

Jade Range LLC, A Middleby Company

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# TITAN HEAVY DUTY RANGES TITAN BAKING AND ROASTING OVENS

**MODELS: JTRH and JTRHE Series** 

## INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

NOTE: Instructions must be posted in a prominent location, which will instruct the user in the event that he/she detects the smell of gas. This information shall be obtained from your local gas company.

#### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.



## WHAT TO DO IF YOU SMELL GAS

- Open windows
- Do not touch electric switches
- Extinguish any open flame
- Immediately call your gas company



#### **WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or serving this equipment.

Adequate clearances must be provided in front, rear and at sides of appliance for servicing. The appliance area must be kept free and clear from combustibles. There must be no material or obstacles obstruction the flow of combustion and ventilation air.

RETAIN THIS MANUAL FOR FUTURE REFERENCE



## **CLEARANCES and VENTILATION**

This appliance is design-certified for installation with the following conditions:

## MINIMUM CONSTRUCTION CLEARANCES FROM COMBUSTIBLE MATERIALS:

	Side	Rear	Floor
With 6" High Legs	4 inches	2 inches	6 inches
Without 6" High Legs	4 inches	2 inches	0 inch

Without 6" High Legs – Range must be installed on a noncombustible kerb or platform with the front of the range projection 3-inch minimum over the kerb or platform. Range may be installed flush against noncombustible rear wall.

#### NOTE: APPLIANCE INTENDED FOR OTHER THAN HOUSEHOLD USE.

The area in front of and above the appliance must be clear to avoid any obstruction of flow of combustion and ventilation air. Means must be provided for adequate air supply and adequate clearance for air openings into the combustion chamber. Keep appliance area free and clear from combustibles.

<u>IMPORTANT REMINDER</u>: It is the responsibility of the installing contractor to provide a regulator of sufficient capacity to accommodate the total BTUs required for all the appliances within the battery that have connecting manifolds. The regulators are to be set at 5" W.C. for natural gas regulators and 10" W.C. for propane gas regulators.

Insert: Drawing of Model JTRH, JTRHE Series



#### PREPARATION FOR INSTALLATION

Safe and satisfactory operation of your equipment depends to a great extent upon its proper installation. Installation must conform with local codes, or in the absence of local, with the <u>National fuel code</u>, <u>ANSI Z233.1-1988</u> or later. Electrical installation must conform with all applicable state and local codes and be in compliance with the National Electrical Code, <u>ANSI/NFPA 70-1990</u>.

NOTE: AFTER ELECTRICAL INSTALLATION TO THE CONVECTION OVEN MASTER SWITCH (TOGGLE SWITCH) SHOULD BE TURNED OFF UNTIL OVEN POLOT IS IGNITED AND APPLIANCE READY FOR USE.

Refer to rating plate for gas-orifice type. If orifices are converted in the field, the rating plate must be corrected by an experienced and responsible service person. Gas regulator must be changed to suit gas to be used. Check with appliance manufacturer.

## **INSTALLATION AND GAS PIPING**

- ♦ Appliances <u>battery-mounted</u> (minimum of two appliances) must be lined up, leveled, and have manifolds leveled and connected. Plate shelves are adjustable and holes are provided to take 3/8-16T.P.I. bolts for securely locking plate shelves together. Similar provisions are provided when appliances are equipped with high shelves.
- Adjusting legs that are provided can adequately level floor-mounted appliances. Kerb or platform-mounted appliances (legs removed) have adjustable leveling bolts located within the body (Front and rear on bottom of control box area, and within combustion area bottom on right side of inner body. Remove oven bottom.)
- Connect appliances to gas supply line. Under no circumstances should the gas supply line be smaller than the inlet pipe on the appliance. Use pipe compound on all pipe joints. Compound must be resistant to the action of liquefied petroleum gases.
- Check all gas connections for leaks using soap and water solution. DO NOT USE AN OPEN FLAME FOR CHECKING PURPOSES.
- ◆ 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 ½ psig (3.45 kPa).
- ♦ The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa).
- Licensed or approved experienced personnel should do all installation and service work.



#### LIGHTING AND RELIGHTING INSTRUCTIONS

## TOP SECTION:

The top sections of your appliance are equipped with constant burning lighters. Lighters and burners should be manually lighted <u>immediately after the gas is turned on</u>. Adjustments can be make through the observation openings in front valve cover. Using a screwdriver, lighter flames can be adjusted by turning the lighter adjustment screw\* clockwise or counterclockwise. Pilots should be checked periodically to insure pilot ignition.

## OVEN SECTION: STANDARD OVEN GAS CONTROLS

- 1. Turn oven ON-OFF valve to "ON."
- 2. Turn thermostat dial to "OFF." Wait 5 minutes.
- 3. Remove oven kick plate.
- 4. Push red button of safety pilot valve and light pilot. Continue to push red button until pilot flame remains on (minimum of 30 seconds). Release button.
- 5. Turn thermostat dial to desired temperature.
- CHECK IF PILOT IS EXTINGUISHED. IF EXTINGUISHED, REPEAT STEPS 1 THRU 4 ABOVE.
- 7. Replace oven kick plate.
- 8. Turn thermostat dial to "OFF" to shut down oven.

## OVEN SECTION-CONVECTION OVEN-GAS CONTROLS

<u>NOTE</u>: THIS CONVECTION OVEN IS EQUIPPED WITH A SIMPLE TROUBLE-FREE RELIGHT FEATURE. THIS FEATURE RUNS ON A 120V SYSTEM AND IS IN ADDITION TO THE STANDARD GAS VALVE SAFETY FEATURE.

## TO LIGHT CONVECTION OVEN

With gas turned "ON" to appliance and all top section (range) pilots ignited, turn appliance master switch to "ON" position – 'light' between switches (toggle types) will glow, indicating power to re-igniter is "ON."

- 1. Turn thermostat dial "OFF." Wait 5 minutes.
- 2. Remove oven kick plate.
- 3. Push red button of safety pilot valve and light pilot. Continue to push red button of safety valve until pilot flame remains on (minimum of 30 seconds). Release button.
- 4. Turn thermostat dial to desired temperature.
- 5. When satisfied oven pilot is holding, turn thermostat to desired temperature.
- 6. Turn off thermostat.



- 7. Check pilot flame (still ignition).
- 8. Replace oven kick plate.
- 9. To operate set thermostat to desired temperature.
- 10. Push rocker switch to "AUTO" position to turn on oven blower.

## CAUTION:

TO OPERATE THE PILOT REIGNITOR, THE MASTER ELECTRIC SWITCH (TOGGLE SWITCH LOCATED AT THE TOP OF THE PANEL) MUST BE IN THE 'ON' POSITION.

IF THE PILOT FLAME IS EXTINGUISHED BY DRAFTS OR TEMPORARY LOSS OF GAS AFTER THE INITIAL LIGHTING OF THE PLIOT BURNER AND OPERATION OF THE MAIN BURNER THROUGH THE USE OF THE THEMOSTAT, IT IS ADVISABLE TO TURN THE THERMOSTAT TO "OFF" POSITION. NO ATTEMPT SHOULD BE MADE TO RELIGHT THE PILOT BURNER FOR A MINIMUM OF FIVE MINUTES. THEN PROCEED AS DESCRIBED IN STEPS 2 THRU 5 TO LIGHT CONVECTION OVEN. THE SPARKING DEVICE (RE-IGNITOR) WILL ATTEMPT TO RELIGHT THE PILOT (THIS SHOULD OCCUR WITHIN 30 SECONDS.) IF THE PILOT BURNER FAILS TO LIGHT, THE THERMOCOUPLE WILL COOL AND CAUSE THE MAIN BURNER GAS TO STOP FLOWING THROUGH THE SAFETY VALVE.

## TO OPERATED TITAN CONVECTION OVEN - GAS CONTROLS

- 1. Turn thermostat to desired temperature.
- 2. Push rocker switch to "AUTO" position to turn fan "ON."
- 3. Preheat oven to desired temperature usually 12 to 16 minutes.
- 4. When ready open oven door (blower will stop).
- 5. Place product in oven try and leave space all around product.
- 6. Close oven door blower will come back "ON" and product will commence to bake!

#### **GENERAL INFORMATION**

If it is necessary to lower oven temperature very rapidly to accommodate a different product, simply adjust thermostat to the lower selected temperature. Open oven door and place rocker switch to manual. This will allow blower to operated and disperse excess heat rapidly from oven cavity (usually seconds). When ready, place new product in oven, close door and place blower switch in the "AUTO" position.

#### TITAN-CONVECTION OVEN - ELECRIC IGNITION OVEN

## TO LIGHT CONVECTION OVEN:



With gas connections and necessary piping correctly installed to and at the appliance according to the latest National Fuel Code and with the wiring correctly installed to the latest electrical codes – proceed as follows:

- 1. Turn on main electrical power to the appliance (circuit breakers).
- 2. With main gas valve to appliance turned on immediately light all freestanding top burners pilots. Adjust flame if necessary.
- 3. Turn appliance electrical "ON-OFF" toggle switch to "ON" position. (Power "ON" light Amber color will come on.)
- 4. Turn electric thermostat to desired temperature. (This will allow the oven burner lighter circuit to commence functioning.) GREEN light will come on. Within a few seconds oven burner will ignite and oven is ready for use.
- 5. Turn on oven Blower toggle switch to "AUTO." This turns on oven fan.
- 6. With oven fan in operation, pre-heat oven. It usually takes 12 to16 minutes.
- 7. When ready, open oven door. Fan will stop automatically.
- 8. Quickly place product into oven.
- 9. Close oven door. Fan will re-commence operating and product will start to be processed.

#### **GENERAL INFORMATION**

If it if necessary to lower oven temperature very rapidly to accommodate a different product, simply adjust thermostat to the lowest selected temperature. Open oven door and place rocker switch to manual. This will allow blower to operate and disperse excess heart rapidly from oven cavity (usually seconds). When ready, place new product in oven, close door and place blower switch in the AUTO position. With the blower switch in this position the fan will operate only with the door closed. Opening the door will stop blower preventing hot air from blowing in the Chef's face.

To turn blower off place rocker switch in "OFF" position.

When the oven is no longer needed turn, off the blower switch and thermostat.

It is sometimes advisable to turn off blower to allow certain products to set, e.g. milk products, meringues, etc. The blower should not be disengaged for more than 2 to 3 minutes at a time.

The use of the convection oven without running the blower does not cause damage to the appliance, but it reduces the efficiency of the oven, cooking time and heat distribution. Therefore, we recommend that the blower be used constantly whenever the oven is in operation.



The Jade Convection Oven described within these instruction sheets under the "Titan Convection Oven-Gas Controls" can also be equipped with electric ignition.

## **SERVICE AND MAINTENANCE**

Contact the factory, factory representative or a local service company to perform maintenance and repairs.

For daily cleaning, turn "ON" burner valves on top sections for 2 to 3 minutes and then turn "OFF." Use warm water and mild cleanser on fry top plates and open top grates. On hot top plates, use a rough cloth to clean plates. DO NOT use water to clean hot top plates.

Once a month, clean all burners with water and steel brush ensuring that all burner ports are free of debris. Clean pilots in same manner. Once cleaned and dried, re-light pilots and check for blockage. As frequently as necessary, remove grease tray, empty and clean with mild detergent.

## **SERVICE INTERVALS**

The need for servicing will, to a great extent, be determined by the appliance usage. The following chart outlines our suggestion for service intervals:

DAYS PER WEEK	SERVICE INTERVALS		
	Normal Use (5 Hrs./Day)	Heavy Use (12 Hrs./Day)	
7	60 Days	30 Days	
5 to 6	120 Days	60 Days	
1 to 4	180 Days	120 Days	

It is strongly suggested that a trained gas appliance service company examine the appliance at least yearly.

#### **REPAIR GUIDELINES**

All repair work must be completed by a licensed, trained service person experienced in commercial gas food service equipment.

If it becomes necessary to replace any gas control device, such as a main burner valve or thermostat, the replacement part should be ordered from the factory only, unless it has been determined that the EXACT part is available from your local parts supplier.

<u>CAUTION:</u> Before servicing this appliance, turn OFF gas to the appliance.



This appliance is serviceable to the front. It is suggested to provide at least 36 inches to the front of the appliance for servicing and for proper operation.

When the appliance is equipped with casters, the installation shall be made with a connector that complies with the standard for Connectors for Movable Gas Appliances, ANSIZ21.69-1987, and Addenda, Z21.691989, and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSIZ21.41-1989. 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.

The connector or restraining device must always be installed when the appliance is in use. Should it become necessary to remove this device for cleaning or servicing the appliance, be sure to reconnect this restraining device after the appliance is returned to its originally installed position.



INSERT -- Restraining device picture.



# **INSERT -- ELECTRIC DIAGRAM CONVECTION OVEN**

NOTE: A WIRING DIAGRAM CAN BE FOUND ON THE INSIDE OF THE OVEN KICK PLATE.

<u>CAUTION</u>: In the event of prolonged power failure, DO NOT attempt to operate appliance.



