

OWNERS MANUAL AND INSTALLATION INSTRUCTIONS



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• MESQUITE WOOD BROILER

All Imperial Mfg. Co. equipment is manufactured for use with the type of gas specified on the rating plate and for installation in accordance with ANSI Z223.1 (latest edition) of the National Fuel Gas Code. Copies may be obtained from the American Gas Association, 1515 Wilson Blvd. Arlington, VA 22209.

FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE OR OTHER
FLAMMABLE VAPORS AND LIQUIDS IN THE

Instructions to be followed in case the user smells gas are to be posted in a prominent location in the kitchen area. This information shall be obtained by contacting the local gas company or gas supplier.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

IMPORTANT

Safe and satisfactory operation of your equipment depends to a great extent on its proper installation. Installation must conform to local codes, or in the absence of local codes, with the National Fuel Code, ANSI Z223.1 (latest edition.)

All Imperial appliances are shipped with a gas pressure regulator packed with the unit. All units are adjusted, tested, and inspected at the factory prior to shipment.

After uncrating, immediately check the equipment for visible signs of shipping damage. If such damage has occurred, do not refuse shipment, but contact the shipper and file the appropriate freight claims.

GENERAL

- (1) Installation of this equipment should be made by a licensed plumber.
- (2) A manual gas shut-off valve must be installed in the gas supply (service) line ahead of the appliance and gas pressure regulator in the gas stream for safety and ease of future service.
- (3) The gas pressure regulator supplied must be installed on the appliance prior to connecting the equipment to the gas line. Failure to install a regulator will void the equipment warranty and result in a potentially hazardous condition.
- (4) The appliance and its individual shut off 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 PSI.
- (5) The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSI.
- (6) Top cooking surface to bottom of vent filter should be minimum of 26 inches.
- (7) Vent fan should have a capacity of approximately 200 c.f.m. per square feet of broiler surface.
- (8) When connecting gas service to broiler inlet nipple, make certain nipple is held by backup wrench.
- (9) After gas connection has been made, turn on gas supply and check all joints in gas line for leaks with a soapy water solution.
DO NOT USE A FLAME FOR CHECKING LEAKS.
- (10) Spread Mesquite Wood evenly over the bottom grate surface to a maximum depth of 1-1/2 inches.
- (11) Please contact the factory, the factory representative, or a local service company to perform maintenance and repairs.

RATING PLATE

Information on this plate includes the model and serial numbers. When communicating with factory about a unit or requesting special parts or information, this data is essential for proper identification. Other information on this plate is the BTU/hr input of the burners, operating gas pressure in inches WC, and whether the unit is orificed for natural or propane gas.

IMPERIAL COOKING APPLIANCES MUST BE CONNECTED ONLY TO THE TYPE OF GAS IDENTIFIED ON THE RATING PLATE!

CLEARANCES

The appliance area must be kept free and clear of all combustibles. This unit is design-certified for the following installations only: Check the rating plate on the unit for appropriate clearances.

LEVELING

A carpenter's spirit level should be placed on the cooking surface and the unit leveled both front-to-back and side-to-side. The mesquite broiler series should be leveled to improved performance. The spirit level should be placed on the upper edge of the chassis for this leveling procedure.

AIR SUPPLY & VENTILATION

The area in front of, around, and above the appliance must be kept clear to avoid any obstruction of the flow of combustion and ventilation air. Adequate clearance must be maintained at all times in front and at the sides of the appliances for servicing and proper operation. If your unit is supplied from the factory with adjustable legs, these legs must not be removed for any reason.

Means must be provided for any commercial, heavy-duty cooking appliance to exhaust combustion waste products to the outside of the building. Usual practice is to place the unit under an exhaust hood. Filters and drip troughs should be part of any industrial hood, but consult local codes before constructing and installing a hood. Strong exhaust fans in the hood or in the overall air conditioning system can produce a slight vacuum in the room and/or cause air drafts, either of which can interfere with pilot or burner performance and can also be hard to diagnose. Air movement should be checked during installation; if pilot or burner outage problems persist, make-up air openings or baffles may have to be provided in the room.

GAS CONNECTION

NOTE:

The gas supply (service) line must be the same size or greater than the inlet line of the appliance. Imperial counter equipment and unit broilers use a 3/4" NPT(Sch40) inlet. Sealant on all pipe joints must be resistive to LP gas.

MANUAL SHUT-OFF VALVE

This installer-supplied valve must be installed in the gas service line ahead of the appliance and regulator in the gas stream and in a position where it can be reached quickly in the event of an emergency.

PRESSURE REGULATOR

All commercial cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. The manual shut-off valve is normally supplied by the installer, but a pressure regulator is packed inside each Imperial unit.

Failure to install a pressure regulator will void the equipment warranty!

The regulators supplied for Imperial units have 3/4" inlet/outlet openings and are adjusted at the factory for 5" WC (natural gas) or 10" WC (propane) depending on the customer's ordering instructions. Care must be taken to ensure that the regulator is not installed in the path of flue gases, or in other high heat areas.

Prior to connecting the regulator, check the incoming line pressure, as these regulators can only withstand a maximum pressure of 1/2 PSI (14" WC). If the line pressure is beyond this limit, a step-down regulator will be required. The arrow forged into the bottom of the regulator body shows gas flow direction; it should point downstream to the appliance. The red air vent cap on the top regulator is part of the regulator and should not be removed.

Any adjustments to regulators must be made only by qualified service personnel with the proper test equipment.

RIGID CONNECTIONS

Double-check any installer-supplied gas pipes visually and/or blow them out with compressed air to clear any dirt particles, threading chips, or other foreign matter before installing a service line. Those particles will clog orifices when gas pressure is applied.

All connections must be sealed with a joint compound suitable for LP gas, and all connections must be tested with a soapy

water solution before lighting any pilots!

FLEXIBLE COUPLINGS, CONNECTORS AND CASTERS

If the unit is to be installed with flexible couplings and/or quick-disconnect fittings, the installer must use a heavy-duty, AGA design-certified commercial flexible connector of at least 3/4" NPT (with suitable strain reliefs). The flexible connector must comply with the standard for Connectors for Movable Gas Appliances, ANSI Z21.69 and addendum Z21.69a (or latest edition). Quick-Disconnect Devices for use with Gas Fuel, ANSI Z21.41 and addendum Z21.41b (or latest edition). If disconnection of the restraint is necessary, make sure to reconnect restraint after the appliance has been returned to its originally installed position. Domestic gas or water connectors are not suitable and must never be used!

All connections must be sealed with a joint compound suitable for LP gas and all connections must be tested with a soapy water solution before lighting pilots.

INITIAL PILOT LIGHTING

CAUTION

When lighting pilots and checking for leaks, do not stand with your face close to the combustion chamber.

All Imperial Mfg. Co. appliances are adjusted and tested before leaving the factory, effectively matching them to sea level conditions. Adjustments and calibrations to assure proper operation may be necessary on installation to meet local conditions, low gas characteristics, to correct possible problems caused by rough handling or vibration during shipment, and are to be performed only by qualified service personnel. These adjustments are the responsibility of the customer and/or dealer and are not covered by our warranty.

Check all gas connections for leaks with a soapy water solution before lighting any pilots. **DO NOT USE AN OPEN FLAME TO CHECK FOR LEAKS!** Putting an open flame beside a new gas connection is extremely dangerous.

Before lighting any pilots, make sure that burner valves are turned "off".

A. LOG LIGHTER

Log lighter burners are equipped with constant-burning pilots. These are to be manually lighted immediately after the gas is turned on and the system is checked for leaks. Log lighter pilots are provided for each burner and can be rechecked for proper adjustment down through the top grate. Adjustments can be made with a screwdriver to the pilot valve accessible through the valve cover.

FINAL PREPARATION

A. TOP SECTION

New units are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, or grease remaining from the thin film of nontoxic rust protectant. Food preparation surfaces should be washed thoroughly with hot, soapy water before being used.

The top grates should be removed and washed before use. With these removed, it will be possible to remove any plastic tie cords holding the burners in place.

OPERATING AND ADJUSTMENT

- (1) Place gas control knobs in the "off" position.
- (2) Remove bottom ash can.
- (3) Light pilots from underneath.
- (4) Turn main gas "on" and "off" several times and observe the flames on the log-lighter. If flame are yellow and soft, open the air shutter slightly or until yellow disappears. If flames seem to blow or lift from burner port holes, close the air shutter until this does not occur. Secure air shutter after burner has been adjusted. All broilers are factory adjusted, but gas conditions vary slightly from one locality to another.
- (5) Turn gas burners "on". The burner should be left on full to ignite wood. Once the mesquite wood has started glowing, the burner can be shut "off". Often, only the bottom portion of wood will become totally red, with the upper layer becoming partially red. This provides adequate radiation for superior Mesquite Wood Char-Broiler performance.
- (6) Be sure to preheat the unit for about 20 minutes before cooking on the Mesquite Wood Char-Broiler, then simply place the foods to be broiled on the top grate, allowing somewhat less time than usually required on open griddles. Turn foods when brown on underside, with the appetizing broiler marking, so popular with the public and continue to cook on opposite side to desired degree of doneness.
- (7) The area of greatest heat is at the back and center portion of the broiler. Use this to your advantage. For instance, if you

have completed broiling meats, and are not ready to serve them, simply move meat to the front section of the grate where they will remain hot, but will not become more done.

NOTE:

The effectiveness and durability of this equipment is subject to air circulation, type of fuel, loading method, and general method of usage by the operator.

Solid fueled broilers operate at a much higher temperature (800 to 1000 degrees) than gas-fired units (most aga rated at 600 degrees)

The exact temperature for different types of cooking must be determined experimentally by the user. Cajun cooking, for example, may need flames about 6 inches above the grate. It must be noted, however that grates will burn out and require replacement much faster with high heat and flames. Heating with coals instead of flames (as used for cooking fish) means longer part life.

Use of the proper parts is important. Bottom grates below the fire box (3 plates- left to right) with punched out holes are used for air dampers. If the fire is burning too hot, air can be reduced by sliding plate to close off the holes. If the fire is smoldering, air can be increased by adjusting, or removing one plate.

CLEANING AND MAINTENANCE

Any piece of equipment works better and lasts longer when maintained properly. Cooking equipment is no exception. Your Imperial range and oven must be kept clean during the working day and thoroughly cleaned at the end of the day.

DAILY

1. Remove large pieces of food residue and carefully scrape spillovers from the drip tray below the cooking surface.
2. Wash all exterior and interior surfaces with a hot soapy water solution. DO NOT use harsh abrasives on any portion of the stainless or painted surfaces.
3. Cast iron grates should be scraped with a wire brush frequently, and periodically soaked in a hot water solution to remove grease from the pores of the cast iron. NEVER expose the grate(s) to extreme heat for the purpose of burning off excess grease. This practice will shorten the useful life of the grates.
4. Keep bottom grates clean to prevent carbon build up.

PERIODIC CLEANING

Your Imperial range should be checked for safe and efficient operation at least yearly by a qualified service company.

STAINLESS STEEL

All stainless steel body parts should be wiped regularly with hot soapy water during the day and with a liquid cleaner designed for this material at the end of each day. DO NOT USE steel wool, abrasive cloths, cleansers or powders to clean stainless surfaces! If it is necessary to scrape stainless steel to remove encrusted materials, soak in hot water to loosen the material, then use a wood or nylon scraper. DO NOT USE a metal knife, spatula, or any other metal tool to scrape stainless steel! Scratches are almost impossible to remove.