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## JADE RANGE LOG BROILER

### MODELS: JLB SERIES

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#### INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS



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



**WARNING**  
Improper installation, adjustment, alteration, services or maintenance can cause damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing 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 obstructing the flow of combustion and ventilation air.

Care must be taken when handling hot ashes in and around this appliance.

**A MAJOR CAUSE OF BROILER-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS BROILER IS INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.**

**RETAIN THIS MANUAL FOR FUTURE REFERENCE**



INSERT FULL PAGE DIAGRAM



INSERT FULL PAGE DIAGRAM



## INSTALLATION

- IF THIS BROILER IS NOT PROPERLY INSTALLED, A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS.
- TO THE INSTALLER: Please contact local building or fire officials concerning any installation restrictions or need for inspection of the broiler installation.
- The broiler, when installed, must conform to all local and national solid fuel burning equipment codes.
- This cooking equipment is to be provided with an exhaust hood tested for compliance with the standard for ventilation control and fire protection of commercial cooking operations, NPFA 96, or with the requirements in the standard for exhaust hoods for commercial cooking equipment, UL 710.

### **WARNING: THE BROILER IS NOT TO BE ON CASTERS.**

1. Uncrate the unit and put into place.
2. For combustible or noncombustible surface installations, follow clearances and instructions specified in this manual. Unit should not be installed next to a Deep Fat Fryer.
3. Adequate combustion/make-up air must be provided to replace the air that is being exhausted by the hood system.
4. Only steel baffle-type grease extractors are to be used.
5. DO NOT USE MESH-TYPE FILTERS.

**WARNING: FOR ANY TYPE OF INSTALLATION, THIS UNIT MUST NOT BE INSTALLED OR MAINTAINED AT LESS THAN THE MINIMUM CLEARANCES.**

The unit must be installed on a noncombustible floor and below a noncombustible ceiling only. For purposes of this manual, "Noncombustible Material" means consisting entirely of brick, concrete, cinder block, or metal. For more details, refer to NFPA Code ANSI Z223.1-1992, NFPA S4-1992.

Installation instruction for converting combustible to modified combustible surfaces using Marinite board, steel studs and stainless steel sheets are as follows.

- Metal studs must run vertically, approximately 20 inch on centers. The Marinite board must terminate 1 inch beyond the metal studs at all joints behind the unit (see Figure 1).



Insert Figure 1

- a. The Marinite board to be used is Marinite Type I, ½ inch thick. It is to cover the back and side walls of installation, and extends a minimum of 24 inches beyond each side of the unit. It must start 6 inches above the floor and continue up into the attic space. It must be ventilated along the bottom and top.
- b. The Marinite board is to be covered by stainless steel. The stainless steel sheets must connect with a joint that faces outward, away from the wall. The stainless steel must not wrap around the edges of each Marinite panel at its joint (see Figure 3).

The side wall terminations of the Marinite must be fully protected by the stainless. The stainless, in this location only, is to wrap around the edge of the Marinite and continue to the wall (90° bend over the edge and continue to the wall).

Note that in some area, the health codes may not allow the 6-inch opening along bottom. In such cases, it will be acceptable to extend the stainless steel protector totally to the floor, but the top of Marinite wall must remain open for ventilation.

1. The ceiling is to be noncombustible (as defined by NFPA 54, National Fuel Gas Code) or, if the unit is to be installed in an island, the noncombustible ceiling must extend a minimum of 4 feet beyond all sides of the unit.
2. The base of the hood is to be located a maximum of 48 inches above the top of the unit. It must be a Type I hood and installed per the Uniform Mechanical Code. The hood can only serve the wood-burning appliance. Per the NFPA, the minimum clearance to the face of the filters shall be 48 inches as measured from the cooking surface.

INSERT FIGURE 2

Attachment of the Marinite to the steel studs can be made with 1” drywall screws as follows: 1) along the bottom edge, 2) any location up to 36 inches above the floor, and 3) 2 inches from the top.



The stainless steel is to be secured to the Marinite using a clip at the top. Some screws can be used up to 36 inches above the floor.

Examples of how the back corner can be made.

INSERT FIGURE 3

Examples of how the bottom edge of the stainless steel might be made.

INSERT FIGURE 4

Examples of how the top of the stainless steel might be made.

INSERT FIGURE 5



## OPERATING INSTRUCTIONS

**WARNING:** Read all instructions carefully. Improper use of this appliance may result in a building fire or personal injury. Instructions must be read and thoroughly understood by all operating and supervising personnel.

- Exhaust hood must be in operation during firing of broiler.
- This unit is designed as a wood or charcoal-burning broiler for cooking food products only. Do not use broiler for any other purpose. Install and use only in accordance with installation and operating instructions.
- During operation the broiler surfaces and body may reach high temperatures. Extreme caution should be taken to prevent burns.
- For use with solid wood or charcoal fuel only.
- Keep a proper fire extinguisher close to the broiler at all times. Extinguisher must be rated for use on wood fires. Instruct all personnel about location and use of the fire extinguisher and proper fire emergency procedures.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or “freshen up” a fire in this broiler. Keep all such liquids away from the broiler while it is in use.
- Keep feed doors closed except when adding fuel.

## OPERATION

1. Burn only seasoned or dried solid wood fuel in the broiler. **DO NOT BURN OTHER FUELS IN THE BROILER. DO NOT BURN TRASH OR GARBAGE.**
2. Firewood stored in the vicinity of the broiler must be kept in a tightly covered metal container. See Maintenance Instructions.

Keep firewood container closed at all times when not adding or removing firewood. Keep container a considerable distance from the broiler and far away from sources of heat or ignition. **DO NOT** store matches, paper or other easily ignited items with the firewood.

**EXTREME CAUTION MUST BE TAKEN TO KEEP COALS, HOT ASHES, AND OTHER SOURCES OF COMBUSTION AWAY FROM THE FIREWOOD. IF COALS OR ASHES FALL INTO THE FIREWOOD, BRUSH AWAY ASHES IMMEDIATELY AND THEN REMOVE AFFECTED FIREWOOD FROM THE BUILDING AND PLACE AWAY FROM ALL COMBUSTIBLES.**

3. Provisions must be made to supply sufficient combustion air into the structure when using this appliance. Make-up air supply and vent hood must be “ON” at all times during firing of the broiler. If hood blower fails, spread the fire out over the entire hearth to reduce the



intensity of the fire in order to prevent the activation of the emergency fire suppression system. DO NOT ADD ADDITIONAL FUEL UNTIL THE EXHAUST SYSTEM IS BACK IN OPERATION.

4. Use only noncombustible hearth tools and cooking implements inside the broiler. Store implements well away from all combustible materials in a proper fixture that will capture any ashes or hot coals, which may be carried out of the broiler on the implements.

5. Starting A Fire

- a. Before starting, turn exhaust system and make-up air supply "ON."
- b. Place a small amount of wadded paper or a fire starter at the bottom center of the unit. Place kindling over the starter. Light with match.

**CAUTION:** NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS BROILER. KEEP ALL SUCH LIQUIDS AWAY FROM THE BROILER WHILE IT IS IN USE.

- c. When the kindling is burning well, add larger pieces of firewood. USE WELL SEASONED OR DRIED WOOD ONLY.
  - d. Continue to add wood as needed to maintain the desired heating rate, being careful to never overfire the unit.
  - e. When finished cooking, spread remaining wood and coals around back and center of bottom so that there is space between pieces. Unit must be attended until fire is completely extinguished. Switch hood system "OFF" only after fire is completely extinguished.
  - f. DO NOT OVERFIRE. IF FLAME SPILLS MORE THAN 1 ½ FEET ABOVE BROILER OR BROILER STARTS GLOWING INSIDE, YOU ARE OVERFIRING.
6. **CAUTION:** Many structure fires have resulted when a fire has been left unattended such as when "banking" a fire for a long overnight burn. This broiler is intended for attended operation only. Trained personnel must attend and closely supervise the broiler at all times during firing.

DO NOT LEAVE AN UNATTENDED FIRE IN THE BROILER. WAIT UNTIL FIRE IS EXTINGUISHED BEFORE LEAVING UNIT UNATTENDED.

7. Always keep the area around the unit clear of combustible objects.

A MINMUM CLEARANCE TO COMBUSTIBLE MATERIALS OF 30 INCHES IN FRONT OF THE BROILER MUST BE MAINTAINED AT ALL TIMES.





8. READ MAINTENANCE INSTRUCTIONS COMPLETELY.

9. File these instructions for future reference.

### **MAINTENANCE INSTRUCTIONS**

**WARNING:** READ ALL INSTRUCTIONS CAREFULLY AND COMPLETELY. IMPROPER USE OR IMPROPER MAINTENANCE OF THIS APPLIANCE MAY RESULT IN A BUILDING FIRE OR PERSONAL INJURY.

1. Always keep the area around the unit clean and clear of all combustible materials. Keep all furnishings, wood and other combustible objects a considerable distance away from the broiler.
2. Ashes should be removed when cold if possible. Ashes must be placed in a metal container with a tight fitting lid. The closed container of ashes must be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooked.

**DO NOT STORE ASHES BENEATH UNIT OR ADJACENT WOOD STORAGE.**

3. Store wood in cool, dry place well away from any source of flame or heat. If stored outside, keep the wood covered to protect from rain or snow. If stored inside (e.g., same room as the broiler), wood should be kept in a covered metal container at least 6 inches above the floor. Keep paper, rags, and other easily ignited materials away from the wood supply.

Small amounts of firewood may be stored in the same room as the broiler during actual attended use of the broiler only. When storing wood in the same room as the unit, place in a proper covered metal storage container standing at least 6 inches above the floor. Keep the container a considerable distance from the unit and far from any source of heat or ignition. Do not store wood, matches or other combustibles above the unit. Remove the firewood and container from the building when the broiler is not in use and store in a proper manner away from other firewood and other combustible materials.

**DO NOT STORE FUEL, MATCHES OR OTHER COMBUSTIBLES NEAR FIREWOOD OR THE BROILER. EXTREME CAUTION MUST BE TAKEN TO KEEP COALS, HOT ASHES, AND OTHER SOURCES OF COMBUSTION AWAY FROM THE FIREWOOD. IF COALS OR ASHES FALL INTO THE FIREWOOD, REMOVE ASHES IMMEDIATELY AND THEN REMOVE AFFECTED FIREWOOD FROM THE BUILDING.**

4. At the end of each shift, or sooner if needed, the area around the unit must be thoroughly cleaned of all wood, wood shavings, coals, ashes and other refuse. All mats (if present, mats must be noncombustible) must be picked up and the floor and mats carefully swept during this clean up. After clean-up around the unit, brooms should be wet down thoroughly to extinguish hot coals, then stored away from combustible materials.
5. The broiler, grease hood and grease extractors should be cleaned on a daily basis. The filters can be removed and cleaned in a dishwasher or sink.



DO NOT CLEAN UNIT, HOOD OR VENT SYSTEM WHILE HOT OR WHILE THE BROILER IS BEING FIRED. REFER TO EXHAUST HOOD MANUFACTURER'S RECOMMENDATIONS FOR INSPECTION, MAINTENANCE AND CLEANING.

6. The entire unit and vent system should be inspected frequently for proper fit, operation and soundness of parts. If any malfunctioning parts, leakage, deterioration, or other problems are noted, contact your dealer to inspect and repair the unit, or qualified ventilation repair service to inspect and repair the vent system. DO NOT OPERATE THE BROILER IF ANY PART OF THE SYSTEM IS FUNCTIONING IMPROPERLY.
7. IF ANY FIREBRICK IS MISSING, IT SHOULD BE REPLACED BEFORE OPERATING THE BROILER.
8. Qualified personnel must perform all maintenance only.
9. Do not use products not specified for use with this broiler.
10. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

