OWNERS MANUAL INSTALLATION, OPERATION, & MAINTENANCE INSTRUCTIONS



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ICRA SERIES • CHINESE RANGES

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/NFPA 54 (latest edition) of the National Fuel Gas Code, the National Gas Installation Code, CSA/B149.1 or the Propane Installation code, CSA/B149.1, as applicable.

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 servicing this equipment.

FOR YOUR SAFETY

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

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 Gas Code ANSI Z223.1/NFPA 54, the National Gas Installation Code, CSA/B149.1or the Propane Installation code, CSA/B149.1, as applicable.

Imperial cooking appliances are restaurant grade.

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.

SHIPPING DAMAGE CLAIM PROCEDURE

The equipment is inspected & crated carefully by skilled personnel before leaving factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this equipment. If shipment arrives damaged:

- 1. Visible loss or damage: Note on freight bill or express delivery and have signed by person making delivery.
- 2. File claim for damages immediately: Regardless of extent of damages.
- 3. Concealed loss or damage: If damage is noticed after unpacking, notify transportation company immediately and file "Concealed Damage" claim with them. This should be done within fifteen (15) days from date delivery is made to you. Retain container for inspection.

GENERAL

Installation of this equipment should be made by a licensed plumber.

- (1) 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.
- (2) 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. If the total BTU input rating exceeds 600,000 the range will have two gas inlets. A gas inlet pipe will be located in the rear at each end of the range. The gas pressure regulators provided must be installed for safe, proper operation.
- (3) The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of ½ PSI.
- (4) 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 ½ PSI.
- (5) 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:

For installation on non-combustible floors.

Clearances from **combustible** and **noncombustible** are as follows:

	<u>Combustible</u>	<u>Noncombustible</u>
Back	12"	0
Sides	6"	0

CAUTION

DO NOT PUSH against the end of the valve cover/landing ledge in an attempt to adjust the ranges position. Although this part is deburred during manufacturing, an accident could occur if the range should move suddenly while being pushed into position by hand.

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.

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 construction and installing a hood.

Strong exhaust fans in this 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, makeup air opening 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. Contact manufacturer for inlet size of unit. 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.

WARNING:

The equipment is to be installed to comply with the basic plumbing code of the Building Officials and Code Administrators International Inc. (BOCA) and the Food Service Sanitation manual of the Food and Drug Administration (FDA).

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 supplied by the installer, however, 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 ranges are adjusted at the factory for 5" WC (natural gas) or 10" WC (propane) depending on the customer's ordering instructions.

Prior to connecting the regulator, check the incoming line pressure, as these regulators can only withstand a maximum pressure of ½ 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 blue air vent cap on the top of the ¾" regulator is part of the regulator and should not be removed. The 1 ¼" regulator requires a limiter or to be plumed in accordance with code.

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

NOTE: Gas regulator inlet/outlet size may be smaller than gas line inlet size for stove. However, installer may use a reduction fitting. Appropriate gas regulator(s) are selected based on total BTU rating and other specification, not inlet/outlet size.

RIGID CONNECTIONS

Double-check any installer-supplied intake 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 <u>must</u> use a heavy-duty, AGA design-certified commercial flexible connector of at least ³/₄" NPT (with suitable stain reliefs). The flexible connector must comply with the standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (or latest edition) CSA 6. 16 (or latest edition) and a quick-disconnect device that complies with the standard for quick-disconnect devices for use with Gas Fuel should comply with ANSI Z21.41(or latest edition) CSA 6.9 (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.

Restraining device may be attached to the back frame/panel of the unit.

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.

WATER CONNECTIONS

A backflow prevention device must be placed in the water supply line if required by local codes. This device is not provided by Imperial Manufacturing.

A perforated water pipe line is factory installed underneath the stainless steel ledge, located across the entire front of the range. The range top should be adjusted to achieve about a 1" pitch. This pitch will result in a flow from the front of the range (which is 1" higher) to the rear garbage trough. The water supply is designed to provide a constant flow of water over the range top to allow for cooling of the range as well as enabling the range top to be kept clean.

INITIAL PILOT LIGHTING

CAUTION

When lighting pilots and checking for leaks, <u>do not</u> Stand with your face close to the combustion chamber.

All Imperial Mfg. 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 <u>only</u> 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".

The pilot should be lit immediately after the gas is turned on and the system is checked for leaks. The pilot can be reached with a long match through the WOK opening in the top of the range.

Pilot adjustment is achieved by using the small brass pilot adjustment screw located through the front panel. Make sure any accumulated gas has dispersed. Since propane gas is heavier than air, check near the floor area for the odor of propane gas before attempting to light any pilot burners.

TO CHECK FOR LEAKS

- (1) Check pilot tubing and burner tubing for leaks where they enter the gas valve with a soapy water solution.
- (2) Light the pilot as described above.
- (3) Check the burner visually for blue flame. There should be no yellow tips or soot. If yellow tipping occurs, call an authorized service person.

FINAL PREPARATION

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

Rinse with a mixture of ½ cup vinegar to one-quart water.

CLEANING AND MAINTENANCE

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

CAUTION

NEVER USE AMMONIA IN AN OVEN THAT IS WARMER THAN ROOM TEMPERATURE AND ALWAYS HAVE DIRECT VENTILATION

DAILY:

- 1. Wash with hot, soapy water, and rinse with vinegar and water.
- 2. Rinse again with clear water.
- 3. For stubborn, harden grease spots see instructions below.

A qualified service company should check your Imperial range for safe and efficient operation at least yearly.

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 surface. 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.