AND COULD RESULT IN HAZARDOUS CONDITION.**

2. Connect the gas line to the 1/2 inch piping that extends from the Gas Burner. A 1/2 inch N.P.T. fitting is required.

**NOTE:** All piping must comply with local codes and ordinances of the National Gas Code ANSI Z 223.1 - and NFPA #54.

3. The gas line should be a separate supply direct from the meter to the Burner. It is recommended that a new pipe be used and located so that a minimum amount of work will be required in future servicing. The piping should be so installed as to be durable, substantial, and gas tight. It should be free from cutting burrs and defects in structure and threading. Cast iron fittings or aluminum tubing should not be used for the main gas circuit. Joint compounds (pipe dope) should be used sparingly on male threads only, and be approved for all gases.

**NOTE:** The building structure should not be weakened by installation of the gas piping. The piping should not be supported by other piping, but should be firmly supported by pipe hooks, straps, bands, or hangers. Butt or lap welded pipe should not be bent.

4. The Pipe Capacity Chart must be used to determine the size pipe to use from the meter to the Burner.

| PIPE SIZE | PIPE CAPACITY CHART |      |
|-----------|---------------------|------|
|           | MAXIMUM LENGTH FT.  |      |
|           | NAT.                | L.P. |
| 3/8       | -                   | 10   |
| 1/2       | 10                  | 30   |
| 3/4       | 70                  | 150  |
| 1         | 200                 | 250  |
| 1 1/4     | 250                 | -    |

**FOR GAS PRESSURE OF 0.5 PSIG OR LESS BASED ON A 0.6 AND 1.5 SPECIFIC GRAVITY GAS.**

5. **TEST PIPING FOR LEAKS.** Before turning gas under pressure into piping, all openings from which gas can escape must be closed. Immediately after turning on gas, the system should be checked for leaks. This can be done by watching the 1/2 cubic foot test dial for 5 minutes to show any movement, or by soaping each pipe connection and watching for bubbles. If leak is found, make the necessary repairs and repeat the above test.

**NOTE:** Defective pipes or fittings should be replaced and not repaired. Never use a flame or fire of any form to locate gas leaks; use a soap solution.

6. After the piping and meter have been checked completely, **PURGE THE SYSTEM OF AIR. DO NOT** bleed the air inside the unit. Be sure to relight all the gas pilots on other appliances.

**NOTE:** The burner and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing at excess of 1/2 psig.

## OT300 REPLACEMENT PARTS LIST

| DESCRIPTION                                    | PART NO. |
|--|----------|
| F66 High Temp. Food Grease.....                | 0304     |
| Control Thermostat.....                        | 1002     |
| Bi Metal High Limit.....                       | 1004     |
| Convection Fan Motor.....                      | 1040     |
| Gas Burner.....                                | 25040    |
| Transformer (Gas Burner Part).....             | 1062     |
| Motor Switch Relay (Gas Burner Part).....      | 1070     |
| Blower Motor (Gas Burner Part).....            | 1076     |
| Main Power Switch.....                         | 1080C    |
| Gas Valve (Specify Natural or L.P. Gas)EP..... | 1084     |
| Electrode.....                                 | 1085     |
| High Voltage Lead.....                         | 1086     |
| Control Module (Gas Burner Part).....          | 1087     |
| 1" Type K Thermocouple.....                    | 0368     |
| Firebox Door Gasket.....                       | 2029     |
| 8" Cooling Fan Blade (outside & inside).....   | 2426     |
| 2" Ball Valve (Grease Drain).....              | 2467-1   |
| Air Foot Switch Pedal.....                     | 1056     |
| Air Foot Switch Micro Switch.....              | 1057     |
| Food Rack - 12" x 30".....                     | 2005     |
| Meat Door Gasket.....                          | 1257     |
| Small Drive Sprocket.....                      | 25010    |
| Large Drive Sprocket.....                      | 25020    |
| Drive Gear Motor.....                          | 25030    |
| Meat Door Hinge.....                           | 2116-1   |
| Drive Chain.....                               | 1858     |
| Food Hanger Rack.....                          | 7017     |

### NINETY DAY LIMITED PARTS WARRANTY (CONSULT FACTORY FOR DETAILS)

Ol'Tennessee guarantees all new equipment of its manufacture to be free of defects in material and factory workmanship for a period of Ninety Days provided that the equipment is installed in the Continental United States, Alaska, or Hawaii and is operated according to the Owner's Manual while located at the original address of installation, the Warranty Registration Card has been completed and returned to the factory within fifteen (15) days after installation, and a start-up has been performed by an authorized service agent.

Ol'Tennessee's obligation under this warranty is limited to one of the following options to be selected by Ol'Tennessee Service Manager.

1. Owner is to return part, freight PREPAID. Ol'Tennessee is to repair it at our expense if defective, and ship part back to owner freight collect.
2. Ol'Tennessee is to furnish replacement part, freight collect, without requesting return of the defective part.
3. Ol'Tennessee is to furnish replacement part, freight collect, in exchange for return of the defective part, freight collect.

Ol'Tennessee will not be liable for damage as a result of improper installation, misuse, abuse, alteration of original design, incorrect voltage, unauthorized service, or breakage of fragile items. Ol'Tennessee will not be liable for any loss or consequential damage or expense accruing directly or indirectly from the use of equipment covered by this warranty, including any production or product losses or other damages which may occur as a result of equipment malfunction or failure. This warranty does not cover cooking performance, which is a function of food types, textures, temperatures and other variables chosen by the owner and over which Ol'Tennessee has no control. The effect of corrosion, fire and normal wear on the equipment or component parts is not covered by this warranty. This warranty does not apply to damage caused by accident or to damage caused by the negligence of the owner and the employees of the owner, or to damage caused by lightning generated electrical current or any other Act of God whatsoever. This warranty does not apply to any equipment bearing a serial number which has been tampered with or altered.