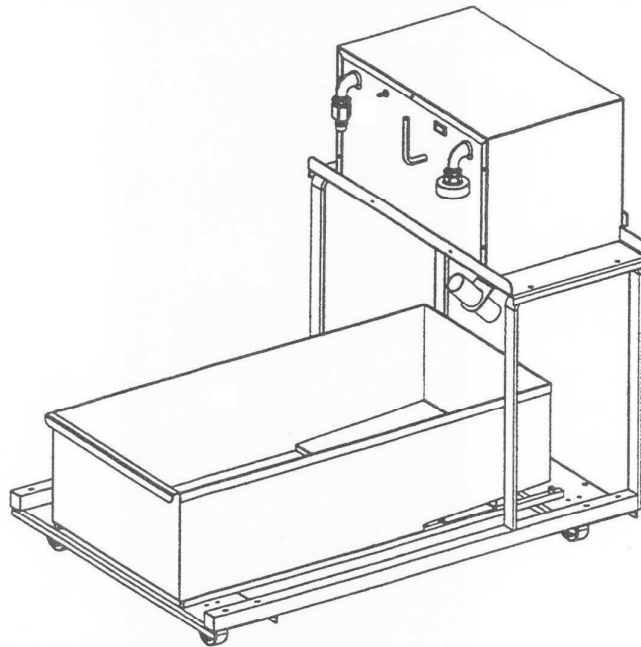




*There's Always Something Cooking!*

Installation, Operation, and Maintenance Manual  
For Reversible Pump Filter Systems

Covering Models  
RP-14 & RP-18



Pitco Frialator, Inc., P.O. Box 501, Concord, NH 03302-0501 • 509 Route 3A, Bow, NH 03304  
(800) 258-3708 • (603) 225-6684 • FAX (603) 225-8497

A BLODGETT Company

## NOTICES

There are three different types of notices that you should be familiar with, a NOTICE, CAUTION, and WARNING. A NOTICE is a special note used to call attention to a particularly important point. CAUTION is used to point out a procedure or operation which may cause equipment damage. The WARNING notice is the most important of the three because it warns of an operation that may cause personal injury. Please familiarize yourself with your new cooker before operating it and heed the notices throughout this manual. The WARNINGS are listed below and on the following page for your review prior to operating the unit.

### **FOR YOUR SAFETY**

**DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.**

**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.**

### **TO THE PURCHASER**

**POST IN A PROMINENT LOCATION INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THAT AN OPERATOR SMELLS GAS. OBTAIN THIS INFORMATION FROM YOUR LOCAL GAS SUPPLIER.**

**THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE**

**SAFETY**

**SAFETY**

**SAFETY**

**SAFETY**

**SAFETY**

**WARNING**

The filter is equipped with an oil proof, electrical supply cord with a three prong safety plug. This is to protect operators from electrical shock hazard in the event of an equipment malfunction. DO NOT cut or remove the grounding (third) prong from this plug.

**WARNING**

At operating temperature the shortening temperature may be greater than 300°F. Extreme care should be used when filtering operating temperature shortening to avoid personnel injury.

**WARNING**

It will be easier and safer if the filter assembly has cooled to room temperature before handling any filter parts.

**WARNING**

The power supply must be disconnected before servicing or cleaning the appliance.

**SAFETY**

**SAFETY**

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**SAFETY**

**SAFETY**

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# Chapter 1: General Information and Installation

Congratulations on the purchase of your new Pitco Frialator filter system. This unit will give you many years of reliable service if you follow the simple operation and maintenance procedures in this manual. Contained in this manual are the general assembly, operation, and maintenance procedures for the filter systems listed in Table 1-1.

## 1.1 WHICH FILTER SYSTEM DO I HAVE?

There are many filter system models available, each with its own model number. To find out which model you have, look at the equipment identification plate. This plate has a lot of useful information. The model number identifies which filter system. Table 1-1 provides you with a brief listing of the models available and some of their characteristics.

Table 1-1 Filter System Model Information

Model Number	Filter Paper Size	Filtering Area	Filter Pan Fat Capacity
RP-14	7-1/4" x 14-1/2" (18.4 cm x 36.8 cm)	500 sq. in. (3226 sq. cm.)	up to 50 lbs (up to 23 kgs)
RP-18	7-1/4" x 14-1/2" (18.4 cm x 36.8 cm)	500 sq. in. (3226 sq. cm.)	up to 80 lbs (up to 36 kgs)

## 1.2 CHECKING YOUR NEW FILTER SYSTEM

Your new filter system has been carefully packed into a crate. Every effort has been made to ensure that your filter system will be delivered to you in perfect condition. As you unpack your new filter system, inspect each of the pieces for damage. If something is damaged, DO NOT sign the bill of lading. Contact the shipper immediately, because the shipper is only responsible for 15 days after delivery. Check the packing list enclosed with your filter system to ensure that you have received all of the parts to the unit. If you are missing any parts, contact the dealer from whom the filter was purchased.

Locate your Pitco Frialator warranty and fill in the serial number of the filter and the date received. You will find the serial number on the rear panel. Put your warranty sheet in a safe place for future reference. DO NOT return the sheet to Pitco Frialator.

### 1.2.1 Check Your Order

The crate containing the filter system will also contain the following:

- |                           |                        |
|---------------------------|------------------------|
| (1) Precoat Filter Powder | (1) Flush Hose         |
| (25) Filter Sheets        | (1) Filter Crumb Scoop |

## 1.3 INSTALLATION

The mobile filter system requires no special installation instructions. Installing and changing the filter media is described in Chapter 3.

### 1.3.1 Electrical Connection

The electrical service used by the filter system must comply with local codes. If there are no local codes that apply, refer to the National Electrical Code (NEC) ANSI/NFPA 70-1990 to install the service. In Canada refer to CSA Standard C22.1 Canadian Electrical Code Part 1 & 2, and local codes. Wiring diagrams are provided with the filter system, located inside motor cover.

#### WARNING

The filter system is equipped with an oil proof, electrical supply cord with a three prong safety plug. This is to protect operators from electrical shock hazard in the event of an equipment malfunction. The plug should be plugged into a properly grounded three prong receptacle. DO NOT cut or remove the grounding (third) prong from this plug.

## 1.4 INITIAL ADJUSTMENTS

After the filter system is unpacked, check it thoroughly. During shipment some components may have loosened and need tightening. Refer to Chapter 3 for filter pickup assembly procedures.

## 1.5 INITIAL CLEANING

When the filter system is shipped, many of its parts are covered with a thin coat of oil for protection. Before the filter system is ready for use it must be cleaned. This will remove the oil coating and any foreign matter that may have accumulated during storage and shipment. All parts of the filter system (except the main housing) are dishwasher safe. Wash all parts and dry thoroughly before use.

## Chapter 2: Operating Instructions

This chapter describes the procedures used to filter fryers using the reversible pump mobile filter system. Figure 2-1 shows the locations of the filter system components. Figure 2-2 shows the filter accessories and tools you should have to perform normal filtering operations. Frequent filtering of your shortening will prolong the shortening's usable life. Daily shortening filtering is strongly recommended.

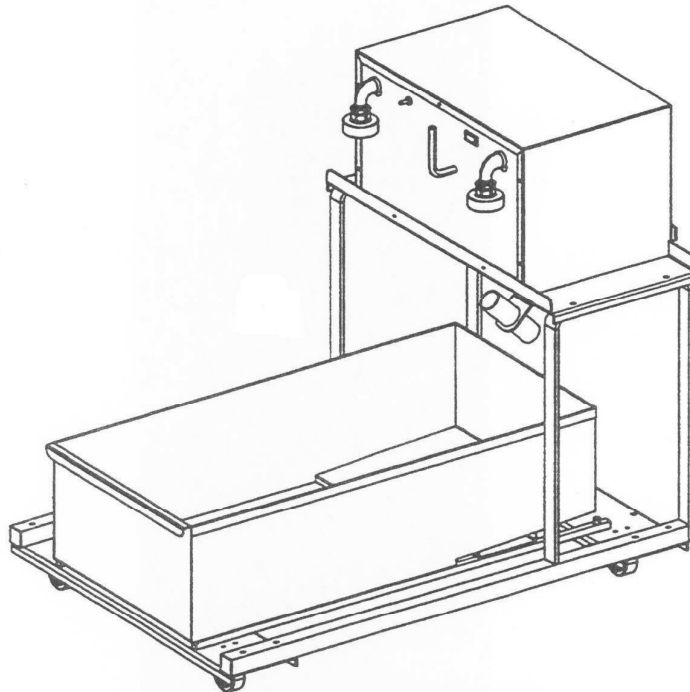


Figure 2-1 Reversible Mobile Filter Unit

### 2.1 GENERAL FILTER HINTS

1. Ensure that all oil in the filter pan is returned before it cools and hardens. This is very important if you are using solid shortening.
2. Always use **Pitco Precoat®** for fastest filtrations, maximum labor saving, and cleanest/clearest shortening possible. Impaired filter performance will result without the use of a filter aid. Use the amount shown below depending on the fryer you are filtering:  
  
Model 7/12 ..... 8 oz. by volume  
Model 14/14B/14R ... 8 oz. by volume  
Model 18 ..... 16 oz. by volume
3. The longevity of your oil is related to how clean you keep it. By removing suspended particles often, it prevents them from burning.

4. **The filter pump is protected from clogging by a special screen in the pickup tube. Clean this screen each time a new filter envelope is installed (see Chapter 3, ).**
5. **Flush Hose** - After using the flush hose, allow it to drain completely before storing.
6. Always check to ensure that the filter system quick disconnects are completely engaged before filtering. When connecting the quick disconnects, you will feel a definite snap and hear a click when the connection is made. After connecting the hose, gently pull on the connection to make sure it is connected.

## 2.2 FILTER PROCEDURES

### WARNING

At operating temperature the shortening temperature may be greater than 300°F. Extreme care should be used when filtering operating temperature shortening to avoid personal injury.

### WARNING

When working with hot oil ALWAYS wear oil-proof, insulated gloves.

- Although there are slight differences between fryer types, the process used to filter the fryer is the same.

### NEVER

- Run the filter system without a filter bag/paper.
- Attempt to filter more than one fryer tank at a time. The filter system pan can only hold the amount listed in Chapter 1, Table 1-1. Do not over fill the filter pan.
  - a. Scrape previously filtered residue off the filter paper. Examine the filter envelope for dark, scuffed, or torn areas. Refer to Chapter 3 for filter envelope replacement instructions.
  - b. Turn the fryer OFF (Refer to the Fryer Operator's Manual). Remove the baskets from the fryer tank(s). Use the clean out rod to lift out the tube screens. If there are excess crumbs in the fryer tank, remove them with the crumb scoop.
  - c. If you have a fryer with a front drain, move the filter into position in front of the fryer to be filtered. Ensure the fryer drain spout is directed into the filter system's pan. If you are using the filter to vacuum drain a fryer, refer to section 2.3.

- d. If you have replaced or scraped the filter paper, stir in Precoat Filter Aid to the shortening in fryer (refer to section 2.1 for amount to add for your fryer). After cleaning out the excess debris with the fryer scoop sprinkle the powder into the first fryer to be filtered and stir the powder into the oil.
- e. Ensure that the filter pickup tube is connected to the filter. Ensure the flush hose is connected to the filter.
- f. Ensure that the direction valve is in the FILTER position.**
- g. Plug the filter system into a three prong receptacle. On models with HEATER OPTION, the filter system piping will have heat tape wrapped around it to soften solid shortening. When the filter piping is up to temperature the filter ready light will come on.
- h. Slowly open the fryer drain valve for the tank being filtered. If necessary use the clean-out rod to clear the crumbs from the drain.
- i. When the oil has drained into the filter system pan point the nozzle of the flush hose into the bottom of the fryer tank. While holding the flush hose, move the filter pump switch to the FILTER position to turn on the filter system pump and wash down the sides of the fryer tank. When the fryer has been sufficiently cleaned, turn off the filter system pump and close the fryer drain valve.
- j. Remove the flush hose from the fryer tank and point it into the filter system pan. While holding the flush hose, place the filter system switch in the FILTER position to turn the filter system pump on and circulate the oil in the filter system pan for 3 to 5 minutes. This will polish the oil and remove any microscopic particles, moisture, and free fatty acids from the oil.
- k. After the oil has been circulated and polished in the filter system, return it to the fryer. Ensure that the fryer drain valve is closed and point the flush hose nozzles into the bottom of the fryer tank.
- l. Place the filter system switch in the FILTER position to turn on the filter system pump and return the oil to the fryer.
- m. If you are going to filter another fryer, scrape the debris off of the filter envelope and repeat filter procedure on the next fryer.

## **2.3 USING THE REVERSIBLE FILTER SYSTEM TO VACUUM DRAIN A FRYER**

The reversible filter system models can also be used to power drain a fryer that can not be drained via a drain valve. Follow the procedure below to power drain a fryer.

- a. Ensure that the filter pickup tube is connected to the filter. Ensure the flush hose is connected to the filter.
- b. Shut down the fryer according to the Fryer's Operator Manual.
- c. Move the direction valve handle to the VACUUM setting.
- d. Insert the nozzle of the flush hose into the fryer to be drained and move the filter system pump switch to the VACUUM position. This will cause the filter system pump to vacuum the oil from the fryer into the filter system.

### **NOTICE**

If the nozzle clogs, move the valve handle to the filter position and place the pump switch in the filter position. This reverses the oil flow and should clear the clog.

- e. Once the oil has been removed from the fryer follow the filtering instructions of section 2.2 step i. Be sure to wait for the Ready light (HEATER OPTION only) to come on before turning on the pump.

## **2.4 DAILY CLEANING**

Your filter system should be cleaned every day to maintain peak performance and appearance. Perform the procedures below every day.

- a. Wipe up any shortening that spills onto the exterior of the filter. This should be done with a soft cloth.
- b. Use warm water with a mild detergent to clean surfaces. Ensure that all detergent is removed completely and all surfaces are dried.
- c. Use a nonabrasive scouring powder or pad to clean stains if necessary.
- d. Disassemble the filter pickup assembly and wash in a sink or dish washer after the filter envelope has been removed. Ensure that all parts are thoroughly dry before reassembly.

## Chapter 3: Owner Maintenance and Adjustments

This chapter provides you with the information and procedures necessary to perform basic filter maintenance and adjustments. If after performing any maintenance on your filter system, and it does not perform properly, contact your authorized service center.

### WARNING

The power supply must be disconnected before servicing or cleaning the appliance.

### 3.1 FILTER MEDIA REPLACEMENT

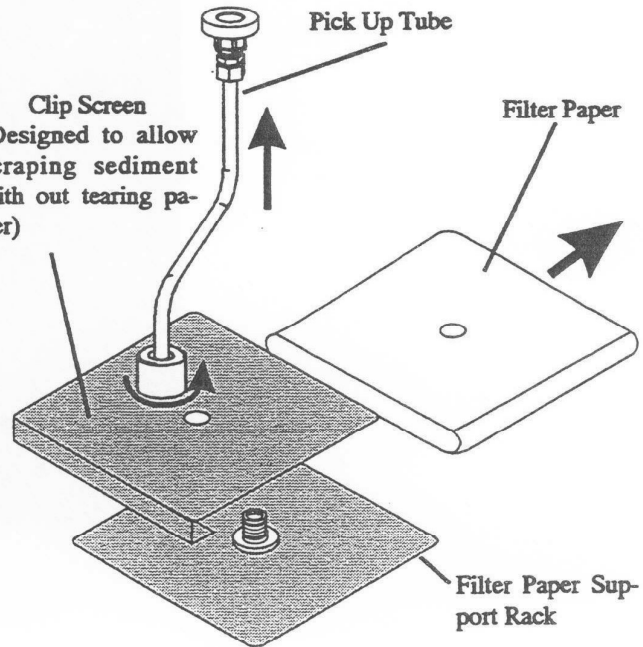
The filter systems described in this manual are very easy to use and allows for quick installation and filtration, even under the busiest conditions. The filter module is shown in Figure 3-1 with specific components and features pointed out and briefly described.

Follow the procedures below to change the filter envelope.

### WARNING

It will be easier and safer if the filter assembly has cooled to room temperature before handling any filter parts.

- a. To remove the filter pan, disconnect the filter tube pick up assembly at the quick disconnect connection (has a picture of the pick up assembly). This is done by moving the black insulated portion of the connector down to disengage the pick up assembly.
- b. Grasp the filter pan handle and gently pull the assembly toward the front of the filter unit.
- c. Lift up on the filter paper assembly and remove from the filter pan. Unscrew the suction tube from the filter paper support rack. Remove the clip screen and slide the filter paper support rack assembly out of the filter bag.





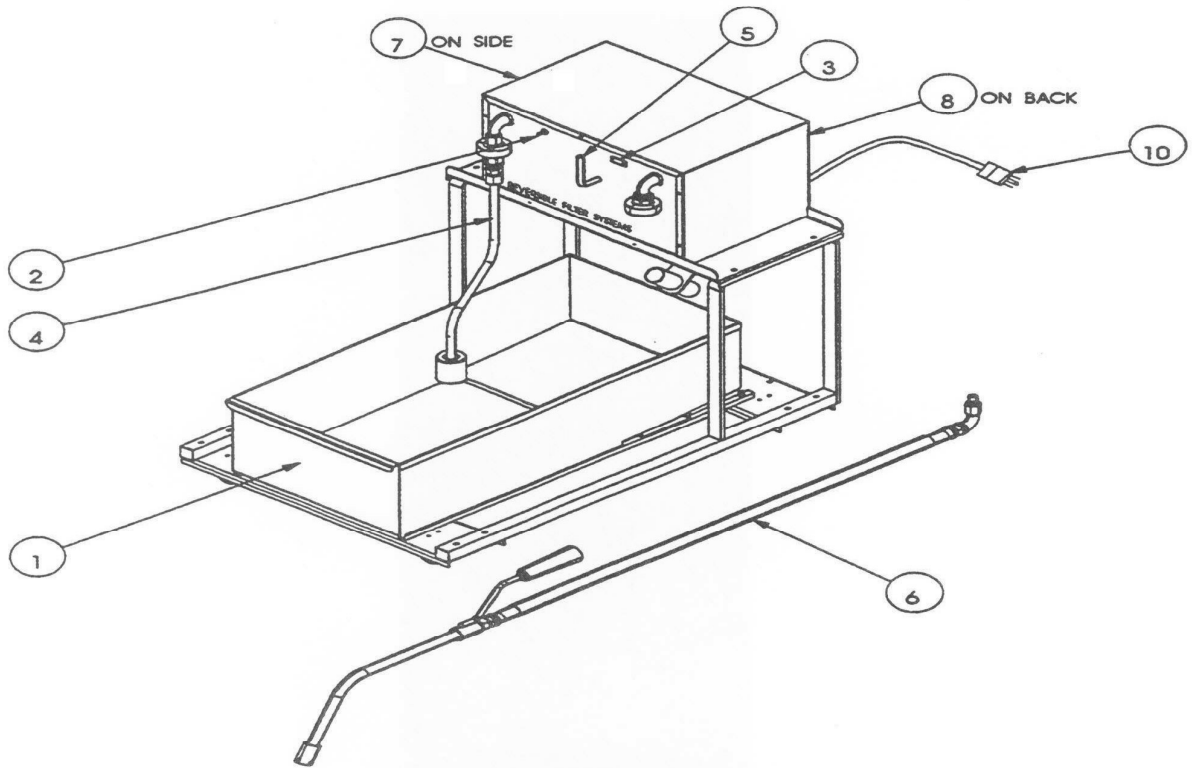
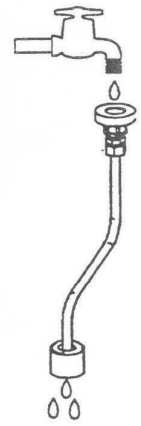


Figure 3-1 Filter System

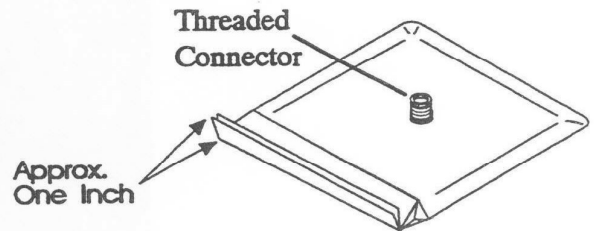
- (1) **Filter Pan** - Holds the oil from the fry tank.
- (2) **Pump Switch** - Three position switch used to turn the filter pump VACUUM/OFF/FILTER.
- (3) **Ready Light (HEATER OPTION Only)**- Light to indicate that the filter lines are warmed to filtering temperature.
- (4) **Pick-Up Tube** - Connects filter envelope assembly to piping. Incorporates a strainer to protect filter pump from grit in the event of envelope failure.
- (5) **Valve Handle Lever** - Controls direction of oil flow.
- (6) **Filter Hose Connector** - Quick disconnect that connects the filter hose to the filter.
- (7) **Pump Motor Thermal Overload** - (On left hand side of unit behind removable plug) Protects motor from high temperatures. Trips if the pump motor is near overheating.
- (8) **Circuit Breaker** - Generally left ON. Will trip if overload occurs (i.e. pump is turned on but no system valves are open). To reset, find and correct cause of trip. Turn power switch OFF. Push circuit breaker OFF, then return it to ON. Normal operation will resume.
- (9) **Power Supply Cord** -Plugs into receptacle to provide power for filter operation.

- d. All of the filter pick up assembly parts can be washed in a dish washer or a pot sink. Flush out the suction tube assembly with hot water. The pick up tube screen keeps grit and solid material from binding the pump. After flushing the pick up tube screen check to ensure that the screen is free of debris. After cleaning, it is very important to thoroughly dry the parts before reassembling. Water and oil do not mix. Water in hot oil will cause the oil to splatter.

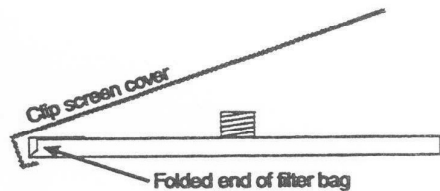


- g. Start reassembling the filter pick up assembly by sliding the new filter paper on to the filter paper support rack. Ensure that the hole in the filter paper goes over the pick up tube assembly threaded connector.

- h. Fold the open end of the bag in two folds. The first fold should be approximately 1 inch from the end and the second should be over the edge of the rack assembly.

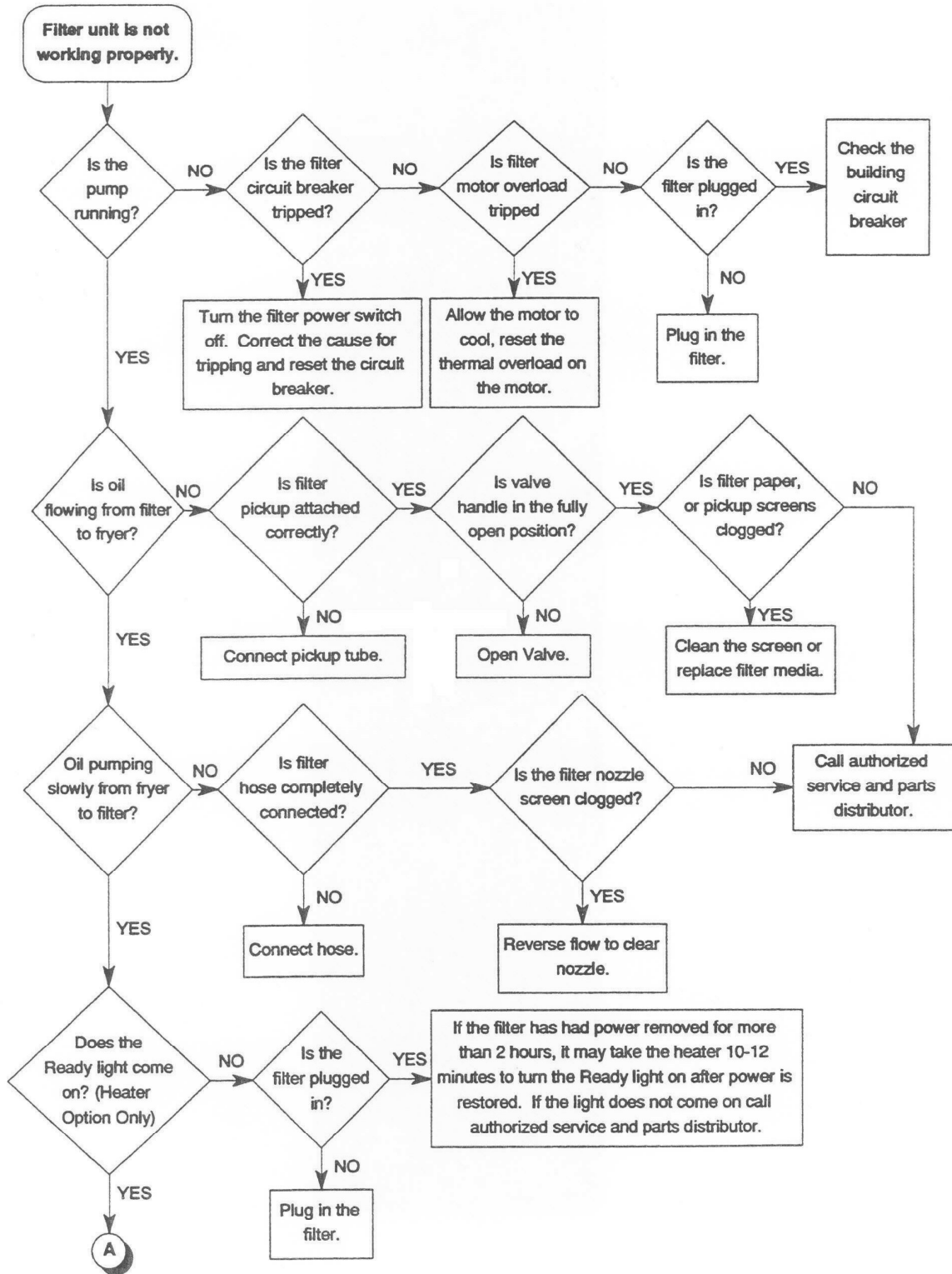


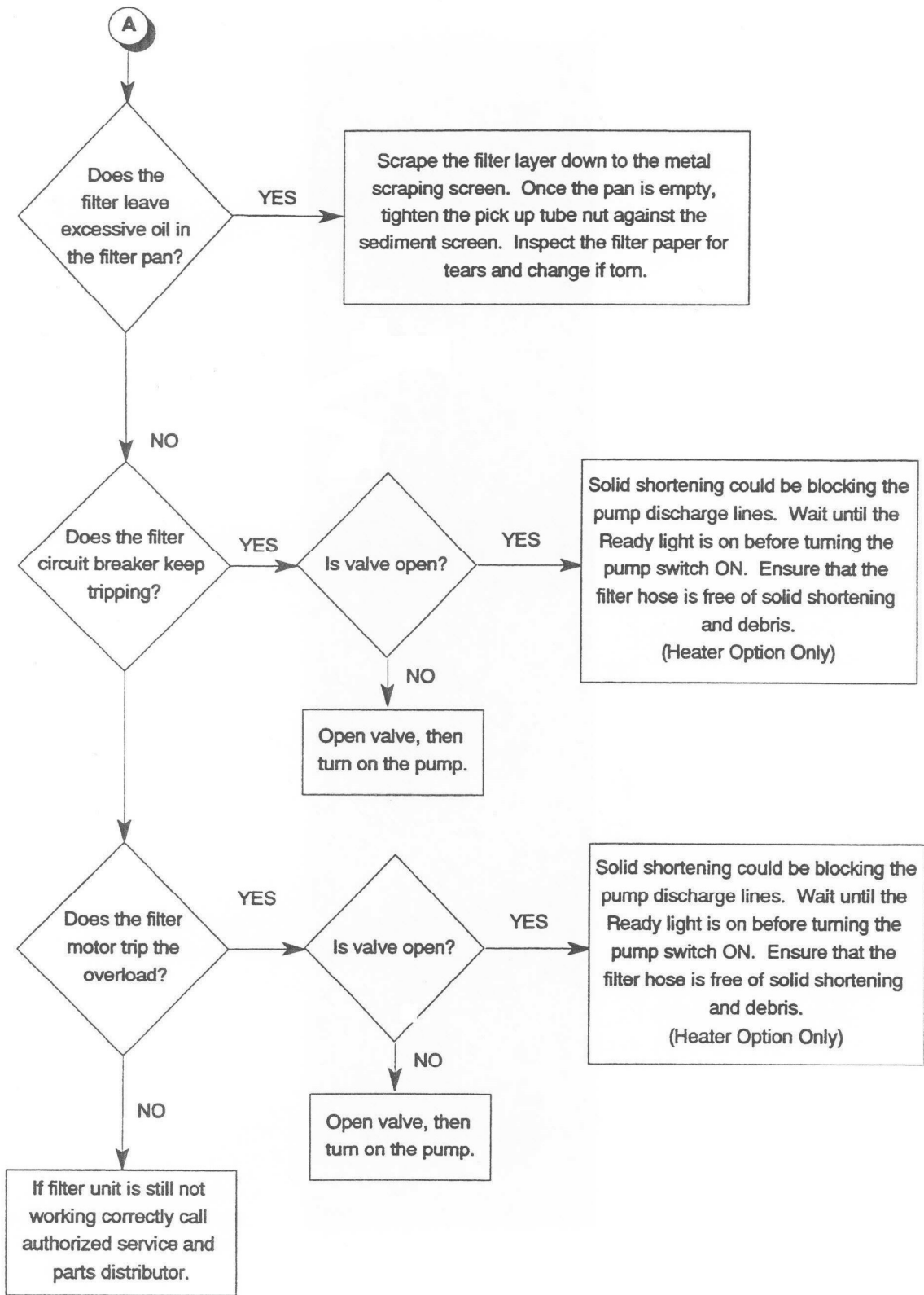
- i. Slide the clip screen over the folded end of the filter paper. Ensure the opening of the clip screen goes over the pick up tube connection. Screw the suction tube assembly onto the threaded connection.



- j. Place the filter rack assembly in the filter pan.
- k. Slide the filter pan assembly back into the filter unit and attach the pick up tube connector to the filter connection.

### 3.2 TROUBLESHOOTING FILTER SYSTEMS







In the event of problems with or questions about you order, please contact the Pitco Frialator factory, from 8:00 a.m. - 5:00 p.m., Eastern Standard Time, Monday through Friday at: (603)225-6684 World Wide

In the event of problems with or questions about you equipment, please contact the Pitco Frialator Authorized Service and Parts representative (ASAP) covering you area, through Pitco Frialator, Inc.