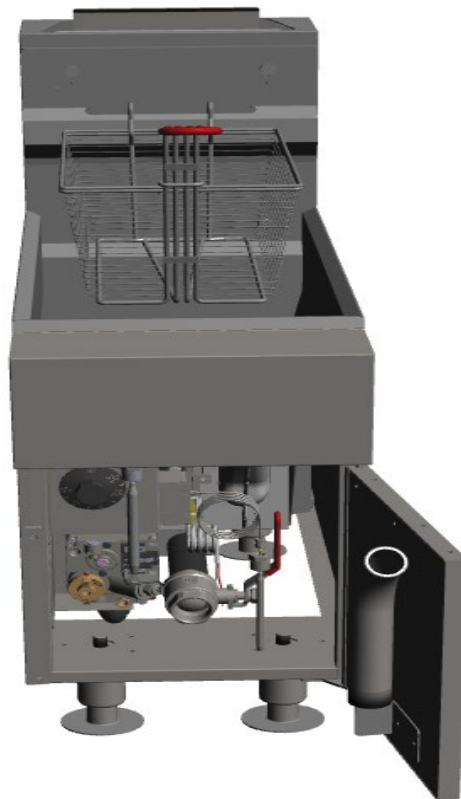


# **PATRIOT<sup>®</sup>**

---

## **INSTALLATION & OPERATIONAL MANUAL COUNTERTOP FRYER**



**MODELS: PT-CTF-2NG/LP & PT-CTF-3NG/LP**

## **IMPORTANT FOR YOUR SAFETY**

**THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.**

**IN THE EVENT A GAS ORDOR IS DETECTED, SHUT DOWN FRYER AT THE MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.**

### **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.**

# TABLE OF CONTENTS

- Important for your safety
- Introduction
  - General
  - Specifications
- Installation
  - Clearances
  - Location
  - Assembly
- Flue connection
- Gas connection
- Gas pressure
- Test gas supply
- Leveling the fryer
- Operation
- Over temperature shutdown
- Before first use
  - Cleaning
  - Filling the tank with shortening
  - Lighting the pilot
  - Turning on the fryer
  - Turning off the fryer
- Extended shutdown
- Basic frying instructions
  - Fry Basket Guidelines
  - Extended shortening life
- Daily filtering
- Daily cleaning
- Bolt out procedure
- Maintenance
- Flue vent inspection
- Troubleshooting

# INTRODUCTION

## GENERAL

This fryer is produced with quality workmanship and material. Proper installation, usage and maintenance will result in years of satisfactory performance.

Before using the fryer, thoroughly read this manual and carefully follow all instruction.

This manual is applicable the models listed below. Procedures in this manual will apply to all models unless specified.

## SPECIFICATIONS

MODEL	Qty of burners	BTU/hr.	Gas type	Orifice	Capacity
PT-CTF-2	2	44,000	Natural gas	#44(2.18mm)	25LBS
PT-CTF-2	2	44,000	Propane gas	#54(1.4mm)	25LBS
PT-CTF-3	3	66,000	Natural gas	#44(2.18mm)	35LBS
PT-CTF-3	3	66,000	Propane gas	#54(1.4mm)	35LBS

## INSTALLATION

Before installing the fryer, verify that the type of gas (natural or propane) is the same as the specifications on the fryer naming plate which is located at the rear part of the unit. Make sure the fryer is configured for the proper elevation.

Record your fryer model, device, and serial numbers for future reference in the space provided below. This information can be found on the fryer data plate.

**Model No:** \_\_\_\_\_

**Device:** \_\_\_\_\_

**Serial No:** \_\_\_\_\_

## **CLEARANCES**

- ☆ Minimum clearance from combustible materials:

6" (15 cm) from the sides of the fryer 6" (15 cm) from the back of the fryer

- ☆ Minimum clearance from noncombustible construction:

0" from the sides of the fryer 0" from the back of the fryer

- ☆ Between the fryer and any open flame equipment:

16" (41 cm)

## **LOCATION**

- ☆ Install fryer in an area with sufficient air supply for gas combustion.
- ☆ Do not obstruct the flow of combustion and ventilation air.
- ☆ Provide adequate clearance for air openings into the combustion chamber.
- ☆ Do not permit fans to blow directly onto fryer.

## **ASSEMBLY**

The fryer must be restrained to prevent tipping and the splashing of hot liquid. The means of restraint may be the manner of installation, such as connection to a battery of appliances, installing the fryer in an alcove, or by separate means such as adequate ties.

## **FLUE CONNECTION**

Make the flue connection as follows:

- ☆ Locate the fryer under a hood with adequate connection to an exhaust duct.  
The hood must extend 6" (15 cm) beyond fryer on both sides.
- ☆ Clearance above the fryer should be adequate for combustion by-products to be removed efficiently.
- ☆ An 18" (46 cm) minimum clearance should be maintained between the flue vent and the filters of the hood venting system. Never make flue connections directly to the fryer.

☆ Do not obstruct the flow of the gases from the appliance. Proper air balance should be maintained in the room.

## **GAS CONNECTION**

### **NOTICE**

All gas supply connections and any pipe joint compound must be resistant to the action of propane gases.

The gas inlet is located on the lower rear of the fryer. Codes require that a gas shutoff valve be installed in the gas line ahead of the fryer.

The gas supply line must be at least the equivalent of ½” (12.7 mm) iron pipe for single units and 1-1/4” (31.75 mm) for batteries.

Make sure the pipes are clean and free of obstructions, dirt, and piping compound. A battery requires one or two connections of appropriate size for the gas requirement.

### **⚠ WARNING**

Prior to lighting, check all joints in the gas supply line for leaks. Use soap and water solution. Do not use an open flame.

After piping has been checked for leaks, fully purge gas pipes to remove air.

## **GAS PRESSURES (ALL MODELS):**

The available gas pressure should be the same as that indicated on naming plate. If incoming pressure exceeds 5 kPa, an additional pressure regulator must be installed.

## **TESTING THE GAS SUPPLY PIPING SYSTEM:**

When test pressures exceed 5 kPa, the fryer and its individual shutoff valve must be disconnected from the gas supply piping system.

## LEVELING THE FRYER

Check that the fryer is level by placing a level on top of the fryer after gas connections have been made. Ensure that the fryer is level front-to-back and side-to-side in the final installed position.

## OPERATION

**▲ WARNING** Hot oil and parts can cause burns. Use care when operating, cleaning, and servicing the fryer.

**▲ WARNING** Spilling hot fryer oil can cause severe burns. Do not move fryer without draining all fryer oil from the tank.

## OVER-TEMPERATURE SHUTDOWN

If the oil becomes overheated, a high-temperature shutoff device will turn the gas valve off and extinguish the pilot.

If the fryer shuts down due to overheating, DO NOT re-light the pilot until the oil temperature is below 300°F

If an overheating situation persists, contact qualified technician for help.

## BEFORE FIRST USE

New units are wiped down at the factory to remove any visible signs of dirt, oil, grease, etc. remaining from the manufacturing process.

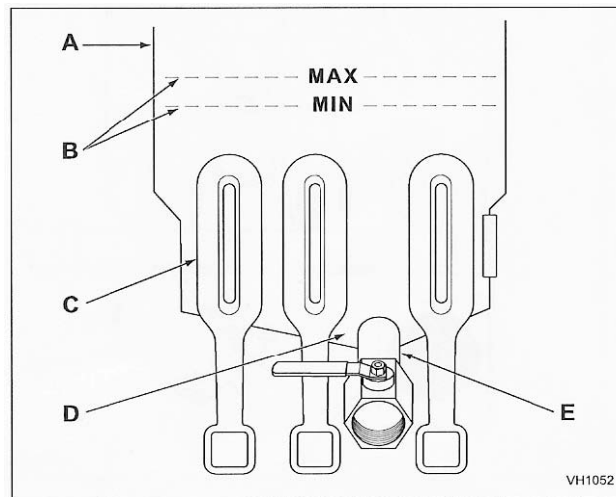
Before any food preparation, thoroughly wipe protective oil from all surface parts and the tank interior with hot soapy water to remove any film residue and dust or debris.

**NOTICE** Do not use chlorine or sulfate/sulfide cleaners.

☆ Clean fryer and accessories thoroughly and drain the fryer. Wipe tank completely dry with a soft, clean cloth.

## FILLING TANK WITH SHORTENING

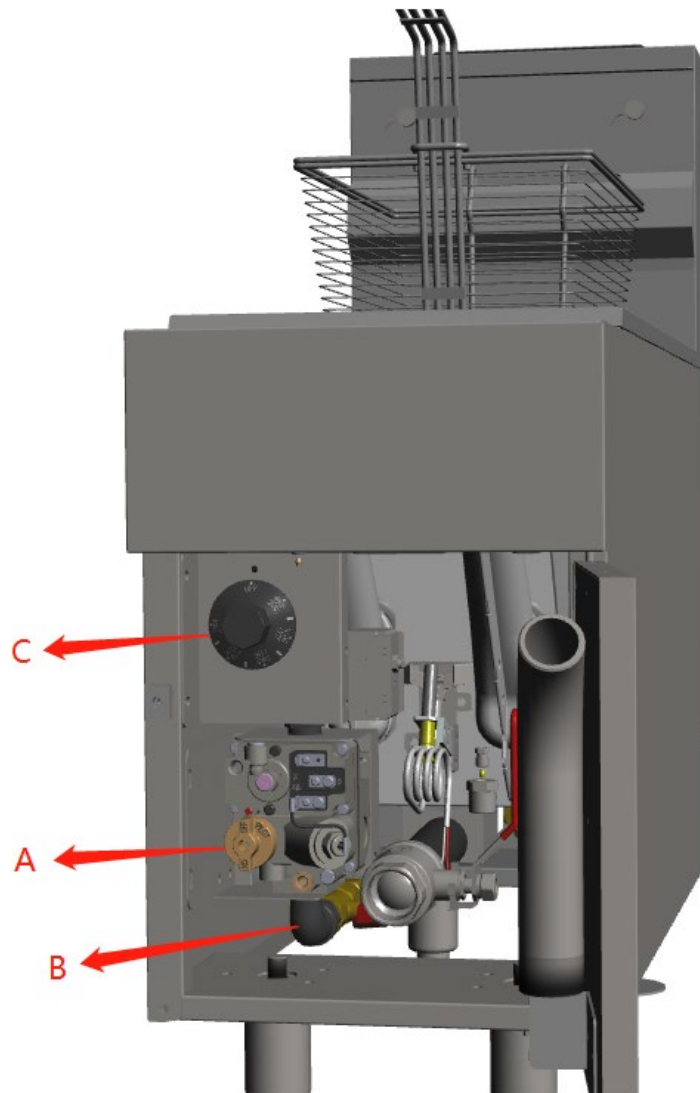
Solid shortening should NOT be used with this type of fryer. Melting solid shortening will damage the tank.



- A Fryer Tank**
- B MIN and MAX Fill Level Lines**
- C Heat Pipes**
- D Cold Zone**
- E Drain Pipe**

- ☆ Close the drain valve.
- ☆ Fill the fryer tank with liquid shortening.
- ☆ Shortening level should be between the min and max lines in the fryer tank.
- ☆ Shortening will expand when heated. Do not fill the fryer tank past the MAX line.

## LIGHTING THE PILOT



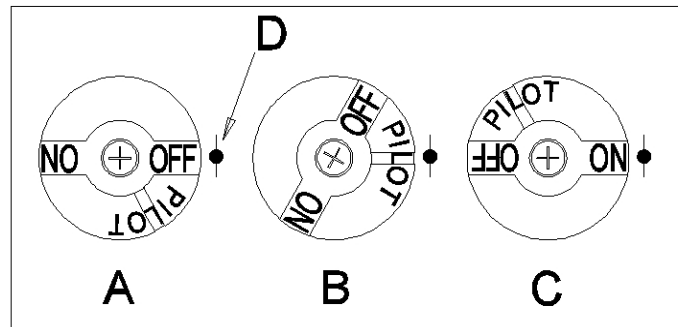
A Gas valve

B Gas supply

C Thermostat knob

1. Open the door.
2. Turn the thermostat OFF (see figure below, view A). The thermostat is located behind the door.
3. Push the gas control valve knob and turn to OFF. Wait 5 minutes for unburned gas to vent.
4. Push and turn gas control valve knob to the “L” in PILOT (see figure below, view B).
5. While still holding the knob in, light the pilot with a flame. Continue to depress the knob until pilot remains lit when knob is released. If the pilot does not remain lit, repeat step 3 through 5.

6. Depress and turn gas control knob to ON (See figure below, view C).
7. If gas supply is interrupted, repeat steps 2 through 6.



- A Gas Valve Knob, View A**  
**B Gas Valve Knob, View B**  
**C Gas Valve Knob, View C**  
**D Indicator Point, All Views**

## **TURNING THE FRYER ON**

1. Set the temperature knob to desired temperature.
2. After the set temperature has been reached, the thermostat shuts off the gas flow to burners.
3. The pilot remains lit. The burners will cycle on and off, maintaining the set temperature.

## **TURNING THE FRYER OFF**

1. Turn the thermostat to OFF.
2. To keep the pilot lit, turn the gas valve to “L” in Pilot.
3. To shut off all gas to the system, including the pilot, turn the gas valve knob to OFF.

## **EXTENDED SHUTDOWN**

1. Turn the thermostat knob to OFF.
2. Push in the pilot knob and turn to OFF.
3. Thoroughly drain the fryer. Refer to the DRAINING THE FRYER section.
4. Clean the fryer. Refer to the CLEANING section.
5. Turn off the main gas shutoff valve.

## **BASIC FRYING INSTRUCTION**

Set the desired temperature and allow shortening to heat up to that temperature.  
Fry items that are about the same size together to ensure equal doneness.  
Drain wet foods to minimize splatter when lowering into hot shortening.  
Add fresh shortening as needed.

## **FRY BASKET GUIDELINES**

Do not overfill baskets. Carefully lower basket into oil.  
When frying doughnuts and fritters, turn product only once during frying.  
When cooking french fries or onion rings, shake the basket several times in a way that does not splatter the shortening.  
Batter-covered foods should be dropped carefully, one by one, into shortening or basket. If you use the basket, first dip the basket into the shortening to reduce batter-build up on basket surfaces.  
When frying is completed, remove basket and product. Hang basket on rear hanger.

## **EXTENDING SHORTENING LIFE**

Shortening life can be extended by the following guidelines:

- ☆ Do not salt foods over the fryer.
- ☆ Use good-quality shortening.
- ☆ Filter shortening daily (at a minimum).
- ☆ Replace shortening if it becomes dark.
- ☆ Keep fry pot and surrounding area clean.
- ☆ Set thermostat correctly.
- ☆ Remove excess moisture and particles from food products before placing on fryer.

## **DRAINING THE TANK**

1. Turn the thermostat to OFF.
2. To keep the pilot lit, turn the gas valve to PILOT.
3. Direct the drain spout into the container that you want to drain the shortening into.
4. Open the drain valve. The oil will drain into the container. When the container is full or the fryer tank is empty, close the drain valve. Repeat this step until the fryer is empty.
5. If desired, perform the weekly clean-out as described under CLEANING.
6. Once tank is completely empty, add new shortening and set thermostat to desired temperature.

## DAILY FILTERING

### **▲ WARNING**

Hot oil and hot parts can cause burns. Use care when operating, cleaning, and servicing the fryer.

- ☆ Filter shortening at least once a day. Refer to the instructions provided with your filtering equipment.
- ☆ A cold fryer will not drain properly. Always filter shortening between 250°F and 350°F. The shortening in the cold zone area will remain hard if the heat is only on for a few minutes. If necessary, use a clean-out rod to carefully stir the hard shortening to an area above the cold zone where it will melt. Use a tank brush to help clear sides and tubes of debris.

## CLEANING

### **▲ WARNING**

Hot oil and hot parts can cause burns. Use care when operating, cleaning, and servicing the fryer.

Clean your fryer regularly with a tank brush along with a damp cloth, and polish with a soft dry cloth. If regular cleaning is neglected, grease will be burned on and discolorations may form.

Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will leave a thin oily or waxy film.

- ☆ Clean all exterior surfaces of your fryer at least once daily.
- ☆ Use a damp cloth with warm water and a mild soap or detergent.

### **NOTICE**

Do not use chlorine or sulfate/sulfide cleaners.

- ☆ Rinse thoroughly and then polish with a soft dry cloth.
- ☆ Keep the fryer exterior clean and free of accumulated grease to prevent stubborn stains from forming. If regular cleaning is neglected, grease will be burned on and discolorations may form.
- ☆ Remove discolorations by washing with any detergent or soap and water.
- ☆ Use a non-metallic scouring pad for particularly stubborn discolorations.
- ☆ Always rub with the grain of the stainless steel.

## BOIL OUT PROCEDURE

### Weekly or as required:

1. Drain the tank as described under DRAINING THE TANK.
2. Once the shortening has been drained, flush out scraps and sediment with a small amount of warm shortening, using tank brush. Allow the tank to drain thoroughly.
3. Close the drain valve and fill tank with non-corrosive, grease-dissolving commercial cleaner.

Follow the manufacture's instructions.

**NOTICE** Do not use chlorine or sulfate/sulfide cleaners.

4. Add commercial boil-out solution. Solution level must be between the MIN and MAX levels on the fryer tank.
5. Set thermostat to the temperature recommended for the solution being used. Allow solution to simmer for about 15 to 20 minutes.
6. Drain the cleaning solution from the tank.
7. Close the drain valve and refill the tank with water. Add 1 cup (1/4 L) of vinegar to neutralize alkaline left by the cleaner. Solution level must be between the MIN and MAX level on the fryer tank.
8. Bring the solution to a simmer only, turn the thermostat off. Allow to stand for a few minutes.
9. Drain the tank according to DRAINING THE TANK. Rinse thoroughly with clear, hot water. All traces of cleaner must be removed. Dry the tank thoroughly.
10. Close the drain valve and add shortening. Follow the FILLING TANK WITH SHORTENING procedure in this manual. The fryer is now ready for use.

## MAINTENANCE

**WARNING** Hot oil and hot parts can cause burns. Use care when operating, cleaning, and servicing the fryer.

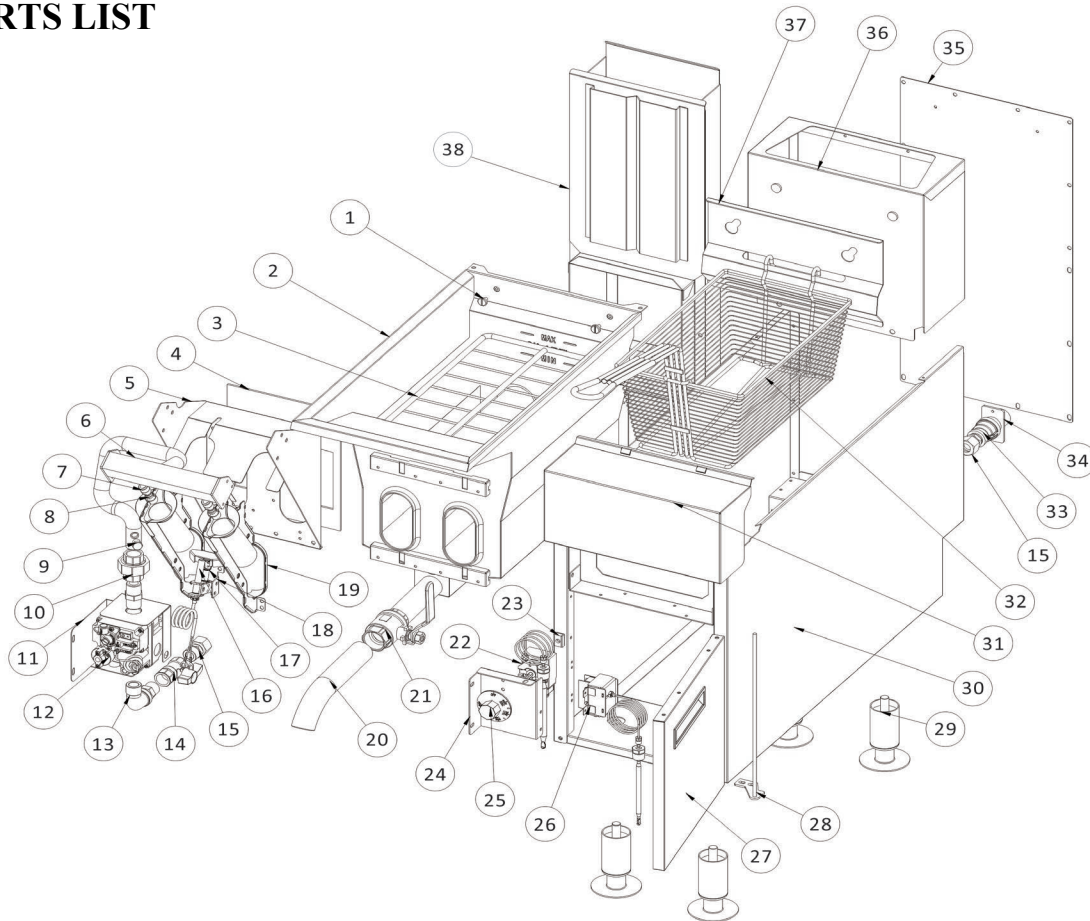
**WARNING** Do not move fryer without draining all oil from the tank.

## FLUE VENT INSPECTION

When the fryer is cool, inspect annually. Check the flue and clear any obstructions.

<b>Troubleshooting</b>	
<b>Problem:</b>	<b>Probable Cause:</b>
No Heat:	Thermostat dial not turned on. Pilot not lit. Gas supply not turned on. Wire connections loose (call service) Wires connections need cleaning (call service) Thermopile (call service)
Insufficient or too much heat:	Thermostat dial not set to desired temperature. High limit tripped (call service) Temperature probe (call service)
Tank will not drain:	Shortening too cold. Drainpipe clogged with debris.

# PARTS LIST



Part	Part Number	Description
1	70202141646	Locking nut
2	801026088003	Tank assembly
3	70201107928L	Wire rack
4		Insulation
5	802026088025	Burner mounting plate
6	70201808128L	Manifold pipe
7	70202023991L	Nozzle base
8	70202024000L	Nozzle
9	70202005355	Nipple plug
10	70200600464	Union connector
11	802026088024	Valve plate
12.1	<a href="#">70200500773</a>	Combination valve NG
12.1	70200500782	Combination valve LP
13	70200601528	Elbow

Part	Part Number	Description
14	70200500764	Shut off valve
15	70201400773+ 70201400791	Connector+ compression sleeve
16	<a href="#">70201700237</a>	Thermal pile
17.1	<a href="#">70201302028</a>	NG pilot
17.2	70201302019	LP pilot
18	802026087033	Pilot bracket
19	70201305037L	Burner
20	70202018273	Drain extension pipe
21	<a href="#">70200500746</a>	Drain valve
22	<a href="#">70202200728</a>	Thermostat
23	70201902455	Magnet
24	802026087036	Thermostat bracket
25	70101103628	Knob
26	<a href="#">70202200737</a>	High limit
27	801026088002	Door
28	801026087007	Door pole
29	70200901228	Leg
30	801026088001	Fryer frame
31	802026088005	Front panel
32	70201107328L	Basket
33	70200600282	1/2 to 3/4 adaptor
34	70201808119L	Gas pipe
35	802026088022	Back board
36	801026088005	Back flue assembly
37	802026088023	Basket hanger
38	801026088004	Inner flue

# **PATRIOT**<sup>TM</sup>

---

## **WARRANTY**

Patriot warrants its equipment against defects in materials and workmanship, subject to the following conditions:

Patriot gas equipment is warranted for one (1) years, effective from the date of purchase by the original owner. A copy of the original receipt or other proof of purchase is required to obtain warranty coverage. This warranty applies to the original owner only, and is not assignable.

The stainless steel fry tank has a five (5) year limited tank warranty. If during the first year, the tank is found to have a leak and is verified by an authorized service company, the entire fryer will be replaced. During years two through five, a new tank will be given.

Should any product fail to function in its intended manner under normal use within the limits defined in this warranty, at Patriot's discretion, such product will be repaired, replaced with a refurbished unit, or replaced with a new unit by Patriot, after defective unit has been inspected and defect has been confirmed. Patriot does not assume any liability for extended delays in replacing any item beyond its control. This warranty does not apply to rubber and non-metallic synthetic parts that may need to be replaced due to normal usage, wear or lack of preventative maintenance.

This warranty covers products shipped into the 48 contiguous United States, Hawaii, and metropolitan areas of Alaska and Canada. Warranty coverage on products used outside the 48 contiguous United States, Hawaii and metropolitan areas of Alaska and Canada may vary.

The following conditions are not covered by warranty:

- Equipment failure relating to improper installation, improper utility connection or supply and problems due to improper ventilation.
- Equipment that has not properly been maintained, damage from improper cleaning, and water damage to controls.
- Equipment that has not been used in an appropriate manner, or has been subject to misuse, neglect, abuse, accident, alteration, negligence, damage during transit, delivery or installation, fire, flood, riot, or act of God.
- Equipment that has the model number or serial number removed or altered.
- Equipment on which the security seal has been broken.

If the equipment has been changed, altered, modified, or repaired without express written permission from Patriot, then the manufacturer shall not be liable for any damages to any person or to any property, which may result from the use of this equipment thereafter.

This equipment is intended for commercial use only and this warranty is void if equipment is used in other than a commercial application.

For warranty issues and technical support call Patriot Cooking at 888-585-9440. Please have your model number, serial number and proof of purchase ready. For non-warranty related issues call 800-458-5593.

“THE FOREGOING WARRANTY IS IN LIEU OF ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES AND CONSTITUTES THE ENTIRE LIABILITY OF PATRIOT. IN NO EVENT DOES THE LIMITED WARRANTY EXTEND BEYOND THE TERMS STATED HEREIN.”

**Please register your product online at [Patriotcooking.com](http://Patriotcooking.com)**

