

### PROFESSIONAL QUALITY COOKING EQUIPMENT

# OWNER'S MANUAL FOR PORTABLE FRYER FILTRATION SYSTEM

MODEL NUMBERS: ARPFS-35/50 AND ARPFS-85



**DESIGN** 



**CLASS** 



**FUNCTION** 







Portable Fryer Filtration System Owner's Manual

# Installation, Operation and Maintenance Instructions





#### **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.



### RETAIN THIS MANUAL FOR FUTURE REFERENCE.

M 1181 1	
Model Number:	
Serial Number:	
Purchase Date:	
Installed By:	Install Date:
Electrical Information:	



### PROFESSIONAL QUALITY COOKING EQUIPMENT

To Our Most Valued Customer:

Congratulations on your purchase of an American Range product. We hope you will enjoy the design, manufactured quality, innovative features and cooking performance of this product – it represents our continuing dedication to satisfying the most demanding needs of customers like you.

Please read this manual and become familiar with important safety information about how to install and set-up the unit, basic operating instructions, and how to maintain that just-like-brand-new appearance and performance - over years of day-to-day.

If you should encounter any sort of problem, turn to the section of the manual entitled, "Troubleshooting" – for a quick solution or guidance regarding the next step required to get back to tip-top condition.

Thank you for choosing an American Range product. As you can expect, this appliance is designed for years of reliable service. If you have any questions or comments, please contact the dealer from whom you purchased the unit, or contact American Range Customer Service at www.americanrange.com or 818.897.0808.

Sincerely,

Shane Demirjian

President, American Range Corporation

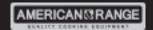
## Owner's Manual

## Portable Fryer Filtration System AMERICAN®RANGE



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## **IMPORTANT - PLEASE READ AND FOLLOW!**

Your safety and the safety of others is very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the SAFETY ALERT SYMBOL. This symbol alerts you to hazards.



Hazards or unsafe practices which may result in severe personal injury or death.



Hazards or unsafe practices which may result in severe personal injury or death.



Hazards or unsafe practices which may result in personal injury or property damage.

Shipping Damage Claim Procedure:

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

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

Rating Plate - The information on the rating plate defines the model, serial number and electrical rating. Keep this information for future reference. It is essential for proper identification of the unit when requesting additional information or factory support.



Rating Plate



## INTRODUCTION

The ARPFS Portable Filtration System is designed to remove food and other solids from the cooking oil used in your deep fat fryer. For best results ONLY use Filtercorp SuperSorb®CarbonPads.

The ARPFS rolls easily for use whenever it is needed and can readily be stored out of the way. The low profile allows the unit to roll directly under the drain valve outlet extension pipe on the fryer, making it easier to drain the fryer.



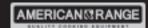
This product has been certified as commerical cooking equipment and is intended for professional use only and is to be operated by qualified personnel only. American Range Authorized Servicers should perform maintenance and repairs. Installation or repairs by unqualified personnel may void the manufacturer's warranty.



Improper installation, adjustment, alteration, and/or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing, servicing or troubleshooting this equipment.



If during the warranty period, the customer uses a part for this American Range equipment other than an unmodified new or recycled part purchased directly from American Range, or any of its Authorized Service Centers, and/or the part being used is modified from its original configuration, this warranty will be void. Further, American Range and its affiliates will not be liable for any claims, damages or expenses incurred by the customer which arise directly or indirectly, in whole or in part, due to the installation of any modified part and/ or part received from an unauthorized service center. If during this warranty period, the customer uses this equipment for purposes other than to filter cooking oil, this warranty will be void.



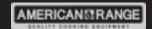
## DESCRIPTION AND CONSTRUCTION

The ARPFS is a portable filter machine for filtering cooking oil used in the restaurant industy. The ARPFS comes in two sizes: the ARPFS-35/50 with a 50 lb oil capacity, and the ARPFS-85 with a 85 lb capacity. It has been designed to utilize Filtercorp's SuperSorb®CarbonPad.

The SuperSorb®CarbonPad is widely acknowledged to be the finest filtration system for cooking oils, giving the operator significant savings in oil usage and the best food quality results.

ARPFS includes features to make the filtration of hot cooking oil as easy and effective as possible. Included is a removeable pan for ease of clean up and sturdy frame for long life and durability.

Frame	Stainless Steel Construction
Pan	Welded Stainless Steel construction with integrated handles for easy removal and cleaning
Motor	Rugged 1/3 Horsepower UL and NSF approved motor and gear pump designed for long life
Electrical Controls	All electrical controls are UL approved and designed to give reliable performance
Hoses	Teflon covered hose and braided stainless steel covered hose, both with UL and NSF approvals
Nozzle	American Range uniquely designed aluminum nozzle reduces splashing while creating mechanical spray action that helps to wash the walls of the fryer during filtering.



## SAFETY AND INSTALLATION

#### **Product Safety**

Safety is the utmost importance when working with heated cooking oils. Throughout this manual you will see the word **WARNING** which means there is potential danger of equipment damage or personal injury.

#### Inspection and Setup

- I. Your ARPFS will arrive crated for shipping.
- 2. Before removing the ARPFS from the crate, inspect the crate for damage. If damage is seen, please contact the delivering carrier.
- 3. After inspecting, remove the ARPFS from the crate.
- 4. Check to make sure the following items are included in the crate:
  - Return hoses assembly
  - Unifit® PadHolder assembly
  - Carton of 10-days supply SuperSorb®CarbonPads
  - 10-foot, 110 v, 3-prong electrical power cord
  - 4 Casters
  - Hardware for Casters
- 5. Install Casters
  - Remove empty tank from cart
  - Tip the cart on its side to expose the bottom
  - Install the casters with the supplied hardware being sure all hardware is tight
  - Tip cart onto the casters and reinstall tank
- 6. Hook up hoses
- 7. You are now ready to filter.



Always follow the operating instructions in this manual when operating the filter.



The ARPFS is equipped with a 10-foot oil proof electrical power cord with ground pin. WARNING - This ground pin protects the operator from electrical shock in the event of an equipment malfunction. DO NOT remove or tamper with the ground feature.



The oil should be at cooking temperature.



### **OPERATING INSTRUCTIONS**

The American Range Portable Fryer Filter is very simple to operate. It is designed as a one-way filter having an on/off switch to engage the motor. Quick-disconnect fittings allow for only one-way hook up of hoses.



Always wear splash goggles or face shield, protective gloves, and appropriate protective safety wear. Never attempt to remove or disconnect hoses when the filter motor is operating.



The American Range Portable Fryer Filter can hold 85 pounds of cooking oil. Do not try to filter a fryer with a larger capacity than the fryer filter.



The end of the drain as well as other parts of the fryer and filter may be hot! Use protective gloves.



Always position the filter system so that the filter pan is in the proper location beneath the drain. This will prevent heated cooking oil from splashing on the floor.



During cleaning, do not pump water with the filter pump. Wait for the filter to cool before cleaning. For safe operation, be sure to wear protective clothing, a safety mask, boots and gloves while operating the unit. The hose ends are equipped with quick-disconnect fitting and  $Delrin^{TM}$  safety collars. To prevent burns, always grasp the fittings by these collars.

## PREPARING THE UNIT FOR OPERATION

- 1. Fryer cooking temperature should never exceed 360°F / 185°C. Perferably, cook less than 350°F / 175°C.
- 2. Remove the tank cover from the unit.
- 3. To connect the hoses to the unit, grasp the Delrin™ safety ring and while applying pressure to the matching fitting pull the ring back to allow the quick disconnect to engage. Next, press the fittings together and release the ring. The ring should return to its initial position and seal the connection. Check engagement by tugging on the fitting.
- 4. To disconnect the fittings, grasp the Delrin™ safety ring and pull it back until the fitting is dis-engaged.





## **OPERATING INSTRUCTIONS (CONTINUED)**

#### NOTE:

I. Put a SuperSorb®CarbonPad into the Unifit® PadHolder.
Place the Unifit® PadHolder into the bottom of the filter pan.



Always wear splash goggles or face shield, protective gloves and appropriate protective safety wear (See accessory section of this manual).

- 2. Check fryer vat capacity and oil volume to ensure cooking oil does not overfill the pan. WARNING The ARPFS-45 can hold 50 lbs of cooking oil and the ARPFS-85 can hold 85 lbs of cooking oil. Do not try to filter a fryer with a capacity larger than the ARPFS tank.
- 3. Attach the drain extension pipe of the fryer to the fryer drain. WARNING The end of the drain as well as other parts of the fryer may be hot! Use protective gloves.
- 4. Roll the ARPFS to the fryer making sure the fryer drain extension drains into the pan. WARNING Always position the filter so that the filter pan is beneath the drain. This will prevent hot cooking oil from splashing on the floor. Plug in the ARPFS electrical cord.
- 5. Open the fryer drain valve slowly, draining the cooking oil from the fryer into the filter pan.
- 6. Make sure the return hose is hooked up and the nozzle is placed into the fryer tank. Push the ON/OFF switch to "ON" position.
- 7. As the cooking oil is filtered through the **SuperSorb® CarbonPad** and returned to the fryer, use the nozzle oil spray to wash down the sides of the fryer.
- 8. Once the sides of the fryer are washed down and the bottom of the fryer is clean of all debris, close the fryer drain valve. Pump all remaining oil from the ARPFS filter back into the fryer Push the ON/OFF switch to the OFF position. **WARNING Never** attempt to remove or disconnect hoses when the filter motor is operating.
- 9. Filter cycle is now complete. Move to the next fryer vat and repeat the process Steps 2-8.
- 10. When finished with filtering the final fryer vat, continue to pump a small amount of air through the pump/motor assembly to ensure cooking oil is not left in the hoses or pump.
- 11. Cleaning (CAUTION Wait for filter to cool before cleaning):
  - Unplug the main power cord
  - Disconnect inlet suction tube at lower quick-disconnect ring
  - Remove Unifit® PadHolder assembly
  - Discard used **SuperSorb®CarbonPad** into trash bin
  - Disconnect the return hose from upper quick-disconnect ring
  - Prior to storing, drain excess cooking oil from hose by holding nozzle of filter over fryer and lifting opposite end of return hose.
  - Clean the inside of the pan and wipe dry.

CAUTION - During cleaning NEVER pump water through the filter pump.





## FRYING OIL MAINTENANCE

#### FRYING TIPS AND RECOMMENDATIONS OR GENERAL GUIDELINES FOR PROLONGING OIL LIFE

- 1. Cooking temperature not to exceed 360°F/185C. Preferably less than 350°F/185C.
- 2. Never turn fryer temperature up, before or during a busy period.
- 3. Turn fryer down or OFF when not in use. Cover fryers not in use.
- 4. Never load baskets over a fryer. Never salt food over fryer.
- 5. Cook similar foods in the same fryer and separate food types if possible.
- 6. Skim the fryer often.
- 7. Add make-up oil often. Do not allow the fryer to be under-filled. Do not over-fill fryers.
- 8. Never cascade, or downstream oil. Never add old cooking oil to new cooking oil.

#### **FILTERING**

- 1. Filter each and everyday. (Each day of filtering missed, cuts 1 to 2 days of oil-life.)
- 2. Use a new SuperSorb® CarbonPad each day.
- 3. It is perferable to filter at the close of business, or after peak periods.
- 4. Ensure that no water is in the filter pan before inserting a **SuperSorb® CarbonPad**.
- 5. Turn fryer OFF, however, filter while cooking oil is still hot (not less than 280°F).
- 6. If there are multiple fryers being used, filter the newest cooking oil first, oldest cooking oil last.
- 7. After draining cooking oil into the filter, wait 2-3 minutes before turning on the pump. Use this time to clean the fryer. Use the ARPFS return hose to rinse debris from the fryer.
- 8. After rinsing the fryer check to make sure fry tank is clean of all debris. Then close the drain valve and re-fill fryer.
- 9. After filtering, allow filter to cool, then clean the filter pan, but never use soap. Avoid kinking the hoses. Dry completely before setting up with a new SuperSorb® CarbonPad.

#### DISCARDING

- 1. Discard only on the basis of a quality standard. Food quality is the best quality index, but test kits that have been evaluated against food quality may be used.
- 2. If there are multiple fryers being used, discard only the fry tank that misses the quality mark.
- 3. Discard cooking oil on a quality standard, not operational ease or by the day of the week.
- 4. Have a manager or a trained person make the discard decision.

#### STORING THE UNIT

- 1. Unplug the main power cord from the wall outlet
- 2. Disconnect inlet suction tube at lower quick-disconnect ring.
- 3. Remove filter pad holder assembly.
- 4. Discard used Carbon Pad(s) into an appropriate trash receptacle.
- 5. Disconnect the return hose from upper quick-disconnect ring.
- 6. Prior to storing hose, drain excess cooking oil from hose by holding nozzle over the fryer vat and elevating opposite end of return hose.
- 7. Clean the inside of the pan and wipe dry.





### PARTS REPLACEMENT



Before servicing any components on this unit, be sure the power cord is removed, and that no oil remains in the tank or hoses.

#### MOTOR CAPACITOR REPLACEMENT

- 1. Remove the six (6) screws securing the top assembly to the cart.
- 2. Remove the quick-disconnect assembly from the nipple which protrudes through the top cover.
- 3. Remove the top cover
- 4. Remove the two (2) screws securing the capacitor cover to the motor case.
- 5. Remove the capacitor from its cavity and disconnect the wires.
- 6. Replace the capacitor and reverse the order of disassembly to complete the installation.

#### ON/OFF SWITCH REPLACEMENT

- 1. Remove the six (6) screws securing the top assembly to the cart.
- 2. Remove the upper quick-disconnect assembly from the nipple which protrudes through the top cover.
- 3. Remove the top cover.
- 4. Disconnect the wires from the switch, noting their locations for accurate reconnection.
- 5. Push the switch out of the switch panel by pressing in the locking tabs while applying pressure to the back side of the switch.
- 6. Install the new switch by reversing the order of disassembly.

#### RECETACLE REPLACEMENT

- 1. Remove the quick-disconnect assembly from the nipple which protrudes through the top cover.
- 2. Remove the six (6) screws securing the top assembly to the cart.
- 3. Remove the top cover.
- 4. Remove the three (3) screws and nuts securing the round receptacle assembly.
- 5. Disconnect the wires from the receptacle, noting their locations for accurate reconnection.
- 6. Install the new receptacle by reversing the order of disassembly.

#### CASTER REPLACEMENT

- 1. Remove the empty tank from the unit.
- 2. Tip the cart on its side to expose the casters and their fasteners.
- 3. Remove the four (4) nuts securing each caster to the cart assembly.
- 4. Pull the caster assembly off of the cart assembly.
- 5. To install the new caster(s) reverse the order of disassembly.

NOTE: To prevent leaks, be sure to use pipe thread sealant when reinstalling the quick-disconnect fitting.

#### WIRE HARNESS REPLACEMENT

- 1. Remove the quick-disconnect assembly from the nipple protruding through the front cover.
- 2. Remove the six (6) screws securing the front panel.
- 3. Remove the front cover.
- 4. Unbolt the motor assembly and rotate it to expose its wire cover plate.
- 5. Remove the cover plate.
- 6. Remove and replace the wires one by one to ensure accurate reconnection.
- 7. Reinstall the pump and motor assembly.
- 8. Reinstall the front cover.





## PARTS REPLACEMENT

#### **OUICK DISCONNECT FITTING REPLACEMENT**

- 1. Unplug the unit and remove the hoses.
- 2. Remove the empty tank from the unit.

#### **UPPER**

3. Remove the quick disconnect fitting using a 15/16" end wrench, check the nipple located behind it to be sure it is tight. To check the upper nipple, remove the front panel as described in Steps I-3 of wire harness replacement procedure.

#### **LOWER**

- 4. After removing the quick-disconnect fitting with a 7/8" end wrench, check the nipple located behind it to be sure it is tight.
- 5. To check the nipple remove the lower cover by removing the four (4) screws securing it, located on the back of the unit.
- 6. Install the new quick-disconnect fitting(s) and tighten hand tight plus one additional turn.

NOTE: To prevent leaks, be sure to use pipe thread sealant when re-installing the quick-disconnect.

#### PUMP/MOTOR REPLACEMENT

- 1. Remove the upper quick-disconnect fitting from the front of the panel.
- 2. Remove the six (6) screws securing the top panel to the top and front of the unit.
- 3. Remove the quick-disconnect fitting protruding from the lower panel.
- 4. Remove the four (4) screws located on the back side of the unit, which secure the lower front panel and remove the lower panel.
- 5. Remove the four nuts and lock washers holding the motor located beneath and to the right of the upper structure.
- 6. Rotate the motor assembly enough to expose the wire cover plate.
- 7. Unscrew and remove the wire cover plate and remove and replace the wire nuts securing the motor wires.

NOTE: To assure proper reconnection to the new motor and pump assembly, remove and replace the wires and wire nuts one at a time.

- 8. Rotate the motor and pump assembly enough to allow the elbows, nipples and fittings to clear the hole located on the bottom of the motor shelf.
- 9. Remove the motor and pump assembly as a unit.
- 10. Install the new motor and pump assembly in the reverse order of disassembly.

NOTE: When installing the new motor leave the mounting bolts a bit loose until the proper alignment of the hole for the nipples/ elbows and quick-disconnect fittings have been achieved, (test fit the top cover) then tighten the motor mount nuts securely. To prevent leaks, be sure to use food grade pipe thread sealant or teflon tape when re-installing the quick-disconnect fittings.

#### AMERICAN RANGE LOGO REPLACEMENT

- 1. Remove the quick-disconnect assembly from the nipple protruding through the front cover.
- 2. Remove the six (6) screws securing the front panel.
- 3. Pry the clips securing the logo off the logo studs.
- 4. Replace the logo and reverse the order of disassembly.

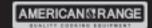


Sealant or Teflon tape will damage the pump if it is allowed to enter the pipe system.

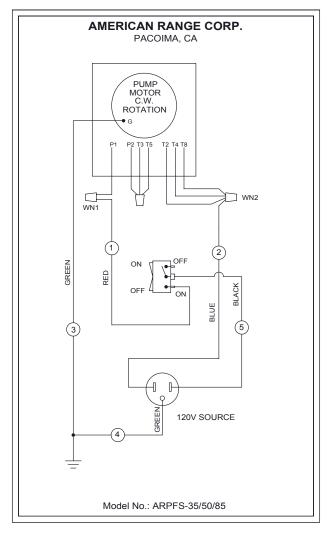


When servicing or replacing fittings or nipples, be certain that Teflon tape or pipe sealant is applied to the thread areas only. Verify that no sealant or Teflon tape has migrated into the fittings or nipples.

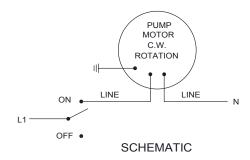


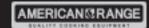


## WIRING DIAGRAM

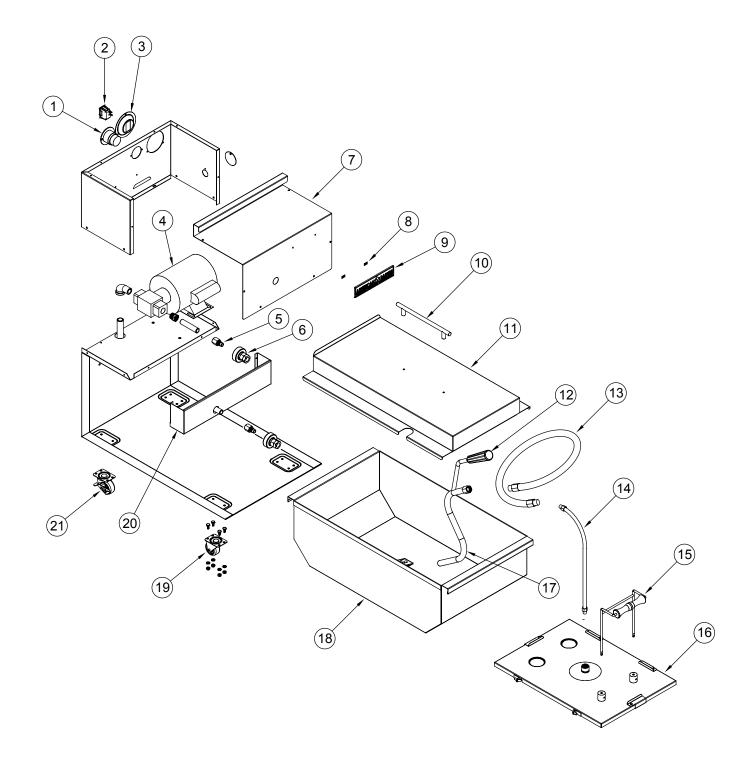


FOR USE WITH ARPFS SERIES A13302 HARNESS





## ARPFS-35/50 & ARPFS-85





ITEM NO.	PART NO.	DESCRIPTION	
1	A20047	Receptacle, Inlet NEMA 5-1 15A 71816 ARPFS 125V 2 pole 3 wire	
2	A10001	Switch, Rocker On/On/Maintn ARPFS Series	
3	71684	Cap, Switch 18GA 430 71684 ARPFS	
4	A16101	Pump, Hot Oil Motor 1/3HP 1725/71809 115V 50/60HZ S23A	
5	A16109	Fitting, 3/8" NPT Quick Disconnect 71807 ARPFS Stainless	
6	A16111	Fitting, 3/8" Quick Disconnect 71812 ARPFS Assembly	
8	A44003	Nut, Speed #6 Push Black	
9	A38000	Name Plate, American Range 8" 10499 Quality Commercial Chrome	
10	A16113	Handle, Lid 10" Satin Finish 71970 ARPFS	
44	A16114	Cover, Oil Tank 18GA 430 71709 ARPFS-35/50	
11 A16115		Cover, Oil Tank 18GA 430 71709 ARPFS-85	
12	A16201	Rod, Aluminum Wand Handle	
13	A16108	Hose, Drain 62" Long	
14	A16107	Hose, Pick-Up 21" Long 71818 ARPSF	
15	A16205	Handle, Assembly Complete 71705 ARPFS	
16	A16119	Housing, Filter Assembly Pad ARPFS-35/50	
16 A16119		Housing, Filter Assembly Pad ARPFS-85	
17	A16199	Wand, Oil Refill Assembly 71824 ARPFS	
18	A16116	Tank, Oil Weld Assembly ARPFS-35/50	
	A16117	Tank, Oil Weld Assembly ARPFS-85	
19	A35023	Caster, 2" Rigid No Brake NFS 71801 ARPFS	
20	71689	Cover, Oil Inlet 20GA 430 71689 ARPFS	
21	A35024	Caster, 2" Swivel W/Brake NFS ARPFS	

subject to change without notice

1	2	5	6	8	9	12
					AMERICAN AMERICAN	
RECEPTACLE	SWITCH, ON/OFF	QUICK-CONNECT 3/8 MALE	QUICK-CONNECT 3/8 FEMALE	SPEED NUT	AMERICAN NAME PLATE	WAND HANDLE
19	19	21				
<b>9</b>						
CASTER SCREW SET	2" RIGID CASTER	2" SWIVEL CASTER W/BRAKE				

Notes	AMERICAN®RANGE





## FRYING OIL ACCESSORIES/SAFETY KIT



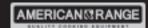
Authentic proprietary BurnGuard materials and construction make up this state-of-the-art safety kit for filtering hot oils. Specially formulated to provide superior protection against the penetration of liquids and insulation from heat.

- Twenty times more durable than conventional garments
- Non-toxic
- Machine washable
- Comfortable design

Then kit consist of a 42-inch apron (Part #3074), a pair of 18 inch five gloves (Part #3075) a part of 18-inch shin guards (Part #3076), and a hard protective face shield (Part #3078).

Note: Items can be ordered separately from FILTERCORP 9805 NE 116th St. PMB A200 Kirkland, WA 98034 www.filtercorp.com





## TROUBLESHOOTING GUIDE

POSSIBLE CAUSE	SUGGESTED ACTION		
SYMPTOM: Unit will not turn on.			
Power cord is not plugged in	Check both filter connection and power outlet		
Power breaker is tripped	Check to ensure the power outlet breaker in your building is on and has not been tripped		
Motor is overloaded	Check for debris in pump impeller		
SYMPTOM: Motor runs but will not pump.			
Hose or pump is blocked	Disconnect and clean hoses with warm water to loosen solidified oil. Drain and dry completely.		
SYMPTOM: Hose leaks at the connections.			
Loose connections	Check to ensure all hose connections are properly attached and locked		

## WARRANTY REQUIREMENT

For reliable operation and for your own safety, this professional cooking equipment must be installed by a certified/licensed contractor.

Failure to comply will void any written or implied warranty.

Should the equipment require service during the standard warranty period, the receipt proving certified installation must be made available to American Range for verification.

If installation was not performed by a certified/licensed contractor be prepared to submit a major credit card for payment for proper installation prior to service.



