



230v/50/1 150 lb PORTABLE FILTRATION MACHINE Operating Instructions

WARNING !!:

TO PRECLUDE THE POSSIBILITY OF SPONTANEOUS COMBUSTION FILTER TUB FIRES; SLUDGE AND CRUMBS **MUST** BE REMOVED AND DISCARDED AND THE FILTER TUB **MUST** BE THOUGHLY CLEANED AFTER CLOSING THE STORE EACH NIGHT!!!



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San Antonio, Texas 78201

PREFACE

This Manual was written and published by the Engineering Department, Ultrafryer Systems for use by personnel who will operate a 150 lb. Portable Filtration Machine in a commercial cooking environment.

**ENGINEERING DEPARTMENT
ULTRAFRYER SYSTEMS
302 SPENCER LANE
SAN ANTONIO, TX 78201**

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GENERAL INFORMATION

A. WARRANTY



ULTRAFRYER® LIMITED WARRANTY

Ultrafryer Systems warrants to the original purchaser of a gas or electric Ultrafryer® sold within the United States, its territories and Canada, that it will be free of defects in material and workmanship for the periods listed below:

STAINLESS STEEL FRYER VAT – Stainless Steel fryer vats are warranted for (10) ten years upon the terms hereinafter described. The (10) ten year warranty coverage applies ONLY to the Stainless Steel fryer vat and does not apply to the other components such as controls, fire boxes, gaskets, mounting hardware, or the heat shield weldment. The (10) ten year limited warranty coverage for the Stainless Steel fryer vats are as follows:

- (1) Vats that fail due to faulty workmanship or materials within the first twelve (12) months from the date of initial start up will be exchanged at no cost. Standard delivery ground freight will be prepaid by Ultrafryer Systems for first year failures only. The cost of labor to install the replacement vat will be covered by Ultrafryer Systems for vats, which fail within twelve (12) months from the date of initial start up. Labor for vat replacements after the first year is the responsibility of the owner.
- (2) Vats that fail within the second year will be exchanged at \$150.00 FOB San Antonio.
- (3) Vats that fail within the third through fifth year will be exchanged at a \$200.00 FOB San Antonio.
- (4) Vats that fail within the sixth through eighth year will be exchanged 50% of current selling price of said vat FOB San Antonio.
- (5) Vats that fail within ninth through tenth year will be exchanged at 70% of the current selling price of said vat FOB San Antonio. (Example: If the current selling price of a vat is \$1,000.00, then during the sixth through eighth year it would be exchanged for \$500.00; in the ninth and tenth years it would be exchanged for \$700.00). (Subject to inflation adjusted in accordance with the C.P.I.). Proper credit issue for vat failures is contingent upon receipt, by Ultrafryer Systems, of the serial number identification tag for any failed vat.

ULTRAFRYER PARTS – All parts on the Ultrafryer® are covered for a period of one (1) year from the initial date of start up. This is to include computers, gas valves, switches, thermostats, etc. Ultrafryer Systems reserves the right to charge for certain parts such as computers, filter pumps and motors or any item over the amount of \$100.00 until Ultrafryer Systems receives the defective part back. After inspection, credit for the part will be issued to the purchaser provided the part is deemed defective and that defect is not the result of neglect or abuse by the user. The shortening filtration system, (hoses) are warranted for ninety (90) days from the initial date of start up.

PROCESSING WARRANTY CLAIMS – The equipment owner must promptly notify Ultrafryer Systems Warranty Department of any alleged defects as soon as they are discovered by calling 1-800-525-8130. After such notice, the Warranty Department will perform its obligation under this warranty within a commercially reasonable period of time. If alleged defects develop after normal business hours, on weekends or on holidays the owner must call Ultrafryer Systems first at the above number. This number is monitored 24 hours a day, 7 days a week. Ultrafryer Systems will notify an authorized service agent to make repairs during normal hours or after hours. Any parts that need to be shipped back to Ultrafryer Systems will be shipped back **prepaid by the customer** marked with the processing number and to the attention of the WARRANTY DEPARTMENT.

NON WARRANTY COVERAGE – This warranty does not include coverage for any consequential cost of damages including, but not limited to, any loss in store sales, spoiled food products, transportation, duty or custom cost. This warranty does not cover the Ultrafryer® exported to countries outside the United States and its territories. This warranty does not cover original installation and adjustments such as leveling, calibrations, electrical and gas connections, or problems due to faulty or contaminated gas supply. This warranty does not cover travel over 100 miles or 2 hours driving time from the location of the Ultrafryer® or overtime or holiday charges unless the Warranty Department granted prior approval. This warranty does not cover damage due to misuse, abuse, alteration or accident. This Warranty does not cover improper or unauthorized repair or installation, damage in shipment, normal maintenance items such as gaskets, hoses, and exterior finishes. Ultrafryer Systems reserves the right to void component part warranty on any Ultrafryer® that is stored more than 6 (six) months after shipment from Ultrafryer Systems and not put into service.

LABOR COVERAGE – The cost for labor to replace parts are covered for one (1) year after the initial start up. This warranty will include the labor involved in the six (6) month and the twelve (12) month fryer inspections recommended by the manufacturer for the first year after initial start up. The Warranty Department must be promptly notified of any defects within the first year of operation. The labor warranty does not include the cost to repair or clear dirty filter systems or perform any adjustments that would normally fall under the tasks associated with a proper start up and/or demonstration. Labor is covered by Ultrafryer Systems for repairs by an AUTHORIZED service agent. Owner is responsible for all costs associated with fryer installation and start up unless prior arrangements have been made with Ultrafryer Systems.

DISCLAIMER OF WARRANTIES

Other than as stated herein ULTRAFRYER SYSTEMS makes no warranty of any kind, express or implied, including but not limited to any warranty of merchantability of fitness for a particular purpose, including trade usage. Ultrafryer Systems sole obligation, and purchaser's sole remedy, under this warranty is repair or replacement, at the discretion of Ultrafryer Systems, of any part or component that proves to be defective in materials or workmanship. In no event shall Ultrafryer Systems be liable for consequential, incidental, or special loss or damages arising from the use of, or inability to use, the ULTRAFRYER®. This limited warranty is the only and complete statement with respect to warranties of NEW Ultrafryer® PAR-2, PAR-3 Gas and Electric ULTRAFRYERS® sold after March 1st, 2001. There are no other documents or oral statements for which Ultrafryer Systems will be responsible.

B. SAFETY

The major safety concern associated with the 150 lb. Portable Filtration Machine is burns from hot shortening. In order to prevent serious burns, good housekeeping habits are required. The floor in front of and the area around the Filtration Machine should be kept clean and dry. Safety goggles, neoprene insulated gloves and an apron must be worn while operating the Filter Machine. Electrical controls on all Ultrafryer Fryers operate on 120 volts single phase electrical power. No adjustments or replacement of electrical controls should ever be attempted without first disconnecting electrical power. The fryer should never be operated with wet hands or while standing in water. To do so can result in serious electrical shock or death. In addition to the above, the following safety precautions must be adhered to:

1. Always use extreme **CAUTION** when working around **HOT** shortening.
2. **NEVER** move a Filter Machine filled with **HOT** shortening.
3. **NEVER** point the Return Hose Nozzle anywhere other than the inside of a Fryer vat while operating the Filter Machine.
4. **DO NOT** attempt to move a Filter Machine by pulling on the **ELECTRICAL CORD** or **RETURN HOSE**.
5. **ALWAYS** ensure that the Return Hose connection is **SECURE** before operating a Filter Machine.
6. **DO NOT** turn the Filter Pump Motor **ON** unless the Return Hose Nozzle **HAS BEEN** inserted in a fryer vat.
7. **DO** check the Return Hose for **CRACKS, KINKS, BULGES, or SOFT SPOTS** prior to operating a Filter Machine.
8. **NEVER** attempt to repair a defective Return Hose. A replacement Return Hose with **SECURE** fittings is available from Ultrafryer Systems through normal supply channels.
9. **ALWAYS** ensure that the Filter Pump Motor switch is in the **OFF** position when resetting the motor overload switch.
10. **ALWAYS** store hoses upright, hanging from one end, to prevent congealed shortening from forming inside the hose.

C. DESCRIPTION/SPECIFICATIONS

The Filtration Machine is constructed from 16 and 18 gauge, type 304 polished satin finish stainless steel. Most Models are equipped with a Permafil Stainless Steel Filter Screen. The Customer has the option of ordering a Magnepad Filter System that uses a Filter Pad in lieu of the S/S filter screen or a magnesol impregnated disposable paper filter. The dimensions listed below: and specifications are

150 LB. FILTRATION MACHINE SPECIFICATIONS	
Overall Depth	30" (762mm)
Overall Width	20" (508mm)
Overall Height w/o Handle	6" (152mm)
Shortening Capacity	150 lbs (68.1kg)
Electrical Supply	120 Volt 6.6 Amps 1 Phase 60 Hz

This Filtration Machine is designed to be used with either a Stand Alone or bank of gas or electric fryers with a vat shortening capacity of 150 lbs. (68.1kg) or less.

D. COMPONENT IDENTIFICATION AND OPERATING CONTROLS LOCATION

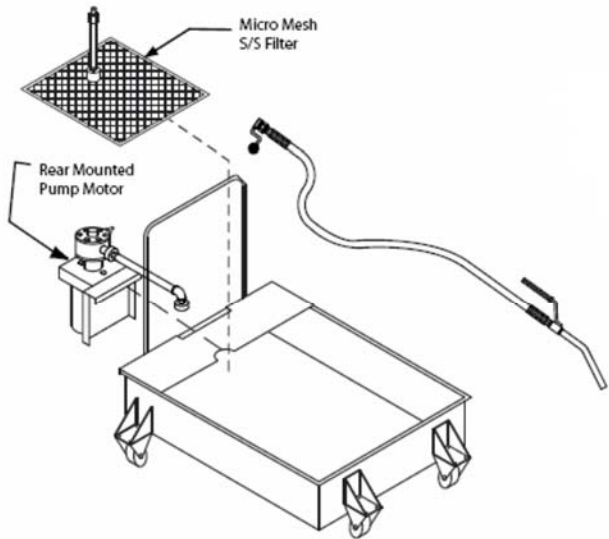
The major “common” assemblies of these machines are:

- 1) Filter Tub w/casters for mobility
- 2) Filter Assembly
- 3) Suction Line and Wash Wand Hose Assemblies
- 4) Pump / Motor Assembly

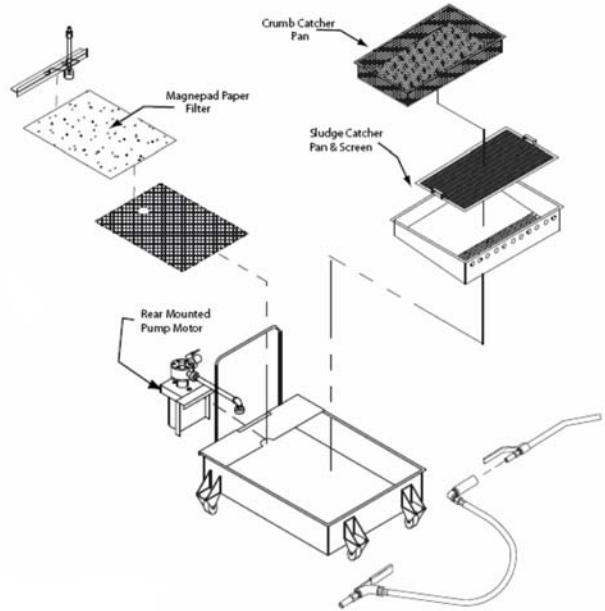
In addition the Model FM99 Filter Machine can also be equipped with:

- 1) Crumb Catcher Pan
- 2) Sludge Catcher Screen
- 3) Sludge Catcher Pan

All Portable Filter Machines have been designed so that they can be easily disassembled, cleaned and reassembled quickly and easily without the use of tools.



Shown with Permafil S/S filter screen



Shown with Magnepad paper filter and triple filtration

As there are numerous configurations of the 150 lb. Portable Filtration Machine, these illustrations may or may not resemble the exact configuration of the supplied Portable Filtration Machine. It is designed to illustrate the major components associated within the assembly.

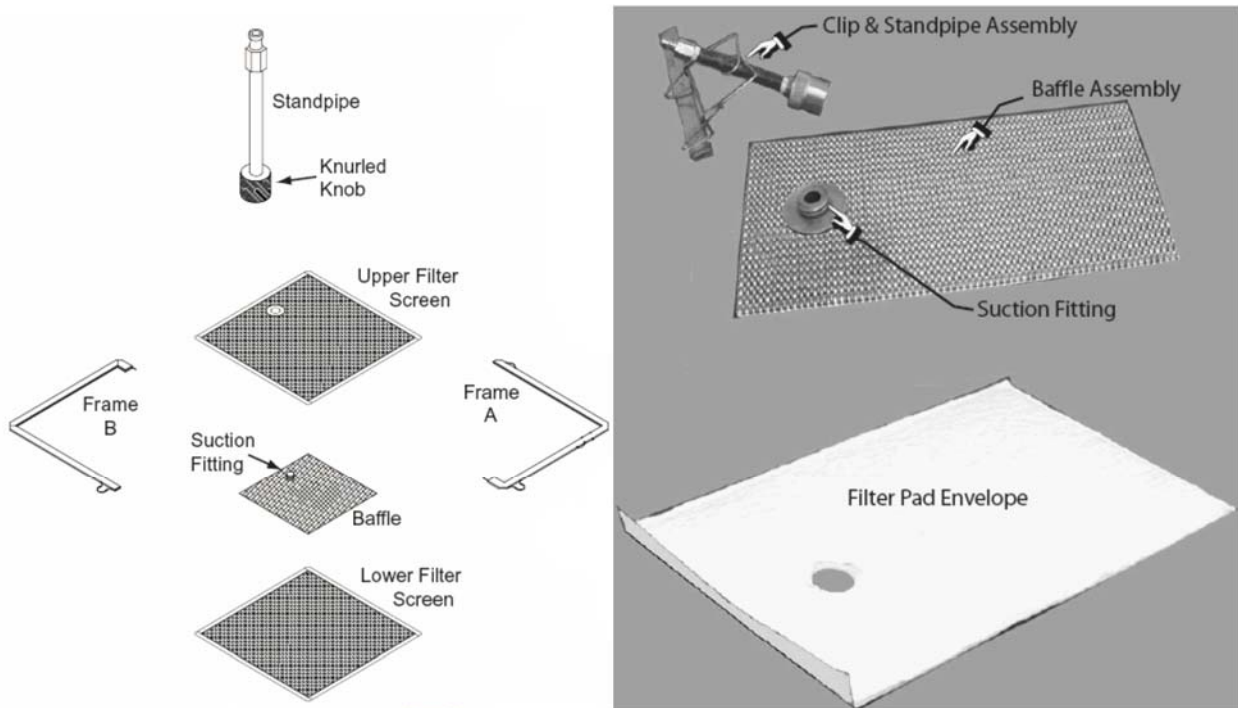
**FILTER MACHINE
INITIAL CLEANING AND ASSEMBLY**

INITIAL CLEANING

New Ultrafryer Systems Filter Machines are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, grease, etc., remaining from the manufacturing process; then given a light coat of oil. Each Filter machine, and its components, should be **THOROUGHLY** washed with **HOT** sanitizer solution to remove film, dust or debris and wiped dry prior to placing the filter machine in operation.

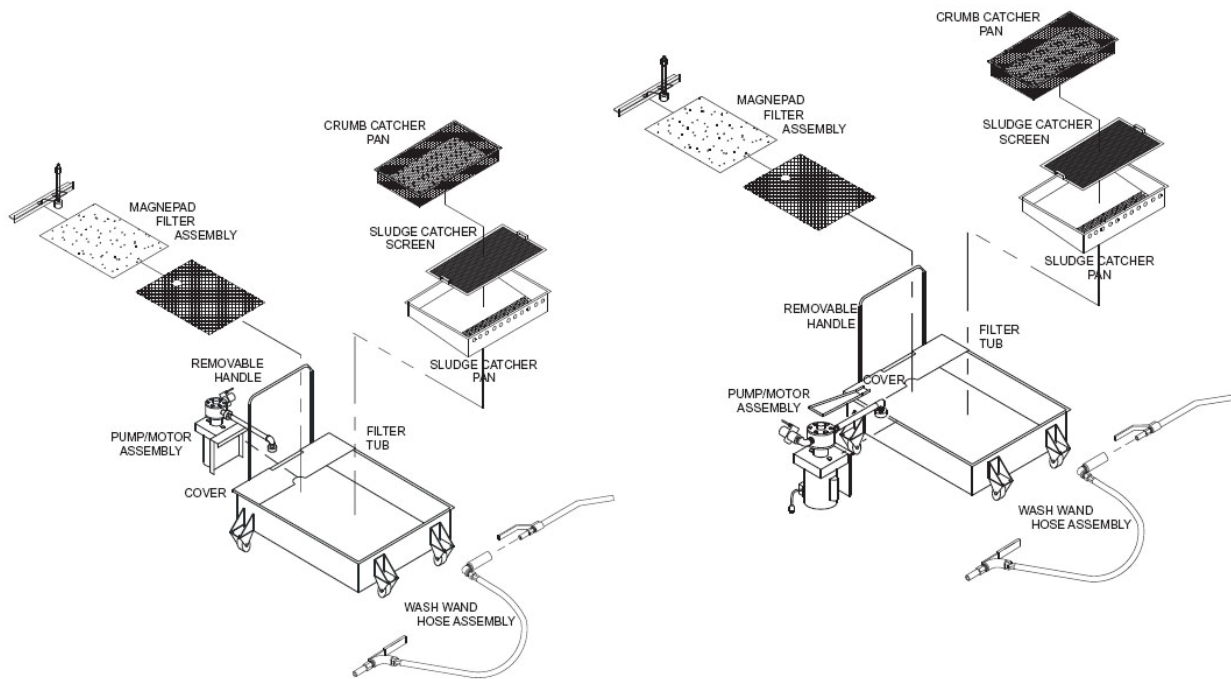
A. FILTER MACHINE DISASSEMBLY

1. Disassemble the Filter Machine by removing the major components in the following sequence; **CRUMB CATCHER PAN, SLUDGE CATCHER PAN AND SCREEN**, if applicable, **FILTER TUB HANDLE, COVER, PUMP/MOTOR ASSEMBLY, WASH DOWN HOSE, SUCTION LINE HOSE, and FILTER ASSEMBLY**.
2. **THOROUGHLY** clean all components **EXCEPT** the Filter Assembly with **HOT** sanitizer solution and allow those items to air dry.
3. **THOROUGHLY** clean the Filter Assembly as follows:



- a. "Micro-Mesh" Stainless Steel Filter Screen
 - 1) Remove the **STANDPIPE** from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE FRAME A** to remove it from the **FILTER SCREENS FIRST**.
 - 2) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove **FRAME B** from the **FILTER SCREENS**.
 - 3) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN**.
 - 4) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP**. If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.
 - 5) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.
 - 6) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME A**.

- 7) Place the **PIN** end of **FRAME B** on the **FILTER SCREENS** so the **PIN** is seated in the **CHANNEL** of **FRAME A** near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the edge of the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME B** and the **PIN** of **FRAME A** is seated in the **CHANNEL** of **FRAME B**.
- 8) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** on the **STANDPIPE** to the **SUCTION FITTING** on the **FILTER SCREEN** assembly. **DO NOT OVERTIGHTEN!**
 - b. "Magnepad Paper Envelope" Filter
 - 1) Remove and discard the Filter Pad Envelope, **CAREFULLY** clean the Baffle Assembly and Clip/ Standpipe Assembly in the 3 compartment sink with **HOT** water and allow these items to air dry. **DO NOT USE SOAP!!** Reassemble the Magnepad Envelope Filter using a **NEW** Filter Pad Envelope as follows:
 - a) Insert the **BAFFLE** into the **FILTER PAD ENVELOPE**, when inserted properly the **SUCTION FITTING** will protrude through the hole in the pad.
 - b) Fold **FLAP** over (in the direction of the hole), securing the Baffle inside the **FILTER PAD ENVELOPE**.
 - c) **CAREFULLY**, align the **CLIP & STANDPIPE ASSEMBLY** so that the **CLIP** can secure the **FLAP** on the Envelope and the **STANDPIPE** will align over the **SUCTION FITTING** protruding through the Envelope.
 - d) Tighten the Knurled **NUT** on the **STANDPIPE** on the **SUCTION FITTING** protruding through the Envelope.



**SC FILTRATION
PORTABLE FILTER MACHINE**

**TRIPLE STAGE FILTRATION
PORTABLE FILTER MACHINE**

B. FILTER MACHINE ASSEMBLY

1. Reassemble the Filter Tub by replacing the components in the following sequence; **1) FILTER ASSEMBLY, 2) SLUDGE CATCHER SCREEN, AND PAN (if applicable), 3) CRUMB CATCHER PAN (if applicable), 4) PUMP/MOTOR ASSEMBLY, 5) COVER, 6) SUCTION LINE HOSE AND WASH DOWN HOSE and 7) FILTER TUB HANDLE.**

- a. **CAREFULLY** insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the handle end of the tub.

CAUTION: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE FILTER.

- b. If applicable, **CAREFULLY** insert the Sludge Catcher Screen and Pan, and the Crumb Catcher Pan in the Filter Tub.
- c. Lift the Pump/Motor Assembly by its **HANDLE** and install it on the Filter Tub.
- d. Place the Cover on the Filter Tub; then **SECURELY** connect the Suction Line Hose on the **INLET PORT** of the pump to the Standpipe.
- e. Install the Handle on the Filter Tub, then **SECURELY** connect the Wash Down Hose to the **OUTLET PORT** of the Pump.
- f. Place the assembled Filter Machine in its storage location.

PREVENTIVE MAINTENANCE, TROUBLESHOOTING AND CLEANING

PREVENTIVE MAINTENANCE

Minimal maintenance is required on a Portable Filter Machine because of its design and materials used in its manufacture. However, some preventive maintenance and inspection must be performed periodically to prevent break downs which could curtail food sales. Any preventive maintenance or inspection should be accomplished with **CAUTION** while the Filter Machine is in operation since **HOT** liquid shortening could cause severe burns. If service or repair is required, electrical power **MUST BE TURNED OFF PRIOR TO** performing that service or repair.

PREVENTIVE MAINTENANCE SCHEDULE

	DAILY
ITEM	INSPECT FOR:
Hoses	Inspect the suction line and Wash Wand hoses for any evidence of deterioration or damage.
	WEEKLY
Connectors	Inspect the Filter Pump inlet and outlet ports as well as the Suction line and Wash Wand hose Quick-Disconnect fittings for wear or damage.
Electrical Cord and Switch	Inspect for any evidence of deterioration or damage.

TROUBLESHOOTING

- A. **GENERAL:** The problems and possible solutions listed in the troubleshooting chart below are typical Problems that are frequently encountered. **ONLY** qualified repairmen are to use the troubleshooting chart to repair this Filter Machine.
- B. **TROUBLESHOOTING CHART:** Should a problem occur that cannot be easily corrected, contact an authorized repairman and/or Ultrafryer Systems Customer Service at 1-800-525-8130.

TROUBLESHOOTING CHART

	PROBLEM	POSSIBLE SOLUTION
A	The filter pump motor fails to operate when the Motor ON/OFF switch is placed in the ON position.	<ol style="list-style-type: none"> 1. Check the manual reset button on the filter pump motor. <p>WARNING!!! TURN THE FILTER PUMP ON/OFF SWITCH TO THE OFF OSITION PRIOR TO DEPRESSING THE RESET BUTTON. FAILURE TO TURN THE SWITCH OFF COULD RESULT IN SEVERE BURNS FROM HOT COOKING OIL!</p> <ol style="list-style-type: none"> 2. If the filter pump motor fails to operate after the reset button has been depressed, repair or replace the motor.
B	Decreased shortening flow rate while filtering.	Check for excessive sediment on the filter screen, standpipe suction filter screen, standpipe suction fitting or in filter tub.
C	Pump / Motor operates but does not pump shortening.	<ol style="list-style-type: none"> 1. Check for congealed shortening in the system. 2. Check that the Standpipe is seated on the baffle fitting. 3. Check for loss Standpipe / Suction Line Coupler connection

CLEANING

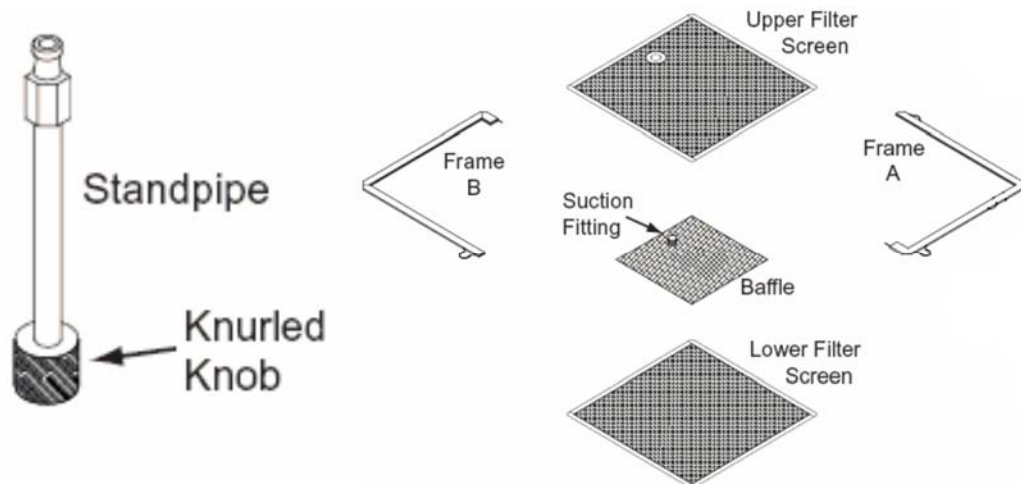
Any item of equipment operates better and lasts longer when it is kept clean and properly maintained, and the Portable Filter Machine is no exception. In order for a Portable Machine to provide years of trouble-free service, it should be **CLEANED** and **MAINTAINED DAILY** and **WEEKLY** according to the following instructions or those provided by your operations department.

A. Daily

1. Clean the Filter Machine and Filter Assembly after **FILTERING** and **AT CLOSING** as follows:

a. After Filtering Shortening:

- 1) Disassemble the Filter Machine by removing the following items in the order listed; (1) **CRUMB CATCHER PAN, SLUDGE CATCHER PAN** and **SCREEN** (if applicable), (2) **FILTER TUB HANDLE**, (3) **COVER**, (4) **PUMP/MOTOR ASSEMBLY**, (5) **WASH DOWN HOSE**, (6) **SUCTION LINE HOSE**, and (7) **FILTER ASSEMBLY**.
- 2) Clean the Suction Line Hose and Wash Down Hose with sanitizer solution; then hang these hoses in an upright position so any shortening can drain into a container.
- 3) If applicable, discard crumb fragments in the Crumb Catcher Pan and **THOROUGHLY** clean the pan with **HOT** water and let it air dry.
- 4) If applicable, remove sludge from the Sludge Catcher Screen and Pan using a scraper and **THOROUGHLY** clean these items with **HOT** water and allow them to air dry.
- 5) Raise the Filter Assembly above the Filter Tub and let any sediment or shortening drain into the tub; then **THOROUGHLY** clean the filter assembly as follows:
 - a) "Micro-Mesh" Stainless Steel Filter Screen
 - (1) **CAREFULLY** remove any debris from the screen using a scraper.
 - (2) Remove the **STANDPIPE** from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE FRAME A** to remove it from the **FILTER SCREENS FIRST**.
 - (3) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove **FRAME B** from the **FILTER SCREENS**.
 - (4) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN**.
 - (5) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP**. If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.
 - (6) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.
 - (7) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME A**.
 - (8) Place the **PIN** end of **FRAME B** on the **FILTER SCREENS** so the **PIN** is seated in the **CHANNEL** of **FRAME A** near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the edge of the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME B** and the **PIN** of **FRAME A** is seated in the **CHANNEL** of **FRAME B**.
 - (9) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** on the **STANDPIPE** to the **SUCTION FITTING** on the



b) "Magnepad Paper Envelope" Filter:

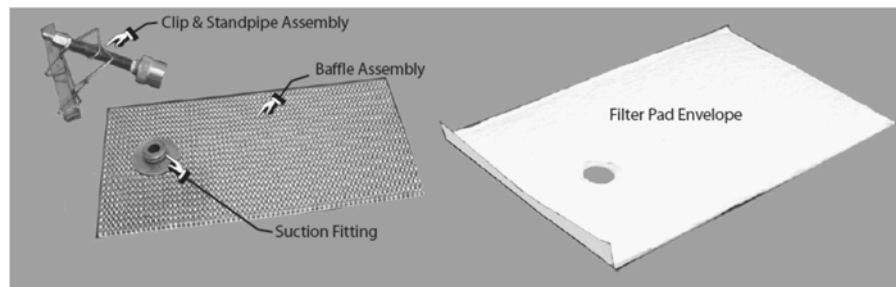
NOTE: Magnepad Paper Filter Assemblies **DO NOT** have to be **SCRAPED** after filtering shortening.

- 1) Remove any sediment and shortening in the Filter Tub using a scraper; then wipe the tub dry with paper towels.
- 2) Carefully insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the Handle end of the tub. **WARNING: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE FILTER.**
- 3) If applicable, **CAREFULLY** insert the Sludge Catcher Screen and Pan in the Filter Tub; then replace the Crumb Catcher Pan.
- 4) **SECURELY** connect the Wash Down Hose and Suction Line Hose to the Pump/Motor; then connect the Suction Line Hose to the Standpipe on the Filter Assembly.
- 5) Place the assembled Filter Tub in its storage location.

c. At Closing

- 1) Repeat **DAILY** steps A 1 a 1) thru A 1 a 6) above.
- 2) **THOROUGHLY** clean the Filter Assembly as follows:
 - a) "Micro-Mesh" s/s Filter Screen:
 - (1) **THOROUGHLY** flush any remaining sediment from both sides of the filter screen with **HOT WATER**.
 - (2) Remove the **STANDPIPE** from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE FRAME A** to remove it from the **FILTER SCREENS FIRST**.
 - (3) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove **FRAME B** from the **FILTER SCREENS**.
 - (4) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN**.
 - (5) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP**. If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.
 - (6) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.
 - (7) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME A**.
 - (8) Place the **PIN** end of **FRAME B** on the **FILTER SCREENS** so the **PIN** is seated in the **CHANNEL** of **FRAME A** near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the edge of the **FILTER SCREENS**; then **HINGE** the frame so the edge of the **FILTER SCREENS** are inserted in the other **CHANNEL** of **FRAME B** and the **PIN** on **FRAME B** is seated in the **CHANNEL** of **FRAME A**.
 - (9) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** on the **STANDPIPE** to the **SUCTION FITTING** on the **FILTER SCREEN** assembly. **DO NOT OVERTIGHTEN!!!**
 - b) "Magnepad" Envelope Filter - Remove and discard the **USED** Filter Pad Envelope, **CAREFULLY** clean the Baffle Assembly and Clip / Standpipe Assembly in a 3 compartment sink with **HOT** water and allow these items to air dry. **DO NOT USE SOAP!!** Reassemble the Magnepad Envelope Filter using a **NEW** Filter pad Envelope as follows:
 - (1) Insert the **BAFFLE** into the **FILTER PAD ENVELOPE**, when inserted properly the **SUCTION FITTING** will protrude through the hole in the pad.
 - (2) Fold **FLAP** over (in the direction of the hole), securing the Baffle inside the **FILTER PAD ENVELOPE**.
 - (3) **CAREFULLY**, align the **CLIP & STANDPIPE ASSEMBLY** so that the **CLIP** can secure the **FLAP** on the Envelope and the **STANDPIPE** will align over the **SUCTION FITTING** protruding through the Envelope.
 - (4) Tighten the knurled **NUT** on the **STANDPIPE** to the **SUCTION FITTING** protruding through the Envelope.

- 3) Repeat **DAILY** steps A1 a 6) through steps A1 a 10) above.



B. WEEKLY

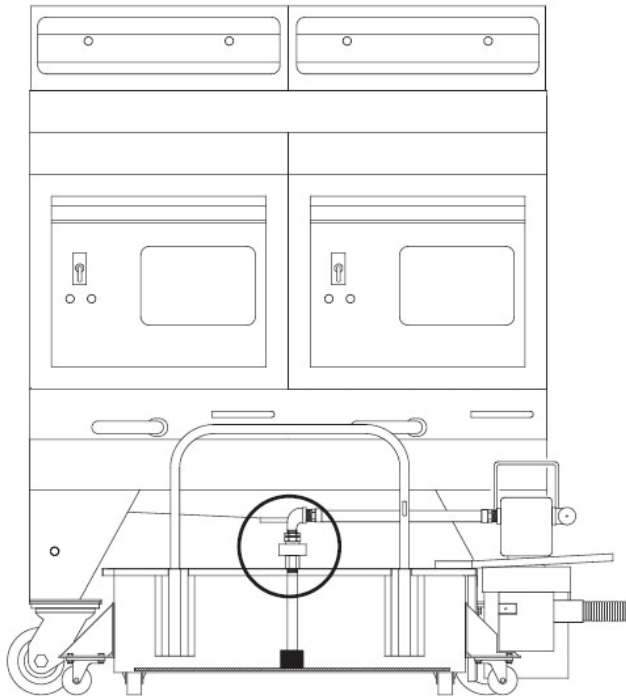
1. Perform the daily cleaning steps A 1 a) 1) thru A 1) a) 6) above.
2. Clean the Filter Assembly as follows:
 - a) "Micro-Mesh" stainless steel filter screen:
 - 1) Disassemble the filter according to **DAILY** steps A 1 a 5) a) (1) through A 1 a 5) a) (4) and clean the two (2) frames as described in step A 1 a 5) a) (5).
 - 2) Place the upper and lower **FILTER SCREENS** in the fryer with **BOIL-OUT SOLUTION** for cleaning. **DO NOT PLACE THE BAFFLE OR STANDPIPE IN THIS SOLUTION!!! BOIL-OUT** the fryer vat according to instructions contained in the cleaning manual provided by your chemical supplier.
 - 3) After the filter screens have been cleaned in the Boil-Out Solution, **ENSURE** they are **THOROUGHLY** sprayed with a solution of 1 **PART** vinegar to 25 **PARTS** of water to **NEUTRALIZE** the boil-out solution, then allow the screens to air dry. **NOTE:** any residue of boil-out solution on the filter screens could cause the rapid breakdown of the shortening.
 - 4) Reassemble the "Micro-Mesh stainless steel filter screen according to **DAILY** steps A 1 a 5) a) (6) through A 1 a 5) a) (9). b) "Magnepad" Envelope Filter - Disassemble, clean, and re-assemble the "Magnepad" Filter Assembly according to **DAILY** cleaning steps A 1 b 2) b) above.
 - b) "Magnepad" Envelope Filter - Disassemble, clean, and re-assemble the "Magnepad" Filter Assembly according to **DAILY** cleaning steps A 1 b 2) b) above.
3. If applicable, place the **CRUMB CATCHER PAN** and **SLUDGE CATCHER SCREEN** in the fryer with the Boil-Out Solution for cleaning, and after they are cleaned, **ENSURE** they are sprayed with a solution of vinegar/water as described in **WEEKLY** step B2 a) 3) above.
4. **THOROUGHLY** clean the Filter Tub, Cover, and if applicable, Sludge Catcher Pan with **HOT SANITIZER SOLUTION** and allow them to air dry.
5. Re-assemble the Filter Tub according to **DAILY** steps A 1 a 7) through A 1 a 10) (pg 12).

CAUTION: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE FILTER.

PORTABLE FILTER MACHINE OPERATION

FILTERING SHORTENING - Shortening should be filtered at least twice a day, once after the lunch rush and again after the dinner rush. In a bank of fryers, the fryer used to cook French Fries should be filtered **FIRST** followed by fryers used to cook other products. Filter shortening in a fryer as follows:

1. Turn the **ON/OFF** Switch and, if applicable, the Gas Valve on the fryer to the **OFF** position; then roll the **ASSEMBLED** Filter Machine under the fryer until the **DRAIN VALVE** is centered directly **ABOVE** the Crumb Catcher Pan and/or Filter Assembly as shown below:



**NOTE: SIDE MOUNTED PUMP/MOTOR
FILTER MACHINE MODEL
TSF-150 SHOWN.**

CAUTION: BEFORE PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

2. Open the drain valve **SLIGHTLY**, when the bottom of the tub is covered with about two (2) inches, completely **OPEN** the drain valve and while the shortening is draining, scrape all sides of the vat to remove encrusted material using the scraper.
3. When all shortening has drained into the filter tub, use a **DRAIN ROD** to stand the vat grill on one side of the vat, then use the drain rod to pull the sediment on the bottom of the vat towards the valve opening, then use the rod to push sediment through the valve opening.
4. Connect the electrical cord on the Filter Machine Pump/Motor Unit to an electrical receptacle; then **SECURELY** connect the Wash Wand Hose Female **QUICK-CONNECT COUPLER** to the **MALE STEM** on the **OUTLET PORT** of the Pump/Motor Assembly.
5. **FIRMLY GRIP** the Wash Wand Hose and point the nozzle into the fryer vat. **DO NOT AIM THE NOZZLE OUTSIDE OF THE VAT AREA.** Turn the Toggle **ON/OFF** Switch on the pump/motor to the **ON** position; then **CAREFULLY**, rinse the vat with the Wash Wand by holding the nozzle at a 45° angle to the bottom of the vat so shortening and debris will bounce off the rear wall and flow towards the drain opening.
6. Use a Drain Rod or a brush to push the sediment through the drain to keep the drain valve clear. Hose off the heat mechanism and walls of the vat until shortening and residue has been flushed through the drain and into the filter tub
7. After all debris and sediment has been flushed into the filter tub, turn the Toggle **ON/OFF** Switch on the motor to the **OFF** position, then replace the grill in the fryer vat. **NOTE:** Step 8 & 9 is **ONLY** applicable to Filter Machines with the Micro-Mesh Stainless Steel Filter Screen.
8. Set a Timer for the amount of time established for **POLISHING** shortening, **FIRMLY** hold the Wash Down Hose Nozzle against an inner wall of the fryer; then turn the Pump/Motor Toggle **ON/OFF** Switch to the **ON** position to allow shortening to circulate through the Filter Tub **POLISHING** the shortening.
9. When the Timer sounds, turn the Pump/Motor Toggle **ON/OFF** Switch to the **OFF** position.
10. Place the **DRAIN VALVE** to the **CLOSED** position, hold the Wash Down Hose **NOZZLE** firmly against an inner

11. When all shortening in the Filter Tub has been returned to the fryer, turn the Pump/Motor **ON/OFF** Switch to the **OFF** position, remove the Wash Down Hose Nozzle from the fryer; then remove the Filter Machine from the fryer.
12. Check and if necessary add fresh shortening to the fryer until shortening is at the proper level.
13. **THOROUGHLY** clean the Filter Machine according to **DAILY CLEANING** steps 1 a 1) through 1 a 10) on page 11 and 12.

FRYER BOIL-OUT

1. Repeat Filtering Shortening steps 1 through 7 above; then turn the **DRAIN VALVE** to the **CLOSED** position.
2. **FIRMLY GRIP** the Wash Wand Hose and **CAREFULLY** place the nozzle into a **METAL** container and hold it firmly against an inner wall.
3. Turn the Toggle **ON/OFF** Switch on the Pump/Motor to the **ON** position, and pump shortening in the Filter Tub into a metal container for disposal.
4. When **ALL** shortening has been pumped into the container, turn the Toggle **ON/OFF** Switch on the pump motor to the **OFF** position, remove the Wash Wand Hose from the pump/motor; then hang the hose in an upright position so shortening can drain into a metal container.

NOTE: Failure to hang the Wash Wand Hose in an upright position to drain may cause the hose to become clogged with congealed shortening.

5. **THOROUGHLY** clean the Filter Machine as indicated in paragraph B 1 through B 5 page 13 of the Preventive Maintenance, Troubleshooting and Cleaning section of this manual.
6. **BOIL-OUT** the fryer following the instructions contained in the Cleaning Manual provided by your Chemical supplier. **DO NOT USE CHLORINE BASED CLEANER.**

CAUTION: DO NOT USE THE PUMP/MOTOR UNIT TO REMOVE WATER FROM THE FRYER, AS THIS WILL CAUSE PREMATURE FAILURE OF THE UNIT AND VOID THE WARRANTY.

TECHNICAL ASSISTANCE & ORDERING INFORMATION

TECHNICAL ASSISTANCE - Contact an authorized service agent or the Customer Service Department, Ultrafryer Systems at 1-800-525-8130 for technical assistance.
E-Mail technical assistance at: techserv@ultrafryer.com

ORDERING INFORMATION:

1. **REPLACEMENT PARTS** - Provide the following information when ordering replacement parts by phone, fax or mail:

Your company name and phone number
Your company purchase order number
Bill-to address
Ship-to address
Quantity desired
Part number and description of the desired-item Your name or signature of authorized-buyer

Phone in order to: 1-888-331-5013

FAX order to: 1-210-731-5061

Mail order to: Ultrafryer Systems

Order Entry Office

P.O. Box 5369

San Antonio, TX 78201

E-Mail your order to: custserv@ultrafryer.com

2. **TERMS** - Net 30 days for customers on approved accounts. Past due balances will be charged 1% per month (12% per annum) until full balance is paid.
3. **DAMAGES** - Ultrafryer Systems is not responsible for damage occurring in transit. All deliveries must be inspected for damage to shipping containers prior to departure of the delivering carrier. Any damage must be notated on the receiving document to facilitate filing of freight claims. Carriers must be notified immediately and freight inspections must be requested from the carrier. Ultrafryer Systems can and will gladly assist you in preparing and processing of the necessary claims only if proper notification has been accomplished on the carrier delivery document. Damaged equipment and or containers must be available for the claims inspector to inspect.
4. **RETURNS** - Ultrafryer Systems cannot guarantee credit for items returned without proper authorization. All returns must have prior Ultrafryer Systems Customer Service or Warranty department approval. An assigned number will be issued by the approval authority. Please print the assigned number on all returned packages and corresponding paperwork. Returned goods are subject to a 15% restocking charge. Ultrafryer Systems is not responsible for freight charges on returned goods unless authorized by Customer Service and or Warranty personnel. Ultrafryer Systems does not receive freight collect or C.O.D. shipments.

PARTS IDENTIFICATION

PARTS IDENTIFICATION

Locate the part on the following sketches and note the index number (i.e, 1, 2, etc) then obtain the part number and description for that index number in the page facing the sketches. Use that part number when ordering a replacement part,



150 lb Portable Filtration Machine

ITEM	DESCRIPTION	PN
1	Wash Wand Assembly	12B649
*2	Filter Tub Scraper	12567
3	220V Pump / Motor Assembly	60A030
4	Filter Tub Handle	19B526
5	Filter Tub Cover	19B670
6	Filter Tub Assembly	19B354
*7	.5 Magnapad Assembly	12A814
8	1.25" (32mm) Black Iron Pipe Cap	24A152
9	Sludge Screen	29A045
*10	Crumb Catcher	19A796
11	Sludge Pan	19A797
12	Medium Duty Caster	28A005
*13	Permafil Assembly	12A807

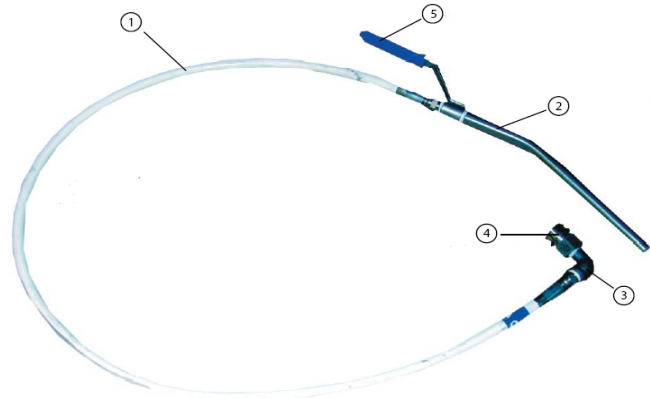
*** Not Shown**



Pump/Motor Assembly

ITEM	DESCRIPTION	PN
1	Bracket, Motor Mount	19B488
2	Bracket, Motor Protect	19B669
3	Switch Guard	12182
*4	1/2" NPT Hydraulic Male QD Stem	24396
5	3/4 x 1/2 Black Iron Hex Bushing	24257
6	1/2 90 deg Street Elbow	24256
*7	1/2 x 5" Black Iron Nipple	24A096
8	1/2 x 3/8 90 deg Street Elbow Reducer	24376
9	21" Vacuum Hose	24A234
10	Strain Relief Bushing	18128
*11	Protective Rubber Switch Boot	23402
12	#16-3 Molded Electrical Cord	33048
*13	10A L Rated On/Off Switch	18025
14	PUMP/Motor Assy 8.0 GPM 1/3 230V 50/60	24A036
15	Quick Disconnect Female Fitting	22677
16	Bracket, Wash Wand Holder	12711
17	7/8" Closure Button	18020

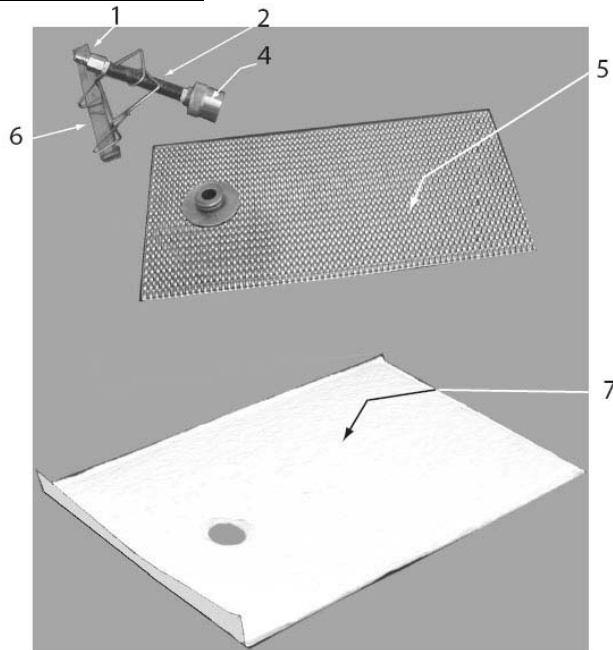
ITEM	DESCRIPTION	PN
1	72 Hose Assembly	12541
2	Nozzle Handle assembly	12675
3	Elbow 90° Street	24256
4	1/2" Quick Disconnect Coupling	24246
5	Wand Handle	22734



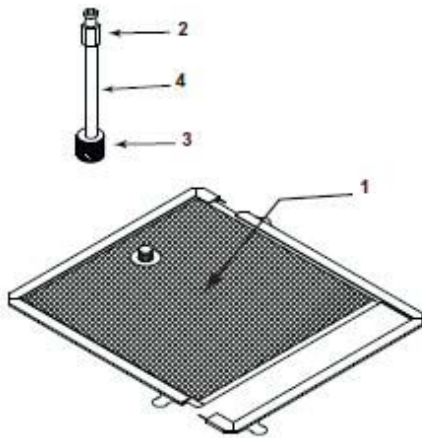
**WASH DOWN HOSE ASSEMBLY
PN 12B649**

ITEM	DESCRIPTION	PN
1	3/8" (10mm) NPT Quick-Connect Male Stem Fitting	22676
2	3/8" x 7" (10mm x 178mm) S/S Nipple	24471
3	23" x 19.5" Baffle Kit consisting of items 4,5, & 6.	29A056
4	Top Compression cap (Knurl Knob)	24A153
5	21½" x 29" (456 x 737mm) Baffle	29A049
6	23" (584mm) Long Standpipe Clip	29A051
7	23" x 19.5" Filter Pad	29A048
*8	Case of 30 Filter Pads	29A054

* Not Shown



**MAGNEPAD FILTER ASSEMBLY
PN 12A814**



ITEM	DESCRIPTION	PN
1	Micro Mesh Filter Screen (see exploded view)	21A279
2	1/2" (10 mm) NPT Male Stem Quick Connect Fitting	22-676
3	Top Compression Cap (Knurled Knob)	24-369
4	1/2" (10 mm) x 7" (178 mm) S/S Nipple	24-471

EXPLODED VIEW

Micro Mesh Filter Assembly



ITEM	DESCRIPTION	PN
1	Filter Screen Frame Set	22A280
2	Upper Filter Screen	21A281
3	Baffle w/suction line fitting	21A282
4	Lower Filter Screen	21A274

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