

## Anets ~ Dependable Foodservice Equipment PO Box 501 Concord, NH 03302

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Model FFM80 shown

Portable Filter Systems
Models
FFM-80
FFM-150

Installation,
User Operation,
&
Maintenance
Manual

## **DANGER**

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.

**Keep this Manual in a Convenient Location for Reference** 







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### **DANGER**

Read these specifications, Code Requirements, Installation Requirements, Installation Instructions, and Operating Instructions very carefully. Failure to follow the Instructions could cause the filter system to malfunction. A filter system malfunction can result in property damage, serious bodily injury, or death.

## SHIPPING CONTAINER INSPECTION

- 1. Carefully examine the shipping container for external damage. When damage is noted, notify the delivery carrier immediately. **Save all packing materials for damage claim examination.**
- 2. If no external damage is noted, remove the shipping container from the filter and examine the unit carefully for damage. Place the filter in a safe location, if damage is noted, so that the freight damage claims adjuster can examine it.

## Models Covered By This Manual

FFM-80 Portable Filter System - 80 lb. capacity FFM-150 Portable Filter System - 150 lb. capacity

**Standard Accessories** furnished in the shipping carton with this filter include:

- (1) Filter Screen Assembly
- (2) Starter Paper Starter Pack
- (3) Return Hose Assembly

NOTE: A Parts List for each **Anets** Filter System is among the items shipped with each unit. If an additional copy of this list is needed, please contact the factory as directed on the back cover.

## **NOTES**

## INSTALLATION INSTRUCTIONS

#### FILTER ELECTRICAL SPECIFICATIONS

Please make sure that your desired filter location has electrical supply factors that are suitable for this product line. Requirements are 120 Volts, 60 Hz, 8 Amps, 1-phase, three wire connection, including an electrical ground. This unit is not fused. Protect circuit with proper sized fuses or circuit breaker line disconnect switch, circuit breaker, or plug and receptacle of power cord connection should be readily accessible to the operator

## **⚠ WARNING ⚠**

**Electrical Grounding Instructions** 

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded, three-prong receptacle. **DO NOT** cut or remove the grounding prong from this plug.

#### FILTER UNIT PREPARATION (Refer to Photos On Page 4)

1. Assemble filter envelope to filter screen by sliding the envelope over the filter screen, folding back the open end over the filter screen. Make sure the hole in the filter envelope fits over the fitting on the filter screen.

#### WARNING

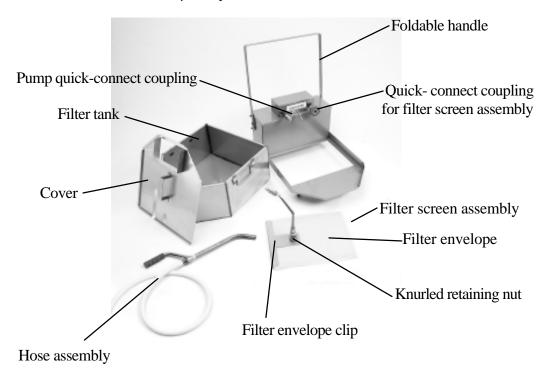
Only use filter paper envelopes from Anets that have been specifically designed for this filter system. Using the wrong type of filter paper can cause damage to the pump system, and will void the Warranty

2. Assemble filter envelope clip over folded back end of envelope and over fitting on filter screen.

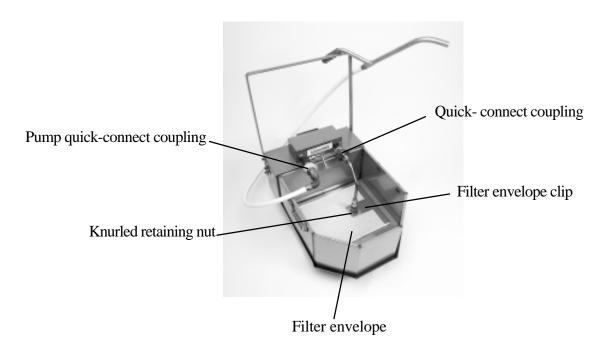
- 3. Attach knurled retaining nut onto fitting on screen, securing the assembly
- 4. Attach quick-connect coupling located on drain tube to knurled retaining nut.
- 5. Place filter unit into the filter tank.
- 6. Connect the filter assembly to the pump using the quick-connect assembly
- 7. Put the filter tank cover on the tank.
- 8. Connect the hose assembly to the filter pump.

## FFM PORTABLE FILTER

Completely Disassembled



# FFM PORTABLE FILTER COMPLETELY ASSEMBLED



## FILTERING INSTRUCTIONS

#### **CAUTION**

Never operate the filter unit unless the cooking oil or shortening in the fryers has been brought up to cooking temperature.

#### WARNING

Always wear protective heat-resistant gloves when performing the filtering operation

- 1. Before filtering the shortening in a fryer turn the thermostat knob to "OFF" or the Gas valve to "PILOT" to prevent the fryer from re-lighting during filtering. On some models the system automatically prevents the burners from lighting when the door of the fryer is open.
- 2. Roll filter under drain pipe extension on the fryer and slowly open drain valve handle, letting all the shortening drain into the filter tank. Leave this valve open.

## **⚠** DANGER **⚠**

Never drain more than one fryer at a time – the filter pan will overflow.

3. Hold hose assembly nozzle over the fryer kettle, turn on the pump switch and flush sediment out of the fryer. While the system is cycling, use a long-handled cleaning brush to wipe the bottom of the fryer and push excess crumbs through the drain and into the filter.

#### **WARNING**

When cleaning the inside of the frypot, do not damage the temperature and hi-limit probes that protrude into the frypot.

4. Allow the pump to run until the shortening returning into the fryer is clear of sediment, then close drain valve handle and allow the fryer to refill.

#### **WARNING**

If solid shortening is being used it is very important that all oil is allowed to flow back into the vat and none is left in the hoses. Failure to do so could cause the pump to fail if the oil solidifies in the line.

5. If filter powder is being used, add 1 cup of powder (for 14" fryers) or 2 cups (for 18" fryers) to either the fry tank or the filter tank. If added to fry tank, make sure powder is completely flushed during fry tank cleaning (Step 3) before closing drain valve (Step 4). If added to filter tank, the powder will be removed when the filter envelope is changed and the filter tank is cleaned.

- 6. On gas-operated thermostat models (such as Anets 14G, 14GS, MXEG, 18EG, 20EG) the thermostat knob can now be turned back to the desired temperature. CAUTION: On these models the thermostat must be set to "OFF" or the Gas Valve to "PILOT" before filtering or the burners MAY come back on if the doors are closed during filtering.
- 7. On electric-operated thermostat models (such as Anets MX-14E, MX-14EX, MX-14AA, 18E, 18AA, 20E, 14EL-14 and 14EL-17) the power switch on the control panel must be reset for the fryer to operate again.

#### **IMPORTANT NOTE:**

The pump on this filter unit is equipped with a safety that will turn off the motor if it overheats or an electrical fault occurs. If this occurs, let the pump motor cool for 15 minutes, then press the manual reset button on the bottom of the motor and restart the motor

#### **DANGER**

Never run water through the filter system. This will cause rust and corrosion in the motor and pump and will void the Warranty.

## OIL DISPOSAL

#### **WARNING**

Always wear protective heat-resistant gloves when performing the oil disposal operation.

If the cooking oil or shortening from a fryer is to be disposed, follow steps 1 and 2 from Filtering Instructions in previous section. Turn on the pump using the switch on the filter and direct the oil into an appropriate device such as an oil shuttle to move the used oil to its disposal tank.

## REPLACING THE FILTER PAPER

If the filter paper becomes torn, or if the time to filter the oil from one unit becomes excessive, it is time to replace the Filter Envelope.

#### WARNING

Only use filter paper envelopes from Anets that have been specifically designed for this filter system. Using the wrong type of filter paper can cause damage to the pump system, and will void the Warranty

## ⚠ DANGER ⚠

Make sure the filter pan has cooled completely to room temperature before attempting to change the paper.

- 1. Unplug the cord from the receptacle.
- 2. Disconnect the line from the pump to the filter screen.
- 3. Remove the filter cover
- 4. Remove the filter screen assembly from the filter pan and place on a clean surface for disassembly
- 5. Detach quick-connect coupling on drain tube from knurled retaining nut.
- 6. Detach knurled retaining nut from fitting in screen.
- 7. Remove filter envelope clip from end of filter screen and folded back end of envelope.
- 8. Remove filter envelope from filter screen.

#### **WARNING**

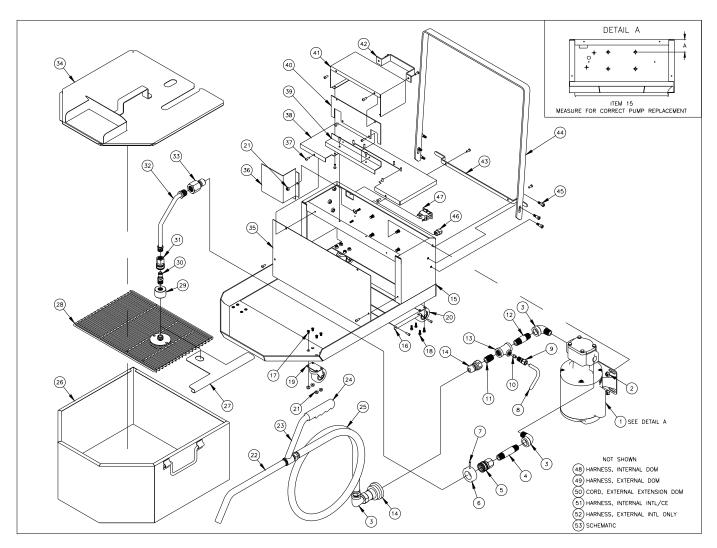
The oil soaked filter envelope may still be very hot and could cause burns.

- 9. Clean the filter pan, filter screen and all components thoroughly using a solution of hot water and detergent. Make sure that all food and breading particles are removed from the pan and from the filter screen.
- 10. Dry the pan, the screen and all components completely before starting to reassemble.
- 11. Follow instructions under FIITER UNIT PREPARATION to install new filter envelope.

## FILTER SYSTEM TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
Pump does not start when the switch is activated.	<ol> <li>Make sure the power cord is plugged into the proper 120 Volt receptacle.</li> <li>Turn the switch on the front of the filter to "ON".</li> <li>If the pump still hasn't started, depress the thermal overload button on the bottom of the motor. If the motor is hot to the touch, wait at least 15 minutes before trying this.</li> <li>If the pump starts and stops again in a short time, or if it hums but does not pump, there is a restriction somewhere in the filter screen or in the pump itself. Go to Step 5. If there is no reaction from the pump, go to step 6.</li> <li>Allow the oil/shortening in the filter pan to cool, then empty the pan and verify that the filter paper and screen assembly is assembled correctly. Disassemble the filter screen and look for blockages of sediment or solid shortening within.</li> <li>Problem is with the motor/pump or the wiring. Remove the motor from the filter and bench test by connecting a 120V line to the motor leads. If it runs, the problem is with the wiring between the motor and the power supply If it does not run, the motor needs to be replaced.</li> </ol>
Filtering procedure is very slow. Shorten- ing/oil returning to the fryer very slow.	<ol> <li>If solid shortening is being used allow HOT oil to recirculate through the lines long enough to ensure that all solidified shortening has melted.</li> <li>After all the shortening/oil has been pumped back into the fryer, inspect the filter paper envelope. Make sure that any excess sediment is removed from the top of the filter paper envelope.</li> <li>If the filter paper envelope is dirty or torn, disassemble the filter screen assembly. Inspect for blockages in the lines. Replace with a clean filter paper envelope.</li> </ol>
	Only use filter paper envelopes from Anets that have been specifically designed for this filter system. Using the wrong type of filter paper can cause damage to the pump system, and will void the warranty  4. If the oil still returns to the fryer slowly the problem may be a blockage within the pump itself. The pump section of the motor can be easily disassembled to look for blockages of sediment or solid shortening within.

#### **PARTS DIAGRAM**



## PARTS LIST

<b>LIST</b>		
ITEM	P/N	DESCRIPTION
1		PMP,ASSY 5GPM 1/3HP 115/230V S283 (DIM A = 2.25)
		PUMP/MTR-1/3HP 115/230V 50HZ S95 (DIM A = 3.91)
		PUMP/MTR-1/3HP 240V 50HZ S95 (DIM A = 3.91)
3		NUT,5/16-18 FLNG LC ELB,BLK STR 90 1/2
4		NIP,BLK 1/2 X 3-1/2
5		CONN,COUPLER 1/2 NON VLVED
6		FLTR,HDL 2.50 DIA BLUE
7		SCR,10-24 X 1/2 SET
8		PG,ASSY VENT TU FFM
9	B11852-00	FTG,COMP MALE CONNECTOR
10	B11853-00	FTG,VENT TIP FFM80/150
11	P7037090	NIP,BLK 1/2 CL
12	P7037094	NIP,BLK 1/2 X 2-1/2
13	60094003	TEE,BLK 1/2 X 1/2 X 1/4 NPT
14		CONN,NIPPLE 1/2 FEMALE NPT
		FLTR, WLDMT FR FFM80 115V S283
		FLTR, WLDMT FR FFM150 115V S283
		FLTR, WLDMT FR FFM150 230V S283
15		FLTR, WLDMT FR FFM150 230V S283
		FLTR,WLDMT FR FFM80 230/240V S95 (POST MARCH 2012) FLTR,WLDMT FR FFM150 230/240V (POST MARCH 2012)
		FLTR, WLDINT FR FFINISU 230/ 240V (POST MARCH 2012) FLTR, WLDINT FR FFIN80 115V (POST MARCH 2012)
		FLTR, WLDMT FR FFM150 115V (POST MARCH 2012)
16		FLTR,BOT COV FFM80 INTL/CE
17		SCR,10-24 X 3/8 FH PHILLIPS
18		SCR,10-24 X 3/8 INDT HEX
19		CSTR,PMF 2 W/TP PL
20	PP11381	CSTR,PMF 2 LOCKING W/TP PL
21	P0092300	NUT,HEX (KEP) 10-24 ZN
22	C7842-00	FLTR,NOZZLE FFM80/150
23	C7841-00	FLTR,WLDMT FFM80/150
24		GRIP,HDL PORTABLE FLTR
25		FLTR,HOSE 65.00 FFM80/150
26		FLTR,TK WLDMT FFM80
27		FLTR,TK WLDMT FFM150
27 28		FLTR,CLP PPR FFM/FM* FLTR,PICK-UP SCRN 15.50 FFM*
29		CPLG,KNURLED CAP FLTR P/U
30		CONN, NIPPLE 3/8 MALE NPT
31		CONN,COUPLER 3/8 NON VLVED
		FLTR, WLDT PICK-UP TU FFM80
32		FLTR, WLDT PICK-UP TU FFM150
33	60015902	CONN,NIPPLE 1/2 FEMALE NPT
34 35	C10713-00	FLTR, WLDMT TK CVR FFM80
	C10713-01	FLTR, WLDMT TK CVR FFM150
	C10704-00	FLTR,FR BK PNL FFM80
		FLTR,FR BK PNL FFM150
36		FLTR, PMP ELEC BOX FFM
37		SCR,10-32 X 1/2 PNH PHH ZN TF
38		FLTR,FR TOP CVR FFM80
20		FLTR,FR TOP CVR FFM150 FLTR,PMP PG SPRT FFM
39 40		FLTR,PMP BOX PL FFM
41		FLTR,PMP PG CVR FFM
42		FLTR,PMP BOX HDL FFM
		FLTR,CORD BRKT FFM80
43		FLTR,CORD BRKT FFM150
		FLTR,HDL PORTABLE FFM80
44		FLTR,HDL PORTABLE FFM150
45		SCR,SHLDR 5/16 DIA X 3/8
46	PP10192	BUSHING,STRAIN RELIEF-RIGHT
47	60046201	SW,RKR SPST (1-0) 125V RED (DOMESTIC)
		CKT BKR,RKR DPST 250V 4A (INTL/CE)
48		CORD,INTERNAL DOMESTIC
49		CORD, EXTERNAL DOMESTIC
50		CORD, INTERNAL INTERSECTION DOMESTIC ONLY
51		CORD EXTERNAL INTL ONLY
52 52		CORD, EXTERNAL INTL ONLY
53	700387	SCHEM, PORTABLE FLTR FFM



#### ORIGINAL EQUIPMENT LIMITED WARRANTY

#### **General Warranty**

Anets, Inc. warrants to the original user of its commercial cooking appliances and related equipment that said appliances and related equipment will be free from defects in material and workmanship under normal use for a period of one (1) year from the date of installation, with appropriate documentation, to a maximum of fifteen (15) months from the date of manufacture, subject to the following additions, exceptions, exclusions and limitations.

What is covered

This warranty is limited to the repair or replacement at the Company's option, without charge, of any part found to be defective within the warranty period and reasonable expenses incurred for freight and material for the installation of such part; in addition, the Company's obligation shall be limited to reimbursement for normal labor on such parts.

Anets, Inc. agrees to pay the Authorized Service and Parts Distributor, for any labor and material required to repair or replace, at the Company's option, any part which may fail due to defects in material or workmanship during the above general warranty period.

#### **Silver Line Fryers**

In addition to the above general warranty, for its economy fryers and cookers, the Company warrants to the original user any mild. Stainless steel fry tank or cooking vessel to be free from defects for a period of one (1) year, prorated from the date of manufacture. Labor and freight shall be the responsibility of the end user.

#### Gold Line Fryers

In addition to the above general warranty, for its standard fryers and cookers, the Company warrants to the original user any stainless steel fry tank or cooking vessel to be free from defects for a period of ten (10) years from the date of manufacture. Labor and freight shall be the responsibility of the end user.

#### Pasta Cooker

In addition to the above general warranty, for its standard fryers and cookers, the Company warrants to the original user any stainless steel fry tank or cooking vessel to be free from defects for a period of one (1) year from the date of manufacture. Labor and freight shall be the responsibility of the end user.

#### **Limitations to Fry Tank and Cooking Vessel Warranty**

After the expiration of the general warranty period, any additional warranty on fry tanks or cooking vessels shall only obligate the Company to repair or replace, at its option, any fry tank or cooking vessel which it determines to be defective. Claims under this item shall be supported by a statement detailing the defect, and the Company may require the return of the fry tank or cooking vessel claimed to be defective. Labor and freight shall be the responsibility of the end user.

#### **How to Keep Your Warranty in Force**

- Make sure any shipping damages are reported immediately. Damages of this nature are the responsibility of the carrier and must be reported by the receiver.
- Install the unit properly. This is the responsibility of the installer and the procedures are outlined in the manual.
- Do not install it in a home or residence
- Maintain it properly. This is the responsibility of the user of the appliance and the procedures are outlined in the manual.
- Adjustments, such as calibration, leveling, tightening of fasteners or plumbing or electrical connections normally associated with initial installation. These procedures are outlined in the manual and are NOT covered by warranty.
- If it is damaged due to flood, fire or other acts of God, this is not covered under this warranty.
  - •Use it for what it is intended. If it is used for a purpose other than for which it was intended or designed, resulting damages are not covered under the
- Make sure that it has the correct voltage, gas supply and/or good quality water. If a failure is due to poor water quality, harsh chemical action, erratic voltage or gas supplies, these damages are not covered under the warranty.
- Do not materially alter or modify from the condition in which it left the factory.
- Do not obliterate, remove or alter the serial number rating plate.
- Use only Genuine OEM parts from Anets, Inc. or its Authorized Parts and Service Distributors. Repairs are not covered by the warranty.
- If any other failure occurs which is not attributable to a defect in materials or workmanship, it is not covered.

This warranty specifically excludes parts which wear or would be replaced under normal usage, including, but not limited to, electric lamps, fuses, interior or exterior finishes, o-rings and gaskets.

#### **Limits to the Warranty**

Outside the United States of America and Canada, this warranty is limited to the replacement of parts and Anets, Inc. will not bear any other expense be it labor, mileage, freight or travel.

If any oral statements have been made regarding the appliance, these statements do not constitute warranties and are not part of the contract of sale. This limited warranty constitutes the complete, final and exclusive statement with regard to warranties

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS.

#### Limitations of Liability

In the event of a warranty or other claim, the sole obligation of Anets, Inc. will be the repair or replacement, at the Company's option, of the appliance or the component part. This repair or replacement will be at the expense of Anets, Inc. except as limited by this warranty statement. Any repair or replacement under this warranty does not constitute an extension in time to the original warranty. Parts covered under this warranty will be repaired or replaced, at the Company's option, with new or functionally operative parts. The liability of Anets, Inc. on any claim of any kind, including claims based on warranty, express or implied contract, negligence, strict liability or any other legal theories will be exclusively the repair or replacement of the appliance. This liability will not include, and the purchaser specifically renounces any right to recover special, incidental, consequential or other damages of any kind, including, but not limited to, injuries to persons, damage to property, loss of profits or anticipated loss of the use of this appliance.

If any provision of this warranty is unenforceable under the law of any jurisdiction, that provision only will be inapplicable there, and the remainder of the warranty will remain unaffected. The maximum exclusion or limitation allowed by law will be substituted for the unenforceable provision.

#### **How to Obtain Warranty Service**

First direct your claim to the Anets, Inc. Authorized Service and Parts Distributor closest to you giving complete model, serial and code numbers, voltage, gas type, and description of the problem. Proof of the date of installation and/or the sales slip may also be required. If this procedure fails to be satisfactory, write the Nationa Service Manager, Anets, Inc., P. O. Box 501, Concord, NH. 03302-0501. USA

This warranty gives you certain specific legal rights; you may have other rights which vary from state to state.

Anets, Inc., P.O. Box 501, Jct. I-89 & I-93 Concord, NH 03302-0501

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