

OWNERS MANUAL  
INSTALLATION, OPERATION, & MAINTENANCE INSTRUCTIONS



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**IPC SERIES PASTA COOKER**

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**

Installing, Operating and Service Personnel:

Installation of the equipment should be performed by qualified, certified, licensed and/or authorized personnel who are familiar with and experienced in state/local installation codes. Operation of the equipment should be performed by qualified or authorized personnel who have read this manual and are familiar with the function of the equipment. Service of the equipment should be performed by qualified personnel who are knowledgeable with Imperial Ranges.

**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.

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

## INSTALLATION INSTRUCTIONS:

The pasta cooker should be placed in an area which is free from drafts and accessible for proper operation and servicing. The area around the pasta cooker must be kept clear of combustible materials.

CLEARANCE	COMBUSTIBLE	NON-COMBUSTIBLE
Sides	6"	0"
Rear	6"	0"
Floor	6"	6"

Installation on non-combustible floor only shall be with factory supplied casters.

It is also important not to obstruct the natural flow of combustion and ventilation air for the pasta cooker to operate properly. Provide adequate clearance around air openings into the combustion chamber.

## RATING PLATE:

Before making any connections to the pasta cooker, check the rating plate to be sure the pasta cooker specifications concur with the type of gas to be supplied to the pasta cooker. The rating plate is located on the inside of the door.

Information on this plate includes model and serial numbers. When communicating with the 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. Pilot lighting instructions are also located in the same area.

## PLUMBING CONNECTIONS:

The plumbing installation should be done by a licensed plumber and must comply with local and national codes.

If a faucet or water fill option is equipped on your appliance connections to a potable water supply will be required. If a single water connection is required it is recommended that the appliance is connected to hot water supply. This will greatly decrease the time it takes for the appliance to reach operating temperature. Water hardness should contain no more than 2.0 grains/gallon. The pH level should be between 6.5 and 8.0 these conditions can be obtained with the use of a properly maintained water softener. The incoming water pressure should be between 20 Psi to 60 Psi. For higher pressures, a high-pressure regulator must be installed to inlet plumbing to avoid damage caused by water hammer. The maximum allowable incoming water temperature is 180°F.

### WARNING

**When water is at a high temperature and high pressure, excessive splashing of hot water may occur that could result in injury.**

Each tank has a drain that can be inserted into a drainage system. Each tank also has an overflow line. The overflow connection is after the drain valve to provide an unobstructed overflow path. The drain and overflow line for each tank is connected together to form a common drain line.

After the appliance has been properly installed as described in the installation section of this manual, it will need to be adjusted to ensure that it will perform as designed. A qualified person must perform these adjustments.

## **GAS PIPING:**

The installation of the pasta cooker must conform with local codes, or in the absence of local codes, with the National Fuel Code, ANSI Z223.1/NFPA 54, the National Gas Installation Code, CSA B149.1, as applicable.

1. The pasta cooker 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 ½ Psig (3.45KPa).
2. The pasta cooker 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 Psig (3.45 KPa). The pasta cooker is provided with a ¾” NPT inlet.

Your local gas supplier should consult the National Fuel Gas Code for proper sizing and installation of gas piping. Generally, piping should be sized to provide a gas supply sufficient to meet the maximum demand of **all** gas appliances on a line without undue loss of pressure at the outlet to the equipment. The total BTU requirements of the equipment being served and the length of the piping from the meter to the appliances are major considerations in the proper design of the gas supply system.

Sealants on pipe joints must be resistive to propane gas. Check for leaks at all connections with soap and water solution. **Do not use flame to check for leaks.**

Imperial pasta cooker is equipped with millivolt control system, it does not need an outside power source.

## **VENTILATION:**

Proper ventilation is very important for the proper function of your pasta cooker as well as to remove unwanted vapors and products of combustion. To keep your warranty in force, a proper ventilation system must be employed.

## **LEVELING:**

After setting in position, level the pasta cooker front to back and left to right. If it is not leveled, the pasta cooker may not function properly.

## **FILLING THE APPLIANCE**

It is recommended that the tank is filled with hot water. This will greatly decrease the time it takes for the appliance to reach operating temperature.

Refer to the following procedure to fill the cook tank prior to operation.

1. Ensure that the drain valve is closed
2. Fill the tank with water until the water reaches the water level line(s).

## **TANK CAPACITY**

MODEL	CAPACITY
IPC-14	12 GAL (45.5 LITERS)
IPC-18	16 GAL (60.5 LITERS)

### **WARNING**

**WATER MUST COMPLETELY COVER THE HEAT TUBES AT ALL TIMES WHILE APPLIANCE IS ON. DURING OPERATION THERE IS AN OPEN FLAME INSIDE THE APPLIANCE. THE UNIT MAY GET HOT ENOUGH TO SET NEAR BY MATERIALS ON FIRE. KEEP THE AREA AROUND THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS.**

**CAUTION**  
**THIS APPLIANCE IS NOT DESIGNED FOR COOKING WITH OIL. FILL WITH POTABLE WATER ONLY.**

### **FILLING THE RINSE TANK**

Once pasta is cooked to the desired doneness it will continue to cook after being removed from the cooked tank until its internal temperature is lowered. Submerging the pasta in cold water or rinsing it with water will lower the pasta's internal temperature and stop the cooking process. Rinsing or submerging will also prevent sticking and remove dissolved starch. If the appliance is equipped with a rinse tank, it may be filled with cold (or ice) water for submerging the pasta after it leaves the cook tank.

Refer to the following procedure to fill the cook tank prior to operation.

1. Ensure that the drain valve is closed.
2. Fill the tank with cold water (and ice if desired) until the water reaches the water level line(s).

If the rinse tank does not have level lines, fill the tank so that the water is 4 inches below the overflow. The tank can be filled up beyond the desired level but water may be lost through the overflow once pasta is placed into the tank.

### **LIGHTING INSTRUCTIONS:**

1. Set the thermostat and the gas cock dial on the combination gas valve to the "OFF" position.
2. Wait for five minutes
3. Turn gas cock dial on the combination gas valve to "PILOT" position.
4. Depress the gas cock dial and apply a lighted match or taper to the pilot.
5. Hold the gas cock dial depressed for about 30 seconds or until pilot stays lit before releasing.
6. If the pilot does not stay lit, repeat steps 4 and 5.

### **PILOT FLAME ADJUSTMENT:**

The following should be done by a qualified technician.

1. Remove the cap screw located below the pilot tubing on the gas valve. The pilot flame adjustment screw is recessed behind this. Turning the pilot flame adjustment screw clockwise lowers the pilot flame. Turning the pilot flame adjustment screw counter-clockwise increases the pilot flame size.
2. Rotate the screw in the direction needed to achieve a sharp and stable pilot flame.
3. Replace the screw cap

### **MAIN BURNER SYSTEM ADJUSTMENT:**

The following should be done by a qualified technician.

The main burners must be adjusted to deliver optimum flame. Refer to the following procedure to adjust the main burners.

1. With the main burner ON, use a pressure gauge to verify that the manifold pressure is within +/- 0.1" W.C. of the specified manifold pressure indicated on the rating plate.
2. To adjust the pressure, use a flat head screwdriver and turn the regulator screw clockwise or counter-clockwise to increase or decrease the pressure respectively, until the proper manifold pressure is reached.
3. Flame adjustment for the main burners is best achieved by proper alignment of the burner jet flame inside the tank tubes. Loosen the burner top mounting screw and adjust flame to a soft blue with well-defined inner cones. Avoid flame impingement on the edges of the tube outer periphery.

4. When the main burner flames have been properly adjusted, tighten the main burner top mounting screws.

#### **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 of Connectors for Movable Gas Appliances, ANSI Z21.69 and addendum Z21.69a (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 and addendum Z721.41a (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.

If the unit is to be installed with casters, a flexible connector must be used and the same ANSI standards apply. Locking front casters are provided to limit the movement of the appliance without depending on the connector or associated piping. A suitable strain relief must be installed with the flexible connector.

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.

#### **OPERATION INSTRUCTIONS**

##### **WARNING**

**Hot water and hot surfaces can cause severe burns. Use caution when operating the pasta cooker. Do not attempt to move the pasta cooker filled with hot water. Do not go near the area directly above the flue when pasta cooker is in operation. Severe burns may be caused. The unit is designed to drain to a floor drain.**

**PREPARATION FOR USE:** New units have a coating of oil on the interior of the vessel. Remove this coating with hot soapy water, washing soda, or any other grease dissolving liquid. Rinse thoroughly and drain until all residues are removed. Wipe dry. Clean the baskets and crumb screen.

**PILOT OPERATION:** Check & make sure the pilot is lit. If not, refer to previous section for lighting the pilot.

#### **APPLIANCE SHUTDOWN:**

There are two shutdown modes of appliance operation: STAND BY and COMPLETE. The stand by mode removes the ability of the appliances main burners to operate. Complete shutdown turns off the gas supply to the appliance. Refer to the following procedures to enter the appropriate shutdown mode.

##### **STAND BY MODE**

1. If the appliance is equipped with a controller it should be turned OFF. If the controller has an ON/OFF button, press and hold the button until the controller is off.
2. If the appliance is equipped with a ON/OFF switch, turn it to the OFF position.
3. Turn thermostat to "OFF" position.
4. Turn the knob on the gas valve clockwise to the PILOT position

##### **WARNING**

**NEVER leave the appliance in standby mode for prolonged periods or overnight**

## **COMPLETE SHUTDOWN**

1. If the appliance is equipped with a controller it should be turned “OFF”. If the controller has an ON/OFF button, press and hold the button until the controller is off.
2. If the appliance is equipped with an ON/OFF switch, turn it to the OFF position.
3. Turn thermostat to “OFF” position.
4. Turn the ON/OFF knob on the gas valve clockwise to the OFF position.
5. The appliance is now completely shut down and can be cleaned if desired.

## **CLEANING:**

For continued performance efficiency and longevity of your pasta cooker it is essential to carry out a good maintenance program.

## **DAILY**

1. Drain and flush vessel thoroughly ensuring to rinse all salts from vessel.
2. Remove and wash thoroughly all “loose” parts (basket hanger, baskets, crumb screens, etc.)
3. Wipe clean all exterior and interior accessible surfaces and parts.
4. If pasta cooker is under heavy use, replace water more often during the day.

## **WEEKLY**

1. Shut down the pasta cooker by turning off the gas cock dial and power supply, where applicable.
2. Drain the pasta cooker in floor drain. Flush out sediments at the bottom of the vessel with water.
3. Close the drain valve and fill the vessel with a mixture of boil-out solution and water.
4. Relight the pilot and turn on the burners.
5. When the solution starts to boil, turn off the thermostat and let the vessel soak to soften. (Approximately 1 hour)
6. Drain off solution, scrub the insides with brush and rinse thoroughly.
7. Repeat the cleaning procedure, if necessary.
8. Refill with clean water.

## **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.

## **PREVENTIVE MAINTENANCE:**

Periodically have a qualified service personnel check and adjust all the control components.

## **CHECKING AND CALIBRATING THERMOSTAT:**

### **CHECKING:**

1. Fill the vessel with water up to the “water level” marking.
2. Turn the thermostat and set @ 200°F.
3. Set a thermometer in the water and let the pasta cooker cycle few times before reading the thermometer.
4. If the temperature differential between the thermostat and the thermometer is more that 5°F, recalibrate the thermostat.

**CALIBRATING:**

1. Pull the thermostat knob out. Use a screw driver to turn the trim screw inside the thermostat stem.
2. Turn counterclockwise to increase and clockwise to decrease the temperature. (Do not turn the stem while turning the screw!). Re-install the knob and check to see if the thermostat setting and the thermometer reading are the same.

**REMOVAL AND REPLACEMENT OF PARTS**

The following should be performed by a qualified technician.

**BURNERS:**

1. Loosen the bolts at the top of the burner
2. Hold the venturi portion, slide up and push back to remove
3. Reverse procedure to replace

**WARNING:** Shut-off gas supply before servicing this equipment.

**GAS VALVE:**

Disconnect wires from the valve and unscrew the pipe fitting.

**PILOT:**

1. Disconnect tubing and thermopile from the pilot by unscrewing the nut.
2. Remove screws holding the pilot to the mounting bracket.

**THERMOSTAT/HI-LIMIT:**

1. Drain vessel. Unscrew and remove the bulb holding down the bracket. Unscrew the nut at the vessel bottom.
2. Pull the bulb out from underneath. Pull the thermostat knob out. Unscrew the thermostat/hi-limit from the mounting bracket. Reverse the procedure to install.

**FOR SERVICE OR ORDERING PARTS:**

Have the following information ready before contacting for service or ordering.

1. Model number and serial number of the pasta cooker
2. Type of gas used (natural or propane) and altitude if over 2000 feet
3. Part name and the corresponding part number. Contact the factory service at (951)281-1830 or FAX (951)281-1879 or any factory authorized service agency and/or parts distributors

## TROUBLE SHOOTING

<u>PROBLEM</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
Pilot will not light	<ul style="list-style-type: none"> <li>A. No gas</li> <li>B. Gas cock dial not set at "Pilot" position and depressed.</li> </ul>	<ul style="list-style-type: none"> <li>A. Turn main gas valve "ON"</li> <li>B. Set gas cock dial on combination gas valve to "Pilot". Depress and hold while lighting</li> </ul>
Pilot will not stay lit	<ul style="list-style-type: none"> <li>A. Gas cock dial not depressed and held long enough.</li> <li>B. Defective thermopile</li> <li>C. Pilot flame not properly adjusted</li> </ul>	<ul style="list-style-type: none"> <li>A. Depress and hold for at least 30 seconds.</li> <li>B. Replace.</li> <li>C. Adjust pilot flame with pilot adjustment screw on the combination valve.</li> </ul>
Main burners will not ignite	<ul style="list-style-type: none"> <li>A. Pilot not lit.</li> <li>B. Thermopile not properly installed in the pilot.</li> <li>C. Gas cock dial not set at "ON" position.</li> <li>D. Thermostat not set at any temperature.</li> <li>E. Defective gas valve.</li> <li>F. Defective hi-limit switch.</li> </ul>	<ul style="list-style-type: none"> <li>A. Light the pilot.</li> <li>B. Push in and tighten. Pilot flame should engulf the thermopile.</li> <li>C. Turn and set gas cock dial to "ON" position.</li> <li>D. Set thermostat to desired temperature.</li> <li>E. Replace.</li> <li>F. Replace.</li> </ul>
Pasta cooker does not heat up	<ul style="list-style-type: none"> <li>A. Insufficient gas.</li> <li>B. Line clogged.</li> <li>C. Overloading the pasta cooker.</li> </ul>	<ul style="list-style-type: none"> <li>A. Check gas pressure.</li> <li>B. Remove and clean gas line.</li> <li>C. Cook smaller loads. Need larger pasta cooker.</li> </ul>
Water/ scorches and breaks down	<ul style="list-style-type: none"> <li>A. Operating temperature too high.</li> <li>B. Thermostat out of calibration</li> <li>C. Water/ overused.</li> <li>D. Water/ not filtered frequently.</li> </ul>	<ul style="list-style-type: none"> <li>A. Set at proper temperature</li> <li>B. Re-calibrate</li> <li>C. Replace with new</li> <li>D. Under heavy usage, filter frequently during the day</li> </ul>
Temperature cannot be controlled	<ul style="list-style-type: none"> <li>A. Thermostat bulb out of proper position</li> <li>B. Thermostat out of calibration.</li> <li>C. Defective thermostat</li> <li>D. Defective gas valve</li> </ul>	<ul style="list-style-type: none"> <li>A. Relocate and secure at the proper position</li> <li>B. Re-calibrate</li> <li>C. Replace</li> <li>D. Replace</li> </ul>
Pasta cooker shut-off, cannot relight pilot	<ul style="list-style-type: none"> <li>A. Hi-limit cut off</li> <li>B. Defective thermostat</li> <li>C. Thermostat out of calibration.</li> <li>D. Hi-limit switch defective</li> </ul>	<ul style="list-style-type: none"> <li>A. Note: Cannot relight the pilot until temperature of water drops to 212F. Call service, if uncertain.</li> <li>B. Replace</li> <li>C. Recalibrate</li> <li>D. Replace</li> </ul>



