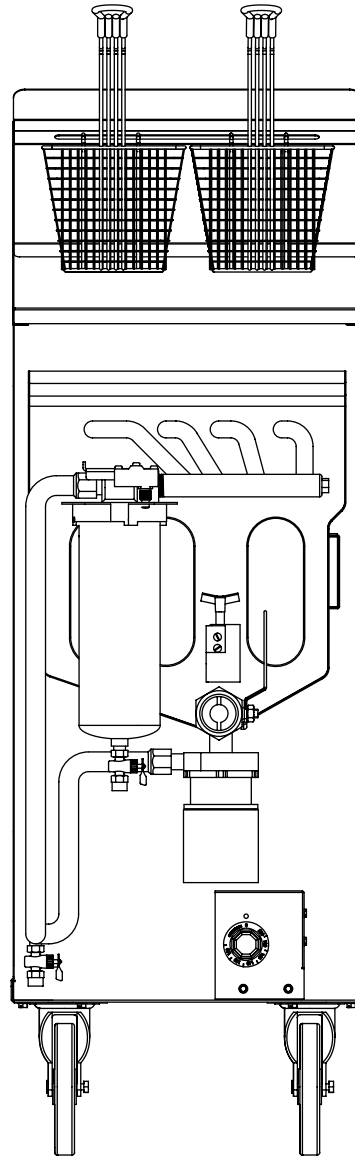




PROFESSIONAL QUALITY COOKING EQUIPMENT

OWNER'S MANUAL FOR CONTINUOUS FILTRATION FRYERS

MODEL NUMBERS: AFM-35/50, AFM-85



Shown with optional casters

DESIGN



CLASS



FUNCTION



FOR
YOUR
SAFETY

FOR YOUR SAFETY!
Do not store or use gasoline or
other flammable vapors or liquids
in the vicinity of this or any other appliance.

FOR
YOUR
SAFETY

WARNING

IMPROPER
INSTALLATION

WARNING!
Improper installation, adjustment, alteration, service
or maintenance can cause property damage, injury
or death and will void warranty. Read the
installation, operating and maintenance instructions
thoroughly before installing or servicing this equipment.

WARNING

IMPROPER
INSTALLATION

IMPORTANT SERVICE NOTICE!

Using any part other than genuine American Range factory supplied
parts relieves the manufacturer of all liability.
American Range reserves the right to change specifications and
product design without notice. Such revisions do not entitle the buyer
to corresponding changes, improvements, additions or replacements
for the previously purchased equipment.

Instruction to be followed in the event the user smells gas should be posted
in a prominent location. This information should be obtained by
consulting the local gas supplier.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

This equipment is design engineered for commercial use only.

Model Number: _____

Serial Number: _____

Purchase Date: _____

Installed By: _____ Install Date: _____

Gas Type: _____

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 use.

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 for your kitchen. 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 via email: info@americanrange.com at www.americanrange.com, or call 888.753.9898.

Sincerely,

Shane Demirjian

President, American Range Corporation



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WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing damage, personal injury or death.

- INSTALLATION AND SERVICE MUST BE PERFORMED BY A CERTIFIED / LICENSED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER
- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch, do not use any phone in your building.
 - Immediately call your gas company. Follow the gas supplier instructions.
 - If you cannot reach your gas supplier, call the Fire Department.

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.

- Please observe all local and national codes and ordinances.
- Do not remove any permanent warning labels or plates from this product.
- Please ensure that this product is electrically grounded.
- Consumers should retain these instructions for local inspectors and for future use.

ABOUT THIS MANUAL

The Use and Care Manual is divided into several sections:

The Safety Section informs you about significant safety precautions when installing and operating your new fryer. This is a must read section of the manual.

Quick Start and Installation Section describes how to unpack the unit, what to save and what to discard, installation dimensions, gas and electrical connections and how to identify the primary parts of the product so you can better understand what's going on "under the hood".

How to Use Your Product shows you how to light the pilot and set frying temperatures.

The Care and Maintenance and Troubleshooting and Service Sections discuss how to keep your product in good operating condition, how to identify what might be going wrong with the unit, and how to communicate your observations with authorized field service technicians.

Before using your appliance, please read this manual paying special attention to the important safety instructions located in the next several pages.



This is the SAFETY ALERT SYMBOL. This symbol alerts you to hazards which will result in severe injury or death.



DANGER

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



WARNING

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



CAUTION

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

CALIFORNIA PROPOSITION 65 WARNING

The burning of gas cooking fuel generates some by-products which are on the list of substances known by the State of California to cause cancer or reproductive harm. California law requires businesses to warn customers of potential exposure to such substances. To minimize exposure to these substances, always operate this unit according to the Owners Manual, ensuring you provide proper ventilation when cooking with gas.

IMPORTANT - PLEASE READ AND FOLLOW!

- Before beginning, please read all the instructions carefully.
- **DO NOT** remove permanently affixed labels, warnings, or plates from product. This will void the warranty.
- All local and national codes and ordinances must be observed; installation must conform with local codes.
- The Installer must leave these instructions with the consumer who should retain for local inspector's use and for future reference.
- Installation and service must be performed by a certified / licensed installer; service agency or gas supplier.
- Please ensure that the product is properly electrically grounded.

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 you receive a damaged product, immediately contact your delivery company, your dealer, your builder or installer. Do not install or attempt to operate a damaged appliance.

1. Note any visible loss or damage on the freight bill or express delivery and have the note 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.

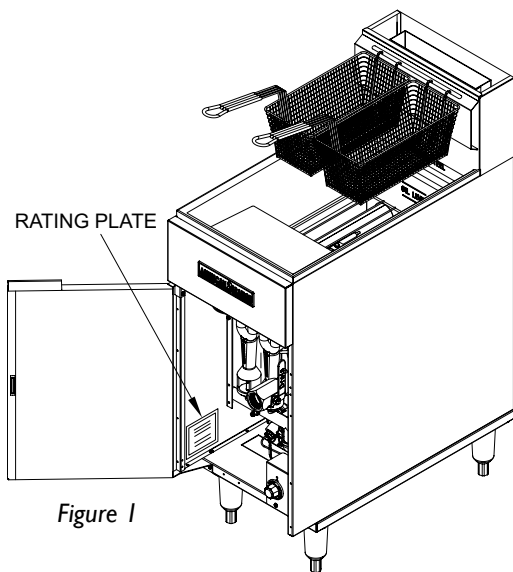


Figure 1

RATING PLATE - The location of the rating plate is shown in *Figure 1*. The information on the rating plate defines the model, serial number; gas type (natural or liquid propane), operating pressures and burner BTU ratings. Keep this information for future reference. It is essential for proper identification of the unit when requesting additional information or factory support.

AMERICAN RANGE 13592 DESMOND ST., PACOIMA, CA 91331		NSF	ETL	ETL
Intertek 3013256		Intertek 3013256		
MODEL: AFM-35/50	SERIAL NO. XXXXXXX			
GAS TYPE: NAT	MAN. PRESS: 4.0	IN. W.C. TANK ID#2		
INPUT-BTU/HOUR/BURNER 40,000	CLEARANCES NON-COMB. COMB.			
ELECTRICAL RATING VOLTS 120	PHASE 1	AMPS 5	BACK 0"	6"
			SIDES 0"	6"
SUITABLE FOR INSTALLATION ON COMBUSTIBLE FLOORS USING 6" ADJ. LEGS OR CASTERS. INTENDED FOR OTHER THAN HOUSEHOLD USE. ANSI Z83.11a/CSA 1.8a-2007 Food Service Equipment				

Rating Plate



WARNING

Appliances must be connected only to the type of gas identified on the rating plate.

CLEARANCES - The appliance must be kept free and clear of all combustible materials. This unit is designed and certified for the following installation only:

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

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

INSTALLATION

INSTALLATION - GAS AND ELECTRIC UTILITY CONNECTIONS - STANDARDS AND CODES



The installation instructions contained here are for the use of qualified installation and service personnel only. Installation or service by other than certified / licensed personnel will void the warranty and may result in damage to the fryer and/or injury to the operator.

Qualified installation personnel are individuals, a firm or a company which either in person or through a representative are engaged in and responsible for the installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance. The installation of gas must be performed by a certified / licensed installer, service agency or the gas supplier.

Qualified installation personnel, licensed and bonded, must be experienced in such work, familiar with all precautions required and have complied with all requirements of state or local authorities having jurisdiction.

U.S. AND CANADIAN INSTALLATIONS - All fryers, when installed, must be electrically grounded in accordance with local codes, or in the absence of codes, with the National Electrical Code ANSI/NFPA 70 - Latest Edition and/or Canadian National Electrical Code C22.2 as applicable.

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA54, or the Natural and Propane Gas Installation Code, CSA B149.1, as applicable, including:

1. The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 PSI (3.5KPa).
2. The appliance must be isolated from the gas supply piping system by closing its individually manual shut off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 PSI (3.5KPa).

The gas supply line must be at least the same size as the gas inlet of the appliance.

The ventilation of these fryers should be in accordance with local codes. In absence of local codes, refer to the national ventilation code titled, Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment, NFPA-96-Latest Edition.

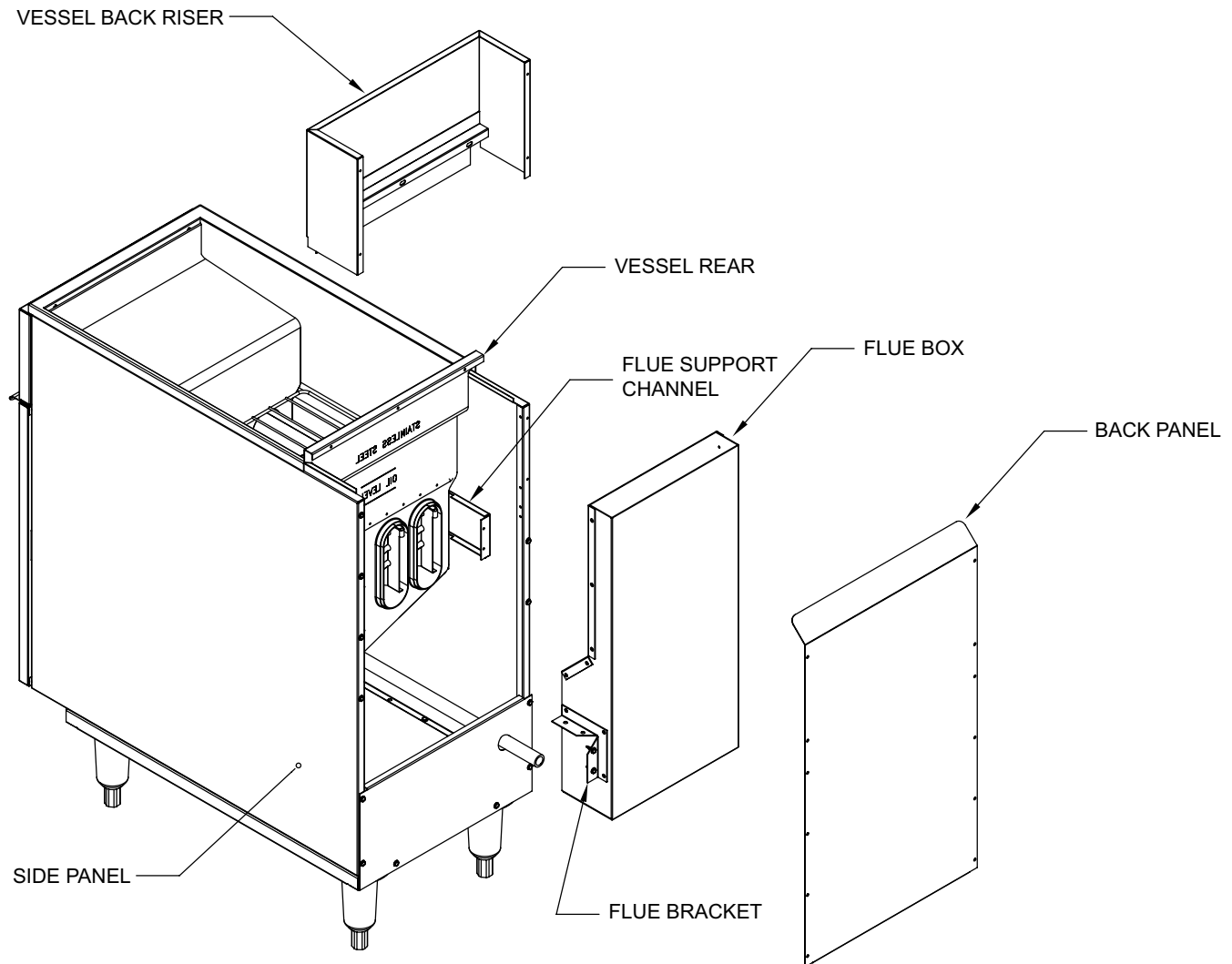
GENERAL EXPORT INSTALLATIONS - Installation must conform to Local and National Standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation or operation of your American Range fryer, please contact your local distributor. If you do not have a local distributor, contact American Range Corporation at 1.888.753.9898 or visit us at www.americanrange.com

INSTRUCTIONS

- The area around the appliance must be kept free and clear of combustibles such as solvents, cleaning liquid, broom, rags, etc.
- All threaded joints of the gas piping must be sealed with a compound that is resistant to the action of natural gas or liquefied petroleum gases and the joint connection checked for gas leaks using a soapy water solution before lighting the pilots.
- Proper clearances must be provided at the front of the appliance for servicing and proper operation.
- For proper combustion and ventilation provisions shall be incorporated in the design of the kitchen, to ensure adequate supply of fresh air and adequate clearance for air openings into the combustion chamber, .
- For proper operation of the appliance, do not obstruct the flow of combustion and ventilation air.
- A manual gas shut-off valve shall be installed when the appliance is connected to the gas supply.
- The rating plate is located inside of the front door panel. The wiring diagram is located on the lower inside of the front door panel.

FLUE INSTALLATION INSTRUCTIONS

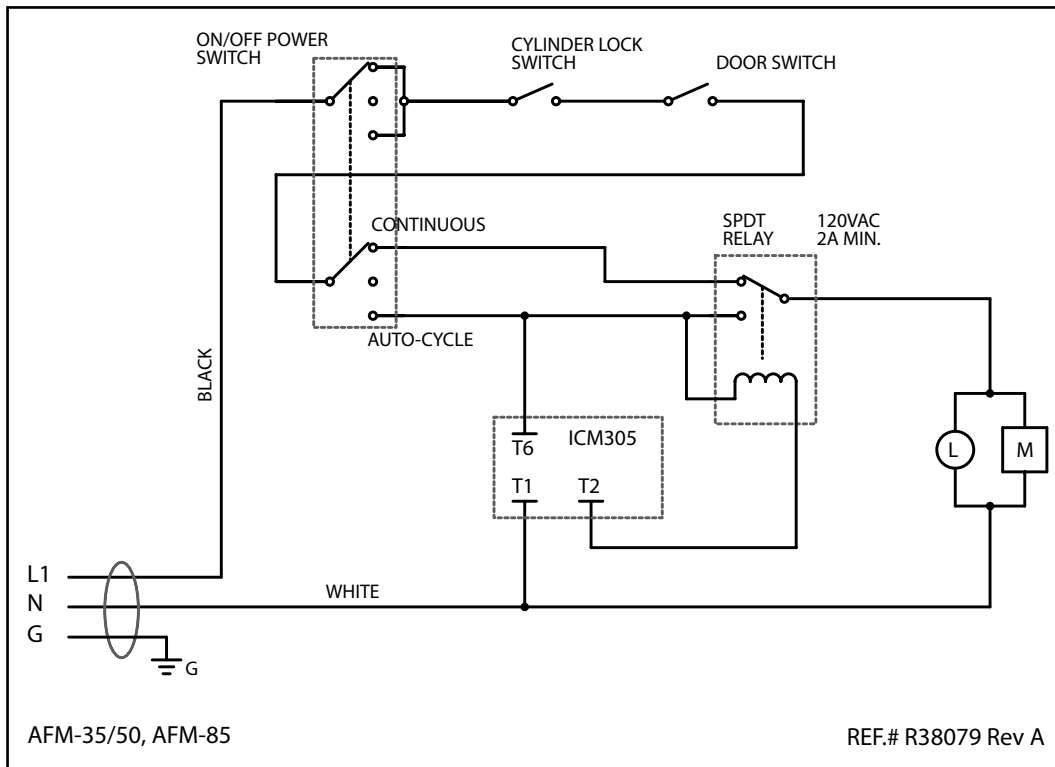
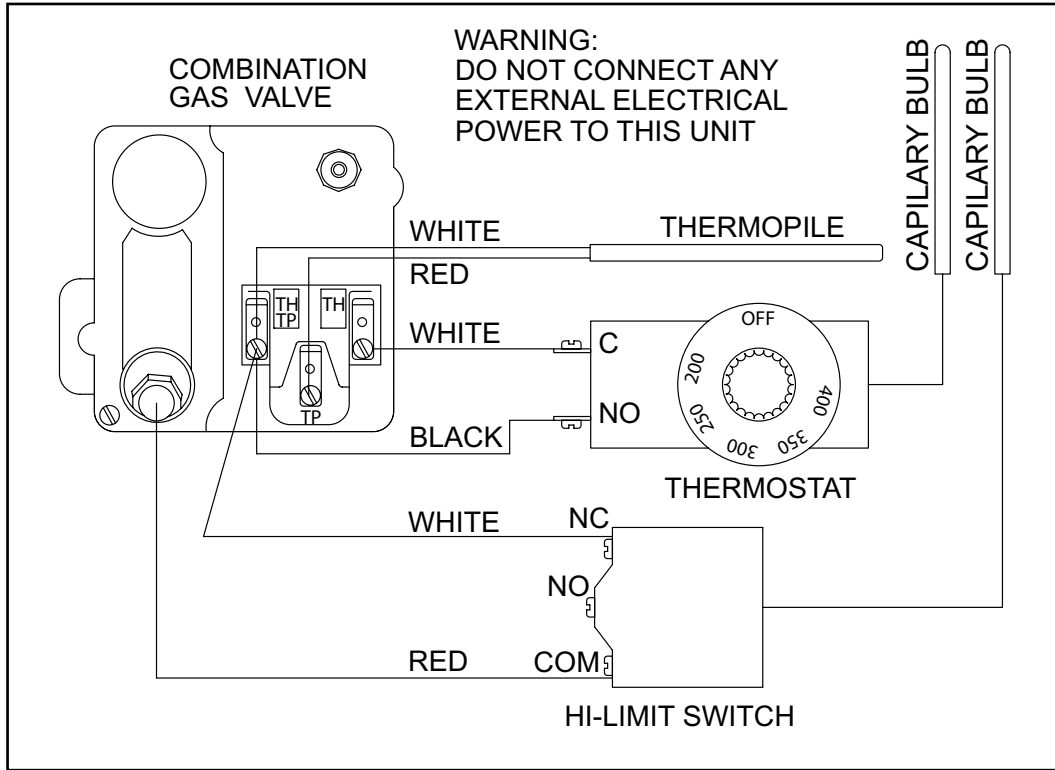
- STEP 1.** Place the vessel back riser over the vessel rear, matching two holes on the angle to holes on the vessel rear; use two (#10) screws to secure the parts.
- STEP 2.** Place flue box onto the flue support channel, match the holes and secure with four (#10) screws.
- STEP 3.** Place back panel at the back, matching four holes on the panel with holes in the back of vessel back riser and six holes at bottom to side panel, secure with ten (#10) screws.



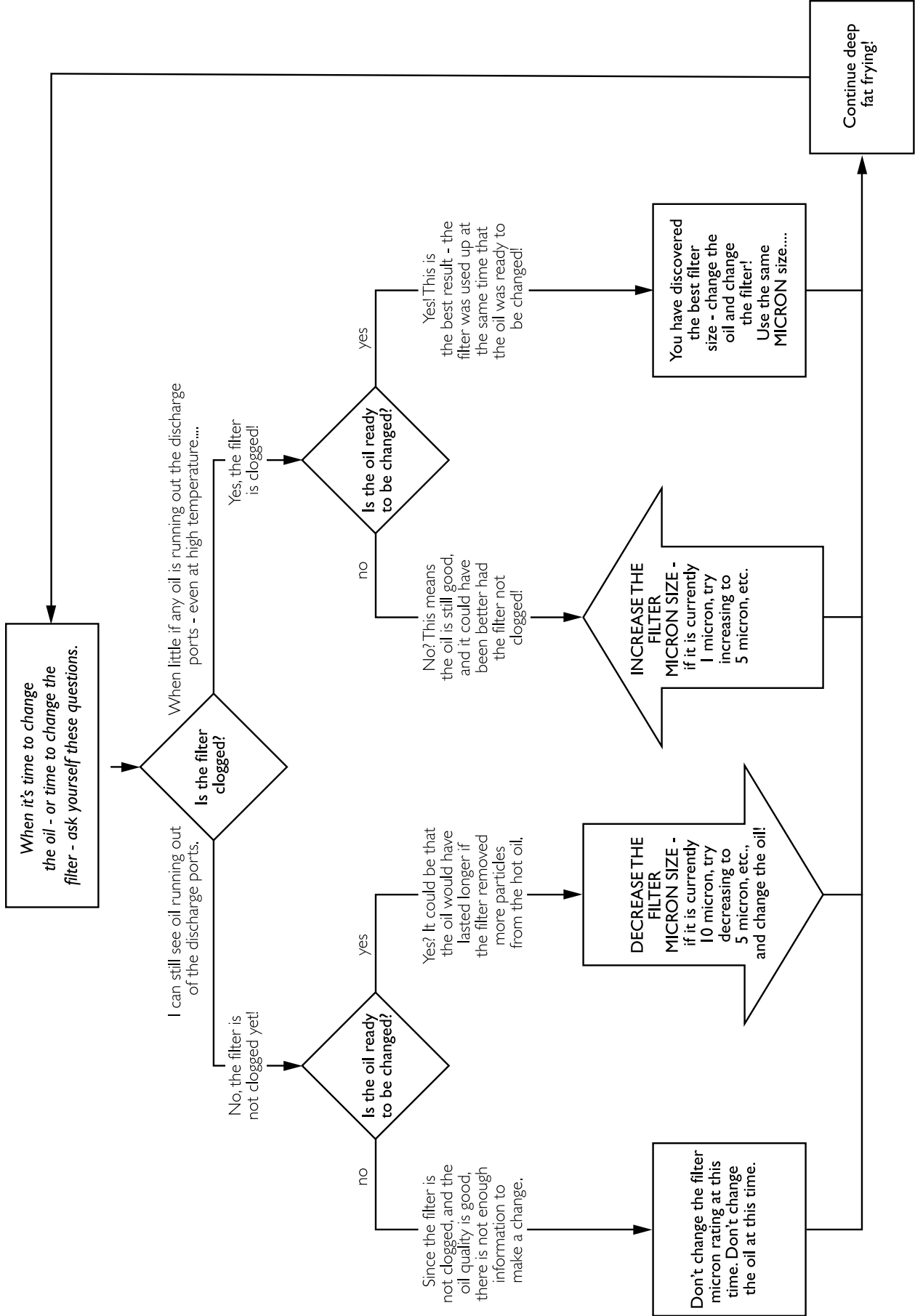
FRYERS WITH CASTERS

When this appliance is installed with casters it must be installed with a connector that complies with the standard for connectors for movable gas appliances, ANSI Z21.69 CSA.16, and a quick-disconnect device that complies with the standard for quick-disconnect devices for use with gas fuel, ANSI Z21.41 CSA6.9. Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement. The restraining device may be attached to the rear panel of the appliance.

WIRING DIAGRAMS



How to Select the Best Filter for Your Restaurant



INSTALLATION CHECKLIST

This checklist has been developed to assure proper installation of your fryer.
 To validate warranty, you must mail, e-mail or fax this form and a copy of your receipt to:
AMERICAN RANGE CUSTOMER SERVICE, 13592 DESMOND STREET, PACOIMA, CA 91331
service@americanrange.com
818.897.8839 FAX

Street: _____

Purchase Date: _____

City, State, Zip Code: _____

Installation Date: _____

E-mail: _____

Installer's Name: _____

Telephone: _____

Company: _____

Dealer: _____

Telephone: _____

CHECK ALL THAT APPLY

Appearance and Aesthetics

- Exterior
- Top section

Installation

- Read User Manual
- Review Safety Instructions
- Backguard in place
- Level
- Ventilation system

Ignition

- Pilot Burner
- Main Burners

Controls

- Combination Gas Valve
- Thermostat

Valve Operation

- Combination Gas Valve

Electrical Connection

- Correct voltage
- Grounded outlet
- Polarized outlet
- No GFCI

Gas Connection

- Verify fuel: Natural -or- LP
- Gas shut-off present and accessible
- Gas Supply line properly sized
- Gas Supply pressure checked
- Operating pressure checked
- All connections checked for leaks

Oven Door

- Alignment
- Hinges
- Door Interlock Switch

Customer Copy

OPERATING INSTRUCTIONS

WARNING

- Hot oil and hot surfaces can cause severe burns. Use caution when operating the fryer.
- Do not attempt to move the fryer when filled with hot oil or shortening.
- Do not go near the area directly above the flue when the fryer is in operation. Flue exhaust temperatures may cause severe burns.
- Drain hot oil into metal containers. Do not use plastic buckets or glass containers.

TO CHECK FOR GAS LEAKS USING A SOAPY WATER SOLUTION

1. Turn ON the manual gas valve at the inlet side of the gas supply line.
2. Check for gas leaks at the flexible coupling or gas connector fitting using a solution of one part soap and three parts water.
3. Sparingly spray or brush the soapy solution at the gas fittings; active bubbling indicates location of gas leak.
4. If a gas leak is detected turn off the manual gas valve at the inlet side of the gas line. Call your certified and licensed service technician.

BEFORE TURNING THE BURNER ON

1. Fill the vessel with a liquid oil up to the "Level" marking.
2. Do not operate fryer without oil in the vessel.
3. Do not overfill the vessel.

LIGHTING INSTRUCTIONS

1. Before attempting to light this appliance, the door if so equipped, shall be open.
2. Turn the appliance manual gas shut off valve to the OFF position.
3. Turn the combination gas control knob to the OFF position.
4. Turn the thermostat control to the OFF position.
5. Wait 5 minutes.
6. Turn the appliance manual gas shut off valve to the ON position.
7. Turn the combination gas control knob to the PILOT position.
8. Light the pilot with a match by depressing and holding the combination gas control knob until the pilot remains it upon releasing the gas control knob.
9. Turn the combination gas control knob to the ON position.
10. Turn the thermostat control knob to the desired temperature to turn burners ON.
11. The door; if so equipped, shall be closed.
12. For complete shutdown, repeat steps 2, 3, and 4.

LIGHTING INSTRUCTIONS are located on the lower inside of the front door panel.

WARNING

- Do not dry fire the oil tank. Operating the unit without a full tank is a major cause of tank damage. Dry firing is typically done after cleaning when the end user wants to dry out the tank the "easy" way.
- Do not drain the oil while it's hot; wait till it cools before emptying. Rapid change in temperature causes stress fractures and tears at the seams.
- Do not use acidic cleaners; use only boil-out solution. Acid can cause erosion to metal and in due time can cause a leak in the tank.
- Solid shortening must be liquefied before filling the tank. The tank walls must have liquid in contact with them in order to transfer heat and avoid overheating and stressing the metal to the point of a tear.
- Do not rinse off a hot tank with cold water. Always allow it to cool first.
- Do not use sharp tools to clean the fryer.
- Keep your tank clean. Check for debris buildup at the bottom of the tank, and never allow too much build-up to occur.

OPERATING INSTRUCTIONS

FRYING OIL

The type of fat that you use in frying influences many qualities of the finished product such as flavor, texture, shelf life and nutritional attributes. How often you use the fryer – and the temperature that you cook at - will determine how long the fryer oil can be used – most can last up to 100 hours.

Depending on the menu and local eating patterns, fryers will usually be operated at full capacity for a few hours a day, intermittently for a few hours and be idle the remainder of the time. Operating a fryer on an intermittent basis is the primary reason that frying oil must be discarded and replaced periodically. During the idle and low production periods, the oil is subjected to thermal and oxidative stress more than it is during the active frying process. If fryers were operated without interruption and oil was filtered regularly, frying oil would rarely need to be discarded.

Oil and shortening are two types of fat that are typically used in commercial deep fryers. Shortening comes in tubs or bricks and quickly melts down to a liquid for frying purposes – however, it is not used as much now, because it is high in calories and fat. Healthier fry oils like vegetable, canola, and the like are more commonly used in restaurants.



CAUTION

When using solid shortening, follow these additional Use and Care guidelines:

1. Reduce the potential of dry-firing the tank, overheating the tank welds and causing a leak by always and carefully melting solid shortening on a stove top and pouring the liquefied shortening into the fryer tank.
2. Every overnight, leave the standing pilot burning and place the unit in Auto-Cycling mode to keep the shortening liquid warm and flowing in the filtration system.
3. When starting fresh at the beginning of the day shift, just set the thermostat to the frying temperature (350°F or whatever you choose) and place the unit back on Continuous mode.

Remember to never operate the fryer with the tank empty. The burners used in fryers are very powerful – mainly to quickly heat oil in a cool tank and to help recover heat lost during the cooking process. This power can damage a fryer tank, because metal of the tank – which is usually cooled by the oil – expands and this expansion could stress and fracture the welds.

So, the tank must be filled with cooking oil (or water for cleaning) before lighting the burners. The bottom line is that failure to do so will damage the tank and may even cause a fire.

WEEKLY CLEANING INSTRUCTIONS

1. Shut down the fryer by turning the thermostat and pilot valve to OFF position.
2. Disconnect the restraining device before moving the appliance for cleaning and servicing.
3. Drain the fryer oil into a pan or steel container. Flush out sediment at the bottom of fryer with liquid oil.
4. Drain remaining oil and remove used filter (refer to the "Replacing the Fryer Filter" section on page 13 of this manual).
5. Close the drain valves and fill the vessel with a mixture of boil-out solution and water.
6. Relight the pilot and turn on the burners.
7. When the solution starts to boil, turn off the thermostat and let the vessel soak to soften deposits and/or carbon spots for approximately one hour.
8. Drain off the solution, scrub the insides with brush and rinse thoroughly.
9. Drain remaining solution and install new filter (refer to the "Replacing the Fryer Filter" section on page 13 of this manual).
10. Repeat the procedure if necessary.
11. Wipe dry with soft towels and refill with oil/shortening.
12. Re-connect the restraining device after returning the appliance to its originally installed position.

STAINLESS STEEL PARTS - Do not use steel wool, abrasive cloths, cleaners or powders to clean Stainless Steel surfaces. All Stainless Steel parts should be wiped regularly with hot soapy water during the day and a Stainless Steel cleaner at end of the day. To remove encrusted materials, soak in hot water to loosen the material - then use a wood or nylon scraper.



WARNING

All water must be removed before adding oil or shortening. Not doing so can result in splattering of hot oil causing severe burns and burn hazard.



CONTINUOUS FILTRATION FRYER CONTROL PANEL DESCRIPTION AND OPERATION

The Continuous Filtration Fryer control panel is equipped with a single indicator light and a three position rocker switch. The indicator light signals that the filtration pump is operating. The rocker switch is used to select between different modes of operation or to shut the unit OFF. The switch positions are labeled CONTINUOUS / OFF / AUTO CYCLING.

In the CONTINUOUS mode of operation, the filtration system is immediately activated. The fryer oil is pumped through the filter – whether hot, warm or cold – at a rate depending on the temperature of the tank. The flow rate of oil through the filter, and so, filtration performance, strongly depends on the temperature of the oil – cold oil flows very slowly, warm oil faster and hot oil flows at nearly 3 gallons per minute. This means almost all the oil in the hot oil tank is circulated through the filter in a few minutes. It may take thirty minutes or more to filter a cold tank of oil.

In the AUTO-CYCLING mode of operation, a solid state timer provided in the unit, and accessible from the back panel, controls the ON time and OFF time of the oil pump. The AUTO-CYCLING timer comes preset from the factory at a three minutes ON - twelve minutes OFF duty cycle – filtering the complete tank in about one cycle or effectively performing four oil turn-overs each hour.

These ON and OFF times can be changed if desired – programming switches on the AUTO-CYCLING timer are used to set the ON and OFF times in one minute amounts from 1 to 1023 minutes. Access to the timer is achieved through a small panel located near the electrical power cord entrance at the back of the fryer. Simply remove the door; use a ball point pen to press in the desired on and off times – and replace the door.

Choosing which operating mode to use – Continuous or Auto-Cycling – depends largely on how the fryer is used in your business. Continuous operation of the filtration system might be best during high volume use – say between 11 am to 1 pm and 5 pm to 7 pm. Auto-Cycling may be better for "off peak" operation of the fryer.

In either CONTINUOUS or AUTO-CYCLING setting, remember the color of the oil is nearly at the molecular level – and while the high temperature polymer filter can be ordered at five micron or one micron pore size, these are very large openings compared to the size of color molecules of the oil – and so, won't have much effect that way.

If the normal flow of a hot tank of oil discharging from the four output jets in the tank looks significantly low – it is probably time to change the oil. It is recommended to change the filter when you change the oil to take advantage of the filtration you get with the system. Consult the chart on page 9 for recommendations on filter size selection.

The important thing to remember is that the filter system works when you need it most – when the fryer oil is at high temperature. At the end of the day, consider operating the system until the oil cools down a bit – and then place the rocker switch in the OFF (middle) position. That way, you'll be ready for tomorrow!

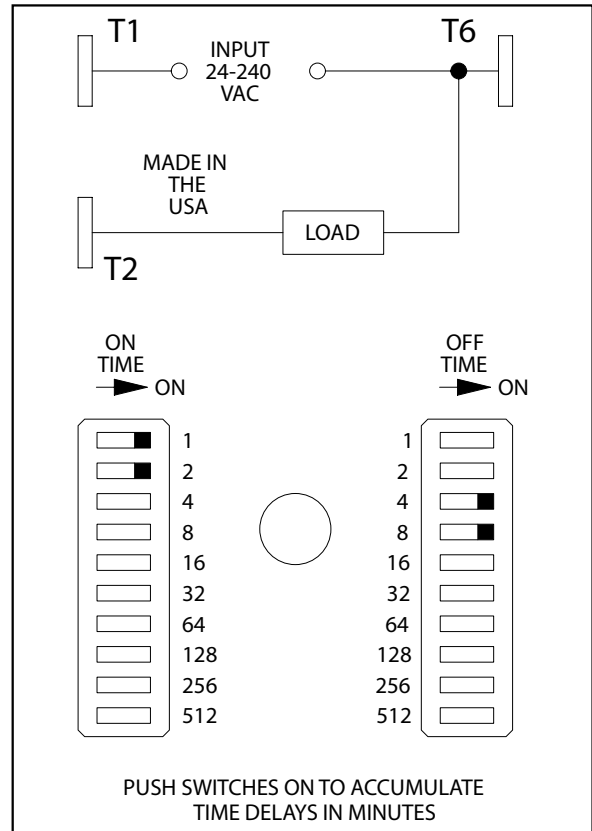
REPEAT CYCLE TIMER PROGRAMMING SAMPLE

The Continuous Filtration Fryer comes equipped with the added feature – Auto Cycling – to optimize your filter and oil performance.

Any material removed from the oil tank accumulates on the filter. Since the oil circulating through the filter is at tank temperature – the material collected on the surface of the filter will begin to breakdown – just like the material in the tank – further reducing the lifetime of the oil. Auto Cycling is controlled by a **repeat cycle timer** to optimize the circulation of oil through the filter – and reduce the length of time the collected debris is in contact with hot oil.

In a typical installation, the hot oil is circulated through the tank and filter at a rate of 3 gallons per minute. At that rate, all the the oil in the tank is filtered in about 3 minutes. The **repeat cycle timer** is factory set to operate the pump for that period of time (3 minutes) and then turn the pump off (for 12 minutes). This repeat cycle is experimental – but it gives you four tank changes per hour – reducing the flow of hot oil over filter entrained materials.

If three minutes seems too short – or your use history indicates that filtration should be more frequent, the **repeat cycle timer** ON and OFF times can be changed. To do this, locate the timer panel at the back of the unit near the power cord entrance. Remove the panel protecting the **repeat cycle timer**. Looking at the timer, locate two blue colored DIP (dual in-line package) switches. These DIP switches store the requested ON and OFF times that the **repeat cycle timer** uses to control the pump motor. The factory settings are shown in the diagram on the right.



To change the settings to, let's say, 13 minutes ON and 27 minutes OFF, set the switches like this:

ON TIME: Switch 8 + Switch 4 + Switch 1 Total=13

OFF TIME: Switch 16 + Switch 8 + Switch 2 + Switch 1 Total=27

– remember the switches add up to the required time – and don't forget to switch OFF the times that you do not need. For the ON condition discussed above, turn OFF Switch 2, Switch 16, 32, 64, 128, 256 and 512. With these new settings, every time the AUTO-CYCLING function is selected on the front panel, the **repeat cycle timer** will turn the filtration pump ON for 13 minutes and OFF for 27 minutes.

It's simple and you can't really make a mistake!

REPLACING THE FRYER FILTER

CLEANING THE STAINLESS STEEL STRAINER

After the used oil has been drained from the tank, the real work begins. For best taste, the walls and tubes of the fryer tank need to be really, shiny clean – no fish scales, fries, calamari legs or other debris waiting to turn a chicken cutlet into a fish cutlet like magic...

When you are at the end of that project, remove the stainless steel strainer located in the bottom of the tank at the back. Just reach in and give it a slight counter clockwise twist to unscrew it and pull up.

With the stainless steel strainer in hand, head over to the sink to scrub it clean – rinsing well and replacing it immediately after you are done. Never operate the continuous filtration fryer without the stainless steel strainer in place.

CHANGING THE FILTER

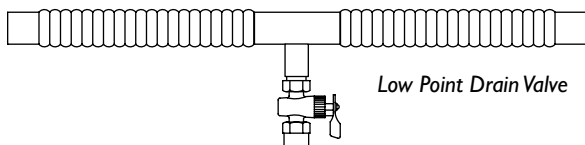
Your American Range Continuous Filtration Fryer has been designed with safety in mind. Be sure to never change the oil filter when the fryer oil is hot. Trying to do this is extremely dangerous.

When the fryer oil is cold – open the fryer door. Listen closely and be sure the circulating pump is not operating. You will also be able to tell this by watching the oil output ports located in the fryer tank front wall. When the pump is off, there will be no flow out these ports. A safety micro-switch located on the door interrupts the flow of electrical power to the pump motor – so there is no possibility of oil leaking out during the oil change process. Do not try to bypass any safety switches.

Once the stainless steel housing is clean, you can place a new filter into it, being sure that the filter sits centered on the post located at the bottom of the cylinder. Slide the housing up onto the filter head with the filter again centered on the post inside the head. When the filter is properly located, the cylinder will mate snugly with the head.

Holding the filter housing in place, slide the lock nut up to engage the threads on the head, and tighten it. When it cannot be turned by hand any more, use the rod with the green cap to make it leak-tight and secure.

If you have followed directions, one safety switch will engage the lock nut both ensuring the filter is in place and locked tight. Closing the fryer door will activate the final safety switch.



STEP 1

- Use a small metal tray to catch oil spills.
- Keep a small pot or pan to dump any oil left in cartridge.
- A tool with a plastic green or red cap is provided with the filter to unlock the housing.
- Open cylinder valve and drain oil.



STEP 2

- Insert tool into cylinder lock.
- Pull to rotate lock so it becomes loose.
- Looking from top of cartridge, this is "clockwise".
- Cartridge may be wobbly, support it so it doesn't fall.



STEP 3

- When the lock nut is fully disengaged it will easily slip down the cylinder.
- Rock the cylinder side to side.
- Take care not to spill any oil.
- Dump into the small pot or pan you prepared in step 1.
- Open low point drain valve and remove oil.



STEP 4

- Throw away the used filter.
- Take a paper towel or cloth and wipe cylinder interior clean.
- Install new filter.

- Cartridge valve closed
- Low point drain valve closed

TROUBLESHOOTING GUIDE

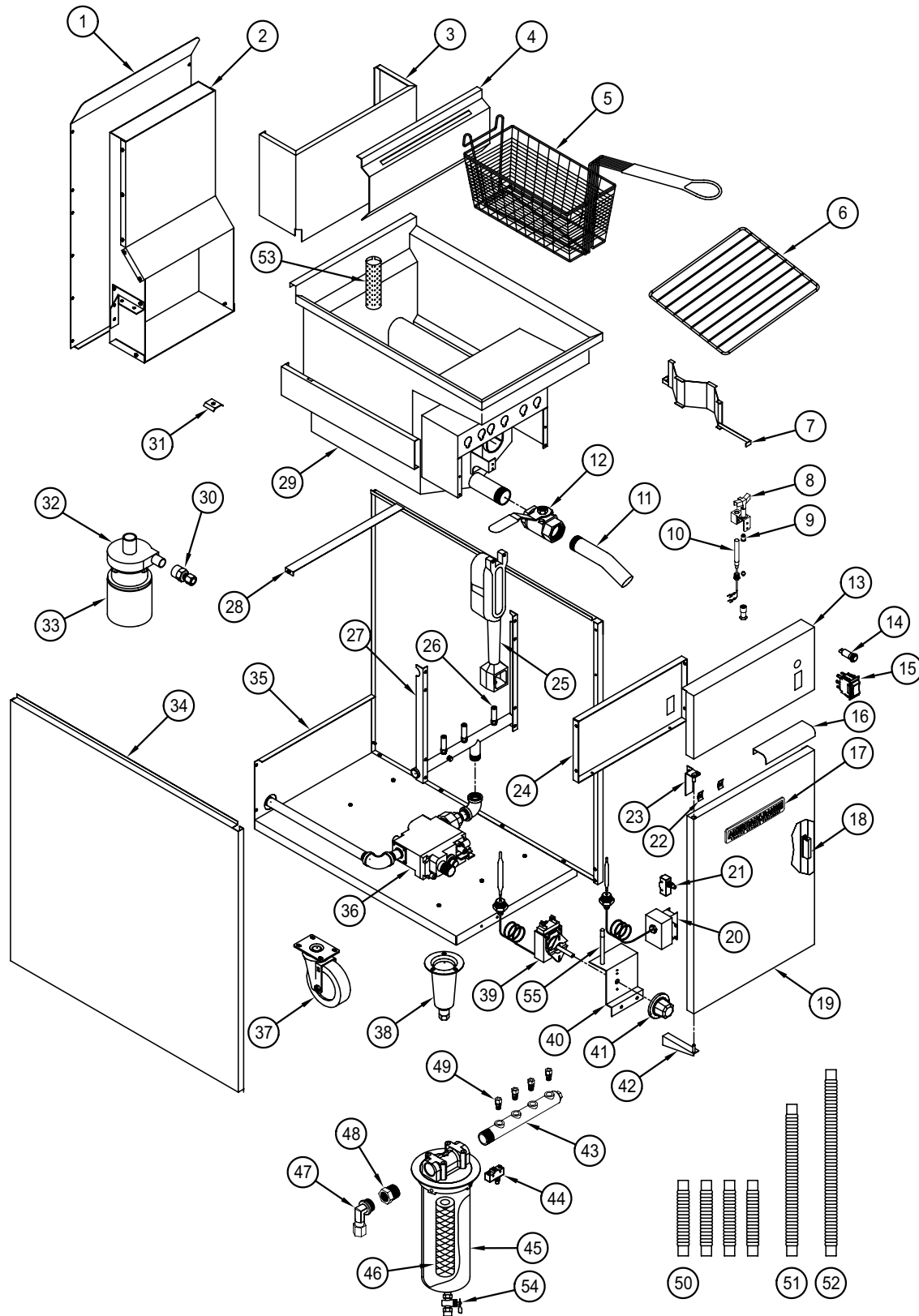
POSSIBLE CAUSE	SUGGESTED ACTION
SYMPTOM:	
Pump not working	<ol style="list-style-type: none"> 1. Check that the fryer is plugged into a power receptacle 2. Switch the unit from OFF to CONTINUOUS or AUTO-CYCLING 3. See that the filter ring is in place and tight enough to activate the interlock switch 4. Close the door to activate the interlock switch 5. Move the unit from OFF position to CONTINUOUS or AUTO-CYCLING - see light
No flow into the fryer tank	Switch ON the filtration system, or Replace filter
Low flow rate into the fryer tank	If flow rate is low and the oil is cold, this is normal If flow rate is low and oil is hot, replace the filter
Indicator light does not work	<ol style="list-style-type: none"> 1. Indicator light glows when pump is energized 2. Install cartridge 3. Close Door 4. Turn ON unit to CONTINUOUS or AUTO-CYCLING
Auto-cycle ON time is too short or long	Set DIP switches on duty cycle timer to desired ON time
Auto-cycle OFF time is too short or long	Set DIP switches on duty cycle timer to desired OFF time
System is surging steam and oil	<ol style="list-style-type: none"> 1. Turn off the unit 2. Remove filter cylinder; dump water; replace filter; reassemble 3. Drain water from low point of supply line using low point drain valve 4. Restart system



WARNING

Always disconnect the electrical power service before cleaning or servicing the fryer.

AFM-35/50 DOMESTIC 1/2" NPT



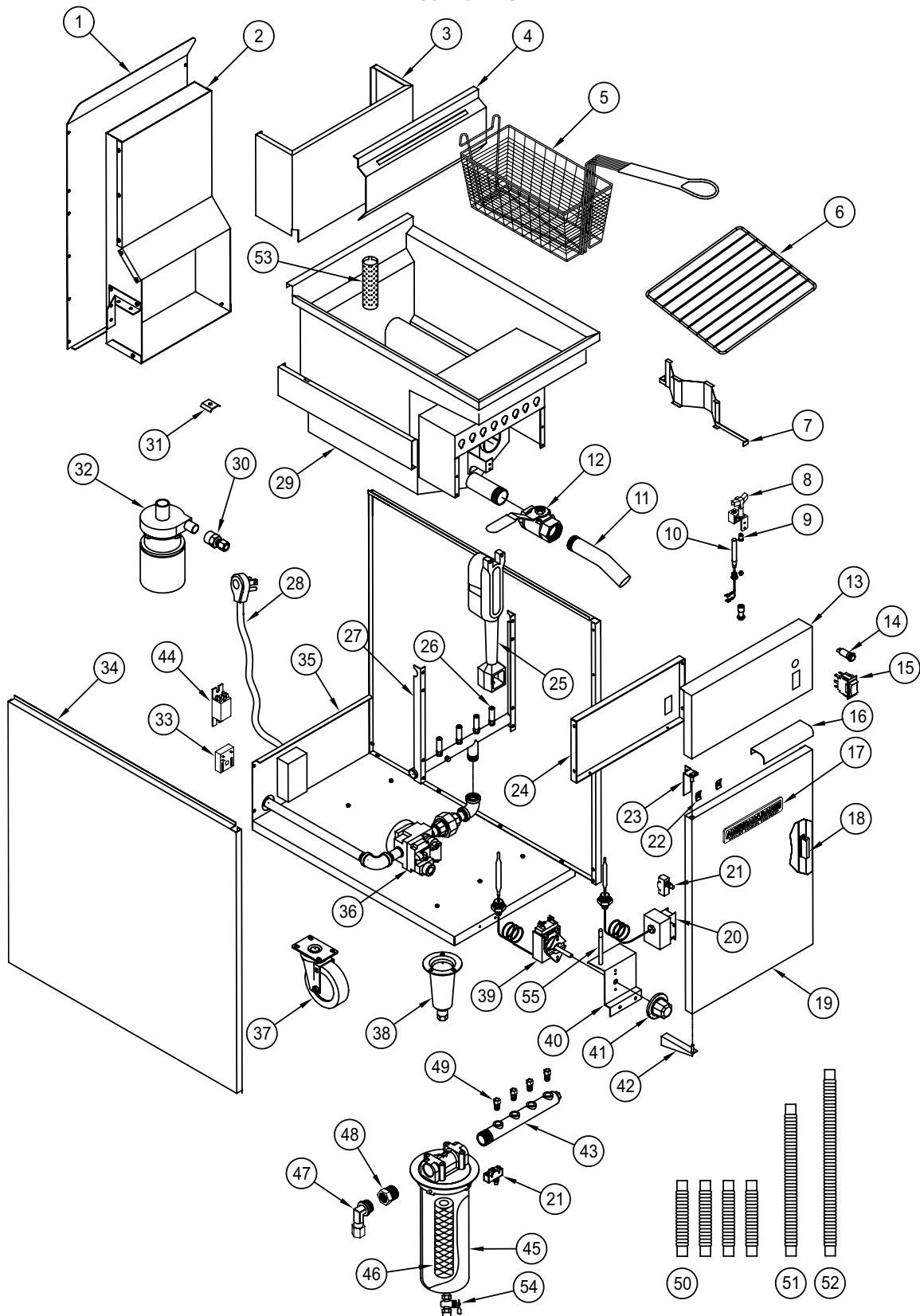
AFM-35/50 Fryers

ITEM NO.	PART NO.	DESCRIPTION
1	A99411	Panel, Top Back AF-45
2	A99322	Flue Box, Assembly AF-45
3	A99408	High Riser, Basket Support AF-45 Heavy Duty Stainless
4	A99405	Hanger, Basket Support AF-45
6	A31004	Rack, AF-45
7	A99240	Diffuser, Assembly AF Series
8	A11103	Pilot, AF 6CH14-6N .018 Nat Gas
	A11121	Pilot, AF 6CH14-6 .014 LP Gas
9	A11118	Orifice, Bell 0.18 AR/AF Nat Gas
	A11109	Orifice, Bell 0.014L VL LP Gas
10	A11102	Thermopile, Power Generator AF
11	A23003	Drain Pipe, AF Series
12	A80201	Valve, Drain NSF AF Series
13	A99428	Panel, Front AF-45 Heavy Duty Stainless
14	A10011	Light, Indicator 120V Red 12.7 10407 w/Wire Lead & Male Term
15	A10009	Switch, Rocker 3 Position
16	A99319	Handle, AF Series Heavy Duty, Stainless
17	A38000	Name Plate, American Range 8" Quality Commercial Cooking
18	A43104	Magnet, Door AF Series
19	A99406	Door, Assembly AFM-45 Heavy Duty Stainless
20	A10007	Switch, Hi-Limit Millivolt AF
21	A10003	Switch, Door Plunger Style w/ Rubber Boot
22	A44003	Nut, Speed #6 Push Black
23	A99219	Hinge, Top Door AF Series
24	A99278	Baffle, Front Cover AF-45
25	A14008	Burner, AF Series Cast Iron w/American Range Logo
26	A29029	Orifice Hood, #32 Nat Gas AF-35/40 1/2" Manifold
	A29030	Orifice Hood, #53 LP Gas AF-35/40 1/2" Manifold
27	A15109	Manifold, AFM-35/50 Fryer 4 Tube 7000 Valve 1/2" Manifold
29	A99400	Tank, AFM-35/50 Fryer Assembly No Drain Valve
30	A28065	Adapter 1/2" Tube
31	A99218	Probe Holder, AF Series
32	A91021	Pump, Magnetic Drive 115V
34	A99430	Panel, AFM-35/50 Rt Side Heavy Duty
	A99431	Panel, AFM-35/50 Lt Side Heavy Duty
35	A99429	Bottom Back Panel
36	A80102	Gas Valve (Nat)
	A80103	Gas Valve (LG)
37	A35013	Caster (with bracket)
	A35012	Caster (without bracket)
38	A35001	6" Cone Leg
39	A50400	Thermostat
40	A99320	Thermostat Bracket

AFM-35/50 Fryers

ITEM NO.	PART NO.	DESCRIPTION
41	A32013	Knob (Thermostat)
42	A99220	Door Hinge Bottom
43	A15202	Oil Manifold
45	A16019	Housing, 10" Cartridge & Head Assembly with Drain Valve 304L
46	A16001	Filter, 1 Micron Magma Fryer Clear White Bag & Pre-washed
	A16002	Filter, 5 Micron Magma Fryer Clear Green Bag & Pre-washed
	A16008	Filter, 10 Micron Magma Fryer Clear Red Bag & Pre-washed
	A16009	Filter, 20 Micron Magma Fryer Clear Blue Bag & Pre-washed
47	A28058	Elbow, Brass 90D 1/2" Comp X 1/2 NPTF Male Pipe Standard
48	A28061	Adapter, 1/2" NPTF X 3/4-20 UNF Female Pipe Brass
49	A28000	Fitting, 3/8CC X 1/4 MIP Brass
50	A53045	Tubing, Flex 3/8" X 9" Stainless
51	A53067	Tubing, Flex 1/2" X 17" Stainless w/ Nut & Sleeve Assembled
52	A53066	Tubing, Flex 1/2" X 21" Stainless w/ Nut & Sleeve Assembled
53	A16003	Strainer, Oil Intake Stainless Filtration System
54	A28066	Valve, Shut Off Brass UL Listed 1/4" NPTF AFM Filtration System
55	A16004	Breaker Bar Loosen & Tighten Filter Cartridge Ring AFM

AFM-85 DOMESTIC 1/2" NPT



AFM-85 Fryers

ITEM NO.	PART NO.	DESCRIPTION
1	A99426	Panel, Top Back AFM-85
2	A99323	Flue Box, Assembly AFM-85
3	A99408	High Riser, Basket Support AF-45 Heavy Duty Stainless
4	A99427	Hanger, Basket Support AFM-85
6	A31005	Rack, AFM-85
7	A99240	Diffuser, Assembly AF Series
8	A11103	Pilot, AF 6CH14-6N .018 Nat Gas
	A11121	Pilot, AF 6CH14-6 .014 LP Gas
9	A11118	Orifice, Bell 0.18 AR/AF Nat Gas
	A11109	Orifice, Bell 0.014L VL LP Gas
10	A11102	Thermopile, Power Generator AF
11	A23003	Drain Pipe, AF Series
12	A80201	Valve, Drain NSF AF Series
13	A99421	Panel, Front AFM-85 Heavy Duty Stainless
14	A10011	Light, Indicator 120V Red 12.7 10407 w/Wire Lead & Male Term
15	A10009	Switch, Rocker 3 Position
16	A99319	Handle, AF Series Heavy Duty, Stainless
17	A38000	Name Plate, American Range 8" Quality Commercial Cooking
18	A43104	Magnet, Door AF Series
19	A99422	Door, Assembly AFM-85 Heavy Duty Stainless
20	A10007	Switch, Hi-Limit Millivolt AF
21	A10003	Switch, Door Plunger Style w/ Rubber Boot
22	A44003	Nut, Speed #6 Push Black
23	A99219	Hinge, Top Door AF Series
24	A99277	Baffle, Front Cover AFM-85
25	A14008	Burner, AF Series Cast Iron w/American Range Logo
26	A29010	Orifice Hood (Nat) #32
	A29023	Orifice Hood (LP) #53
27	A15032	Manifold, AF-85 Fryer 4 Tube 7000 Valve 1/2" Manifold
29	A99400	Tank, AFM-85 Fryer Assembly No Drain Valve
30	A28065	Adapter 1/2" Tube
31	A99218	Probe Holder, AF Series
32	A91021	Pump, Magnetic Drive 115V
34	A99424	Panel, AFM-85 Rt Side Heavy Duty
	A99425	Panel, AFM-85 Lt Side Heavy Duty
35	A99429	Bottom Back Panel
36	A80102	Gas Valve (Nat)
	A80103	Gas Valve (LG)
37	A35013	Caster (with bracket)
	A35012	Caster (without bracket)
38	A35001	6" Cone Leg
39	A50400	Thermostat
40	A99320	Thermostat (Bracket)

AFM-85 Fryers

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54	A28066	Valve, Shut Off Brass UL Listed 1/4" NPTF AFM Filtration System
55	A16004	Breaker Bar Loosen & Tighten Filter Cartridge Ring AFM

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.



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