



Commercial Cooking Equipment

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BUILT-IN FILTER / FRYER SYSTEM

NOTE: This is an addendum for built-in filter when assembled in a line-up with Fryer(s). Refer corresponding Fryer manual for Fryer installation, operation and maintenance instructions.

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 functions of the equipment.

Service of the equipment should be performed by qualified personnel who are knowledgeable with Imperial equipment.

INSTALLATION INSTRUCTIONS:

GENERAL

- 1. Installation of this equipment should be made by a licensed plumber.
2. Installation must conform to state and local codes.
3. Contact the factory, the factory representative, or authorized service company to perform maintenance and repairs.

ELECTRICAL CONNECTION

The filter requires a 115V, 60 HZ, 1 PH electrical supply to operate.

WARNING:

This appliance is equipped with a 3-prong grounded plug for your protection against shock hazard and should be plugged directly into a properly grounded 3-prong receptacle. Do not cut, remove or by-pass the grounding prong from the plug.

The electrical service in the building must be equipped with a properly grounded 3-prong receptacle, in accordance with local codes, or in the absence of local codes, with the national electrical code, ANSI/NFPA 70-1987.

Disconnect power supply before cleaning or servicing.

PROCEDURE

The Fryer/filter system is pre-assembled at the factory with the line-up specified. The drain and oil return line are rigidly secured in place.

- 1. Set the Fryer/filter system in place.
2. Connect gas supply to the common manifold at rear. The gas supply (service) line must be the same size (1-1/4") or greater than the inlet line of the appliance. Sealant on all pipe joints must be resistive to LP gas.
3. Connect the electric plug from the filter to power supply.

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) 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 Z21.41a (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.

Locking front casters are provided to limit the movement of the appliance without depending on the connector or associated piping.

OPERATION INSTRUCTIONS:

Refer to Fryer manual for Fryer operation.

The draining and filtering operation must be performed very carefully to avoid the possibility of burn from careless handling.

PREPARATION FOR USE:

Remove all loose parts from the filter pan assembly. Wash all parts, including filter pan, with hot soapy water or washing soda, rise thoroughly and drain. Wipe dry.

FILTER PAN ASSEMBLY (With filter paper)

1. Set perforated screen on the bottom of the filter pan.
2. Set filter paper evenly over the perforated screen.
3. Place the hold down ring over the filter paper. Push down between the perforated screen and filter pan wall. The paper will wrap around the ring.
4. Hang the splash diffuser ASSY on the filter pan, by the drain.

OPERATION:

CAUTION: Filter oil from one Fryer at a time. Draining two Fryers into the pan at a time will cause overflow causing hazardous situation.

DRAINING OIL:

1. Pull the drain valve handle of the Fryer to be filtered.
2. Wait till oil/shortening is completely drained.
3. If it is necessary to wash the debris in the fry tank, keep the drain valve open and pump oil back, 10 to 15 seconds, into the fry tank through return line or using a wash down hose.
4. Close the drain valve by pushing the handle in.

FILTERING AND RETURNING OIL

1. Open the return line valve in the Fryer by pulling the return line valve handle (valve is located at the rear bottom of the Fry tank).
2. Open the corresponding filter valve in the oil manifold, located inside the filter cabinet.
3. Turn filter switch to "ON".
4. When oil starts to bubble in the Fryer, allow it to continue for a few seconds before simultaneously closing the return line valve (push handle in and turning the filter switch to "OFF").
5. Close the return line valve in the filter cabinet

USING WASH-DOWN HOSE TO RETURN OIL

1. Connect the quick disconnect end on the wash down hose to its mating part on the return line manifold (inside filter cabinet).
2. Hold the handle on the nozzle end and place the nozzle well into the fry tank (between tubes).
3. Turn filter switch."ON".
4. Turn switch "OFF" when oil starts to bubble in the fryer.

MAINTENANCE INSTRUCTIONS - For continued performance efficiency and longevity of your filter, it is essential to carry out a good maintenance program.

CHANGING FILTER PAPER

Change filter paper as frequently as necessary. When the paper becomes dark or is scuffed, it is time to change.

Exhibit caution when replacing paper. Make sure that any debris or sediment does not get into the return line opening at the bottom of the pan.

NOTE: To prolong the life of the paper, periodically remove debris/sediments accumulated on the paper. Reorder filter paper, quantity of 100 sheets, PN: 28209 directly from factory.

DAILY

1. Filter the liquid oil/shortening at the end of the day, replace if necessary. If fryer is under heavy use, filter as often as necessary.
2. After filtering, scrape the inside walls of the filter pan to remove debris.
3. Remove debris/sediments on the paper. Change paper, if necessary.
4. Remove and wash filter pan and all loose parts thoroughly. Set paper aside temporarily.
5. Wipe dry and re-assemble.

WEEKLY

1. Check the drain and return line for leaks or residual debris. Tighten fittings if leak is detected. Clean the debris in the line(s).
2. Thoroughly clean the area around and inside the filter cabinet.
3. Wash the pan with hot soapy water. Scrub the insides with brush and rinse thoroughly.
4. Wipe dry with soft towels and re-assemble.

CAUTION: **"DO NOT"** pump water to clean the system. This will not only void warranty, but also may cause the pump to fail, as it is designed to pump **oil** only.

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.

FOR SERVICE OR ORDERING PARTS: Contact the factory service at (626) 357-7411 or fax (626) 358-6547 or any factory authorized service agency and/or parts distributors.

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TROUBLE SHOOTING:

<u>Problem:</u>	<u>Probable Cause</u>	<u>Remedy</u>
Pilot will not light.	A. No gas. B. Gas cock dial not set at "Pilot" position and depressed.	A. Turn main gas valve "ON". B. Set gas cock dial on combination gas valve to "Pilot". Depress and hold while lighting.
Pilot will not stay lit	A. Gas cock dial not depressed and held long enough. B. Defective thermopile C. Pilot flame not properly adjusted.	A. Depress and hold for at least 30 sec. B. Replace. C. Adjust pilot flame with pilot adjustment screw on the combination valve.
Main burners will not ignite.	A. Pilot not lit. B. Thermopile not properly installed in the pilot. C. Gas cock dial not set at "ON" position. D. Thermostat not set at any temperature. E. Defective gas valve. F. Defective hi-limit switch.	A. Light the pilot. B. Push in and tighten. Pilot flame should engulf the thermopile. C. Turn and set gas cock dial to "ON" position. D. Set thermostat to desired temperature. E. Replace. F. Replace.
Fryer does not heat up fast	A. Insufficient gas. B. Line clogged. C. Overloading the fryer.	A. Check gas pressure. B. Remove and clean gas line. C. Cook smaller loads. Need larger fryer !
Oil/shortening scorches and breaks down.	A. Operating temperature too high. B. Thermostat out of calibration. C. Oil/shortening overused. D. Oil/shortening not filtered frequently.	A. Set at proper temperature. B. Re-calibrate. C. Replace with new. D. Under heavy usage, filter frequently during the day.
Temperature cannot be controlled.	A. Thermostat bulb out of proper position.. B. Thermostat out of calibration. C. Defective thermostat. D. Defective gas valve.	A. Relocate and secure at the proper position.. B. Re-calibrate. C. Replace. D. Replace.
Fryer shut-off, cannot relight pilot.	A. Hi-limit cut off. B. Defective thermostat. C. Thermostat out of calibration. D. Hi-limit switch defective.	A. Note: Cannot relight the pilot until temperature of oil drops to about 325°F. Call Service, if uncertain. B. Replace. C. Recalibrate. D. Replace.

REMOVAL AND REPLACEMENT OF PARTS

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: 1. 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 parts: 1. Model number and serial number of the fryer. 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 (626) 357-7411 or FAX (626) 358-6547 or any factory authorized service agency and/or parts distributors.

Filtering Instructions

Before You Begin the Filtering Process

Prepare the Filter Pan

1. Disconnect return line from pan and remove filter pan from cabinet.
2. Wash all parts, including the filter pan, with hot soapy water.
3. Rinse and drain.
4. Dry **THOROUGHLY**. Water should **NEVER** be allowed to circulate through the filter pump.
5. Place filter paper rack support in bottom of the filter pan.
6. Place filter paper in the filter pan. Be sure there is no debris around the surface of the paper support area.
7. Make sure the filter paper hold down ring is free and clear of debris.
8. Insert filter paper hold down ring in the filter pan and snap the handles under the locks.
9. Sprinkle filter powder over the filter paper. (Determine amount of powder)
10. Insert the crumb catcher in the filter pan. Make sure the crumb catcher is positioned directly under the manifold drainpipe.
11. Place cover on filter pan.
12. Reinstall filter pan back into cabinet and connect return line hose.

Draining the Fryer

1. Turn the fryer **OFF**. For optimum filtering results, oil temperature should be around 200°F.
2. Slowly slide the drain valve (**Green Handle**) of the fryer to be filtered. **NEVER** open two drain valves at the same time. The capacity of filter pan will not accommodate the contents of more than one fryer.
3. While fryer is draining, use the declogging rod or a brush to loosen any debris or sediment that might slow the oil draining process.

Filtering the Oil

4. Open the oil return valve of the fryer being filtered by pulling the lever with the (**Red Handle**). *Pulling the oil return handle will automatically activate the filter pump.*
5. Oil will begin circulating through the filter and back to the fryer. Leave the drain open on the fryer and allow the oil to circulate through the filter system for five minutes. The declogging rod or brush can also be used during the circulating process to clean debris from the fry vessel.
6. After the five minute circulating time, close the drain valve (**Green Handle**) and allow the oil to refill the fry vessel.
7. When large air bubble are present, close the oil return valve (**Red Handle**). *This will automatically turn the filter pump off.*
8. Fryer can be turned **ON** for use.
9. Repeat steps 1-9 listed above for each fryer within the fryer / filter system.



For Further Assistance Call the Imperial Service Department at 1-800-343-7790