

Powr-Flite[®]

OPERATOR'S MANUAL

NEBULA

MISTER and SPECIALTY CLEANER PFMS



**WARNING: OPERATOR MUST READ AND UNDERSTAND THIS MANUAL
COMPLETELY BEFORE OPERATING THIS EQUIPMENT.**

Save These Instructions

Congratulations on your purchase of a Commercial Mister and Specialty Cleaner. You are now equipped to handle any and all commercial misting and carpet cleaning jobs. Your new unit is a high quality, precision-made product. All parts used in the manufacturing of this unit have passed rigid quality control standards prior to assembly. Please safeguard the original receipt / invoice. If you experience any problems with your unit during the warranty period, the original receipt / invoice will act as proof of purchase.

IMPORTANT SAFETY INSTRUCTIONS

READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE USING THIS UNIT

Read and understand this owner's manual and all labels on the unit before operating. Safety is a combination of common sense, staying alert and knowing how your unit works. Use this unit only as described in this manual. Use only manufacturer's recommended attachments. To reduce the risk of personal injury or damage to your unit use only recommended accessories.

WARNING To avoid fire, DO NOT use with a flammable or combustible liquid or floor cleaner.

WARNING To avoid electric shock, DO NOT expose to rain. Store Indoors.

To reduce risk of fire, electric shock, or injury:

- Do not use outdoors or on wet surfaces.
- Do not leave unit unattended when plugged in. Turn off the switch and unplug the electrical cord when not in use and before servicing.
- Do not allow to be used as a toy. Close attention is necessary when used near children.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Do not use with damaged cord or plug. If unit is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center before using.
- Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull a cord around sharp edges or corners. Do not run the unit over cord. Keep cord away from heated surfaces.
- Do not use extension cords or outlets with inadequate current carrying capacity.
- Turn off all controls before unplugging.
- Do not handle plug or unit with wet hands.
- Do not put any objects into openings. Do not use with any opening blocked, keep free of dust, lint, hair, and anything that may reduce airflow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- Use extra care when cleaning on stairs. Do not use to pick up flammable or combustible liquids such as gasoline, or use in areas where they may be present.
- Store your unit indoors in a cool, dry area.
- Do not unplug by pulling on cord. To unplug, grasp the plug, NOT THE CORD.
- Follow these guidelines to ensure operator safety and to maintain equipment in running order.
- Make sure the machine is plugged into an electrical outlet with the same voltage rating as shown on the nameplate of the machine.
- Do not attempt to plug a 115 volt machine into a 230 volt outlet or a 230 volt machine into a 115 outlet.
- Replace a damaged cord immediately.
- If an extension cord is necessary, use a three conductor grounding cord-12 gauge wire or heavier to prevent motor burnout and over-heating of wires
- Do not expose the machine to freezing temperatures.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

- Do not break off or pull out the ground prong on the plug.
- Do not attempt to repair a warranted machine unless instructed to do so by an authorized shop or the factory.
- Do not use any replacement parts except those specified on the parts list. Proper performance of the machine could be affected if substitutions are made.
- Use defoamer at all times to prevent damaging the vacuum motor.
- Do not use water in excess of 140° F (60° C).
- Failure to comply with the above warning instructions will void the warranty.

When using as an extractor

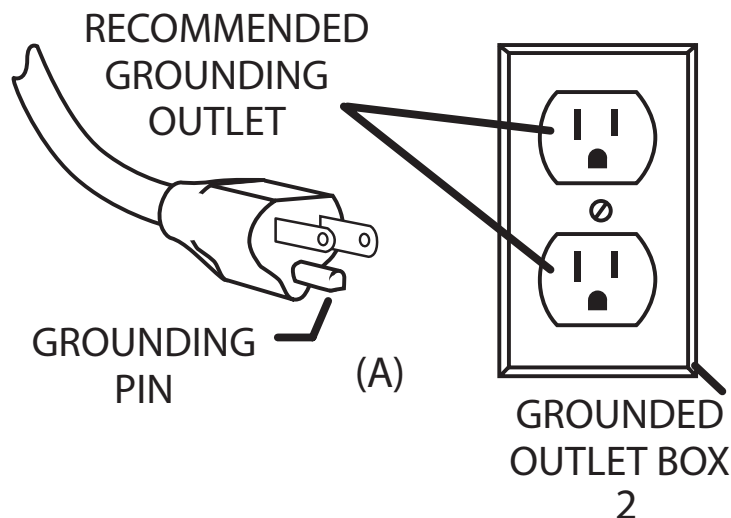
- Do not use the machine for totally dry vacuuming. This machine is not fitted with a fine dust filter.
- Do not use citrus-based cleaners in this machine.
- Do not use cleaning chemicals in this machine except those recommended for commercial extraction equipment.
- The use of any chemical with abrasive additives voids the warranty.
- Use defoamer at all times to prevent damaging the vacuum motor.
- Do not use water in excess of 140° F (60° C).

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk electric shock. This machine is equipped with a cord having an equipment -grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 115-volt circuit, and has a grounding plug that looks like the plug illustrated in sketch A.



TECHNICAL SPECIFICATIONS

Model	PFMS
Input Voltage	115 VAC
Plug Type	US
Cord	25' with on-board storage
GPM	.05 with Atomizer Nozzle/.25 with fan nozzle/.25 Extraction Mode
Amps	Mist Mode 1A/Extraction Mode 8.9A
Solution Tank	3.5 Gal/13.2 l
Recovery Tank	2.5 Gal/9.5 l
Dimensions	23" x 11" x 23" / 58.5cm x 28cm x 58.5 cm
Weight	41 lbs./18.5 kg
Waterlift	89"/226 cm
CFM/CMM	104/3
Solution Pressure	55 p.s.i./3.8 BAR
Coverage	Mister model 7,500-10,000* sq.ft. per tank
Misting Hose	35' with quick disconnect
Misting Wand	18"

*Variance dependent on user application method

This unit can be used as either a Mister or an Extractor to use on upholstery and for detail work. The brass atomizing nozzle provides lower saturation when spraying disinfectant while a larger brass fan nozzle is provided for large area coverage.

NOTE: This mister is designed for use with all water-based disinfectants from the EPA “List N”.

MISTER OPERATING INSTRUCTIONS

Filling the Mister

- Unplug the unit.
- Disconnect the solution and recovery tanks.
- Remove the upper recovery tank.
- Add water and manufacturer’s recommended solution ratio into solution tank. Fill only to the fill line indicated on the label on the inside of the solution tank. The tank will hold up to 3.5 gallons.

Operating the Mister

- Attach misting wand pressure hose to the quick disconnect in the pocket at the front of the machine.
- Turn the 3-way switch to MIST ONLY setting. (Allow approximately 30 seconds for the pump to prime).
- Use the wand with spray tip to spray the solution. The atomizing nozzle that is pre-installed on the wand applies smallest micron sized droplets and is perfect for most applications, however proper application should still be followed to prevent over-saturation. To apply use a natural up and down or side to side motion, slightly overlapping from one section to the next. Do not dwell on a spot, as this will cause over-saturation.
- Refill solution tank, as recommended above, to resume cleaning.

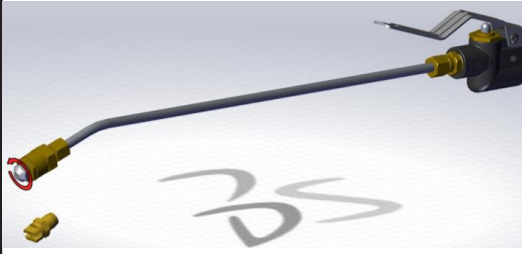
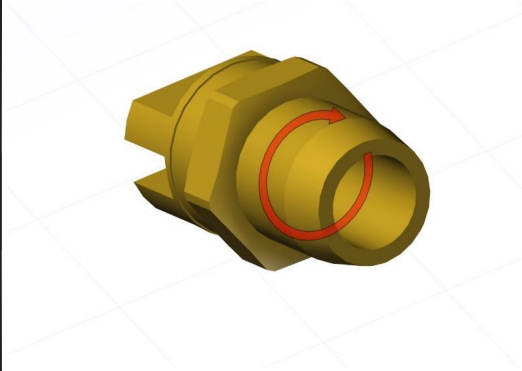
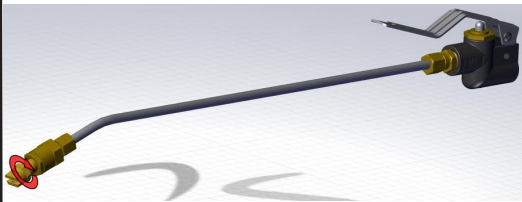
After use

- Unplug the unit.
- Disconnect the solution line.
- Unlatch the recovery tank from the base of the unit and remove.
- Drain any remaining solution in the tank following EPA and Manufacturer guidelines for the disposal of the chemical being used.
- Rinse the tank after each use.
- Allow it to air dry.

Note: If the spray jets become clogged, remove and soak them thoroughly for an hour in a 8 to 1 ratio of water to white vinegar or anti-browning solution, and blow-dry. Do not use wire or pins to clean the nozzles as this will cause the spray pattern to become distorted.

The wand will come with two spray tip options. The lower micron size atomizing spray tip will already be installed on the wand. You will also get a higher micron fan nozzle as an option. This additional nozzle option will be taped onto the wand when you receive the unit. The installed atomizing nozzle is best for cleaning office areas, touch points, etc, as it does not saturate things like paper and boxes that could be found in offices, retail, hospitality, restaurant, educational type of environments. The attached additional fan nozzle spray tip is for application in areas like warehouses, shipping carts, etc., where there is not a worry that the items being sprayed could get oversaturated. This allows for a quicker application of the disinfectant to cover larger areas. Care should be taken when applying disinfectant in food areas. Be sure to read and follow the manufacturers instructions for disinfectant products.

WAN-PFMS

Replacing the Nozzle	
<p>Remove the misting nozzle from the wand by loosening counterclockwise.</p>	
<p>Wrap Teflon tape around the threads on the new nozzle twice as shown. Avoid getting Teflon tape into the fluid path as it can cause clogs.</p>	
<p>Screw the new nozzle on to the wand clockwise until tight.</p>	

EXTRACTOR OPERATING INSTRUCTIONS

Filling the unit for use as an extractor

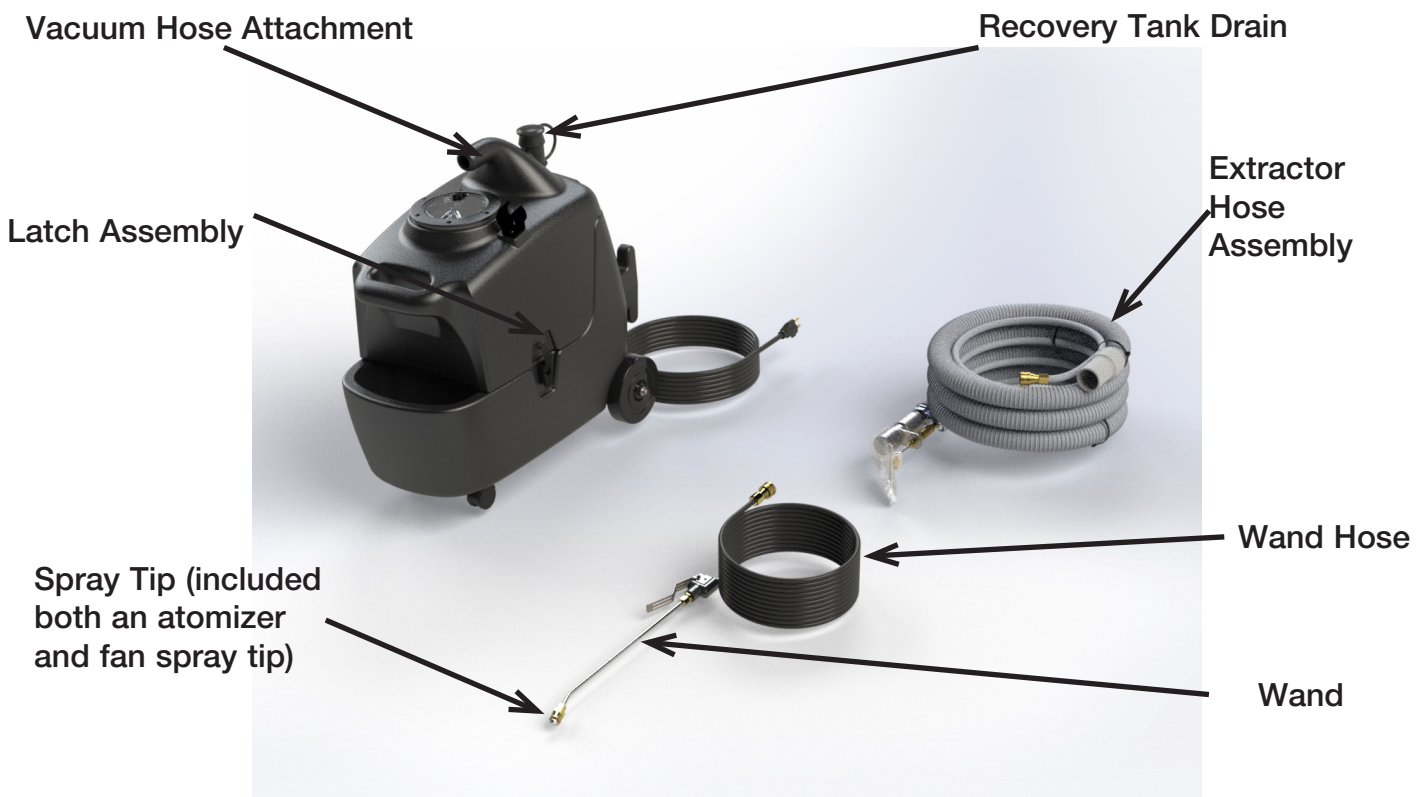
- Unplug the unit.
- Disconnect the solution and recovery tanks.
- Remove the upper recovery tank.
- Add water and/or chemicals to the lower solution tank. Fill only to the fill line indicated on the label on the inside of the solution tank. The tank will hold up to 3.5 gallons.

Operating the extractor

- Attach the solution line from the vacuum hose assembly to the quick disconnect in the pocket at the front of the machine.
- Attach the vacuum hose to the vacuum inlet (handle) above the recovery tank lid.
- Turn the 3-way switch to VAC PUMP. (Allow approximately 30 seconds for the pump to prime).
- Attach the hand tool to the hose end. Use the hand tool to spray and recover the solution.
- The float shut-off will disable the suction of the unit when the recovery tank is full. The operator will notice a distinctive change in the sound of the vacuum motor when the shut-off is activated. Empty the recovery tank and then fill the solution tank to resume cleaning.

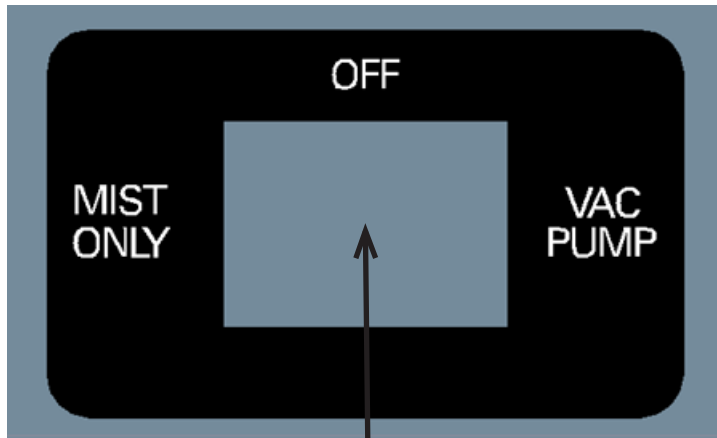
Emptying the Recovery Tank

- Unplug the unit.
- Disconnect the solution line and vacuum hose.
- Unlatch the recovery tank from the base of the unit and remove.
- Remove the drain plug.
- Drain the tank over a suitable outlet for wastewater.
- Rinse the tanks after each use.
- Store the unit with the lid off of the recovery and allow it to air dry.





Solution Hose Connection

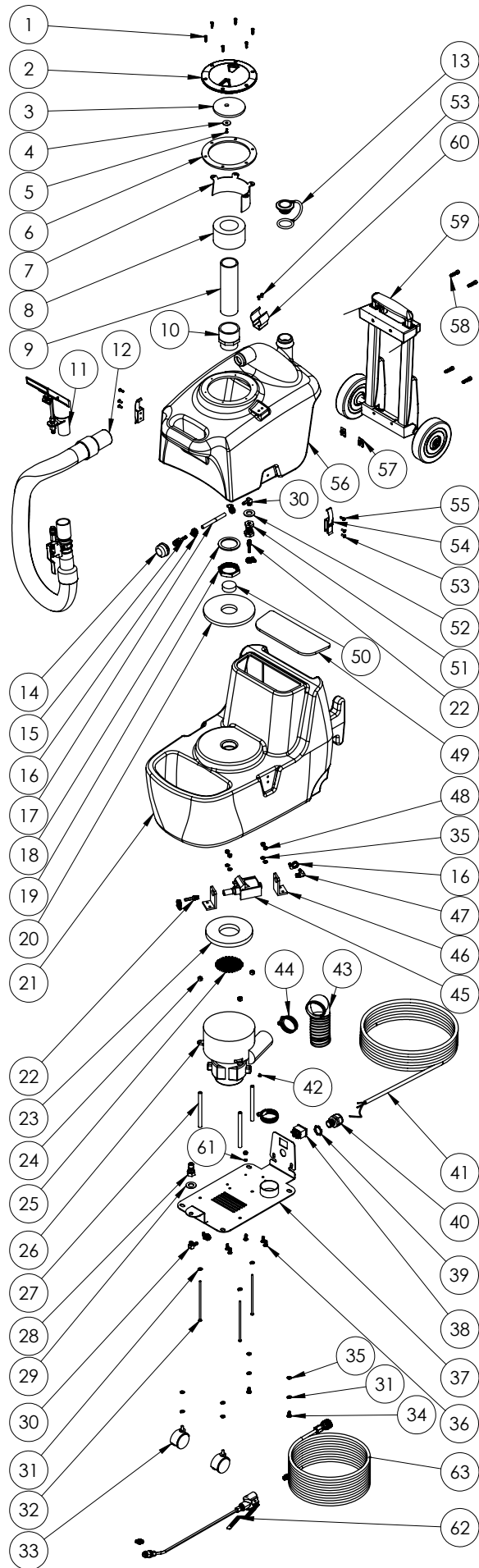


3-Way Switch

TROUBLESHOOTING

Problem	Possible Cause	Solution
No Spray	Pump is not primed.	Depress lever on hand tool to release pressure.
Low Solution Flow	Solution tank level is low. Clogged filter. Clogged Spray jet.	Refill Solution tank.* Clean the screen filter on the hose in the solution tank. Clean the spray jet in the hand tool.
Low Suction	Recovery tank is full. Clogged Hand Tool or hose. Excessive foam.	Empty recovery tank. Clean Hand Tool and hose. Add defoamer to recovery tank.

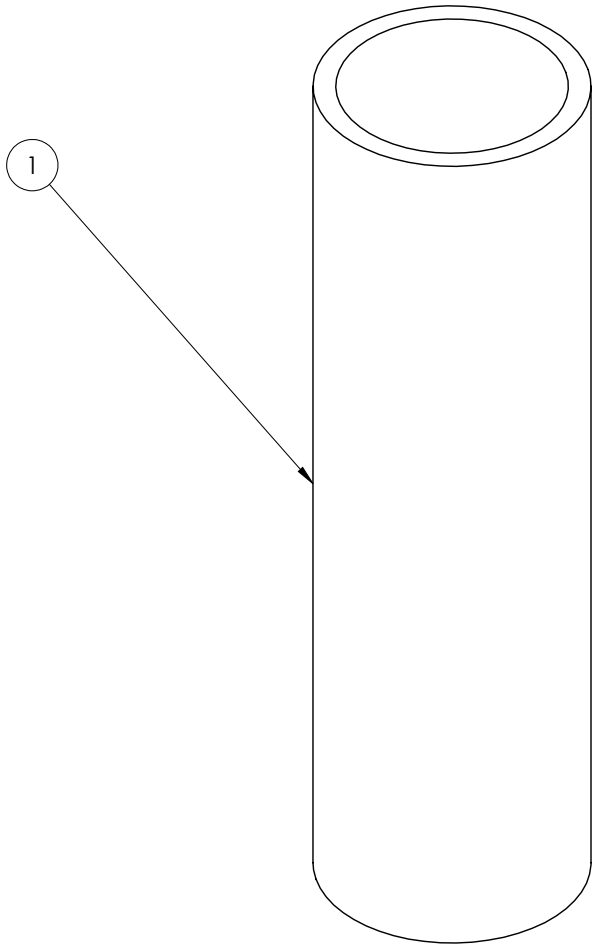
*Before re-filling the solution tank, always empty the recovery tank.



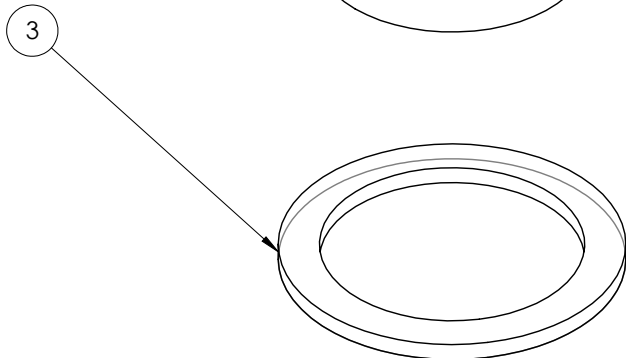
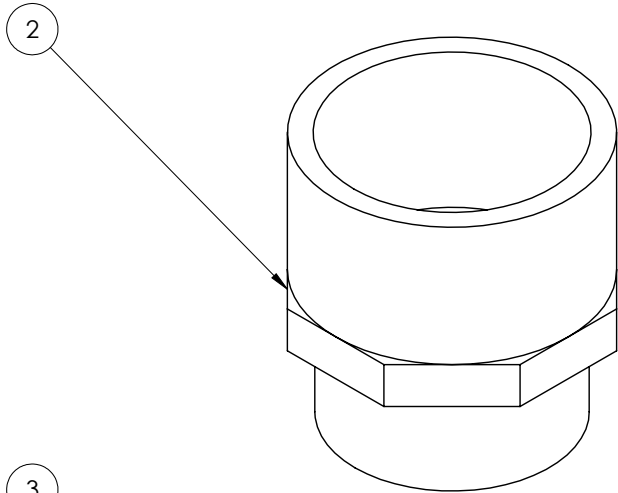
No.	Part No.	Qty	Description
1	X8295	6	Screw #8 x 3/4"
2	PX103A	1	Lid 4" Clear w/Blk Ring
3	X9061	1	Shut Off Disk
4	X9087	1	Washer
5	X9088	1	Screw 8-18 x 1/2"
6	PX103AG	1	Lid Gasket
7	X9518	1	Deflector
8	X9062	1	Float
9	X9082	1	PVC Pipe 1-1/2" x 6-1/2"
10	X9076	1	Bulkhead Fitting 1-1/2" MPT x 1-1/2" "Female Slip
11	AA195	1	Extractor Detailer Tool 1-1/2"
12	X2058	1	Hose Assembly, Rigid, Crush Proof
13	PAS36	1	Drain Hose Plug
14	PX30	1	Solution Tank Filter
15	PX213	1	Nylon Fitting 1/4" MPT x 1/4" Hose Barb
16	7DL003	6	Hose Clamp
17	71817A	2	Braided Hose, 1/4" 250 PSI
18	PX14A	1	Dump Valve Gasket
19	PX46	1	Lock Nut
20	X9079	1	Gasket
21	X1920BLK	1	Solution Tank
22	PC66	2	Hose Barb 1/4"H x 1/8" MPT
23	X9740	1	Gasket
24	X8237	3	Nyloc Nut
25	X9060	1	Vacuum Motor Screen
26	1942-Kit	1	Vacuum Motor 2 Stage 115V w/Gasket
27	X9045	3	Spacer
28	PC10	1	QD Male 1/8" x 1/8" FPT
29	X9412	1	Washer
30	7AT006	2	Brass Fitting 90° 1/4" Barb x 1/8" MPT
31	X8212	7	Lock Washer
32	X8291	3	Screw 1/4-20 x 5-1/2"
33	X9047	2	Swivel Caster 45mm 1/4-20 x 3/4"
34	7BS003	2	Screw 1/4-20 x 1/2"
35	00-0600-0503	8	Washer
36	30676	5	Screw 10-24 x 5/8"
37	X9046	1	Base Plate Weldment
38	X9048	1	Rocker Switch
39	X8008N	1	Lock Nut Lock 1/2" Steel Conduit
40	PD8	1	Strain Relief

No.	Part No.	Qty	Description
41	19498	1	Power Cord 18/3 Ga. SJTW x 25' Yellow
42	X8201	1	Screw #8 x 3/8"
43	7CZ001	18	Vacuum Hose 2"
44	PX215	2	Hose Clamp
45	FJ5082	1	Oscillating Pump
46	PX204	2	Pump Mount
47	PX214	1	Nylon Fitting 90° 1/8" MPT x 1/4" Hose Barb
48	X8271	5	Nyloc Nut
49	X9064	1	Gasket
50	PX209	1	Foam Filter
51	7AJ004	1	Brass Anchor Connector 1/8" FPT x MPT
52	72115A	1	Washer
53	X8262	6	Screw 8-32 x 1/4"
54	X9059	2	Latch w/Keeper
55	X8278	2	Screw 8-32 x 1/2"
56	X1921BLK	1	Recovery Tank
57	X9106	2	Nut
58	X9065	4	Screw 1/4-20 x 1"
59	X8990	1	Handle Assembly
60	72173A	1	Spring Clip
61	7CY001	1	Internal Tooth Lock Washer
62	WAN-PFMS	1	Wand Assembly
63	PX35-2-4-100	1	Hose Assembly
	X2050	1	Atomizer Nozzle
	X2051	1	Fan Spray Nozzle

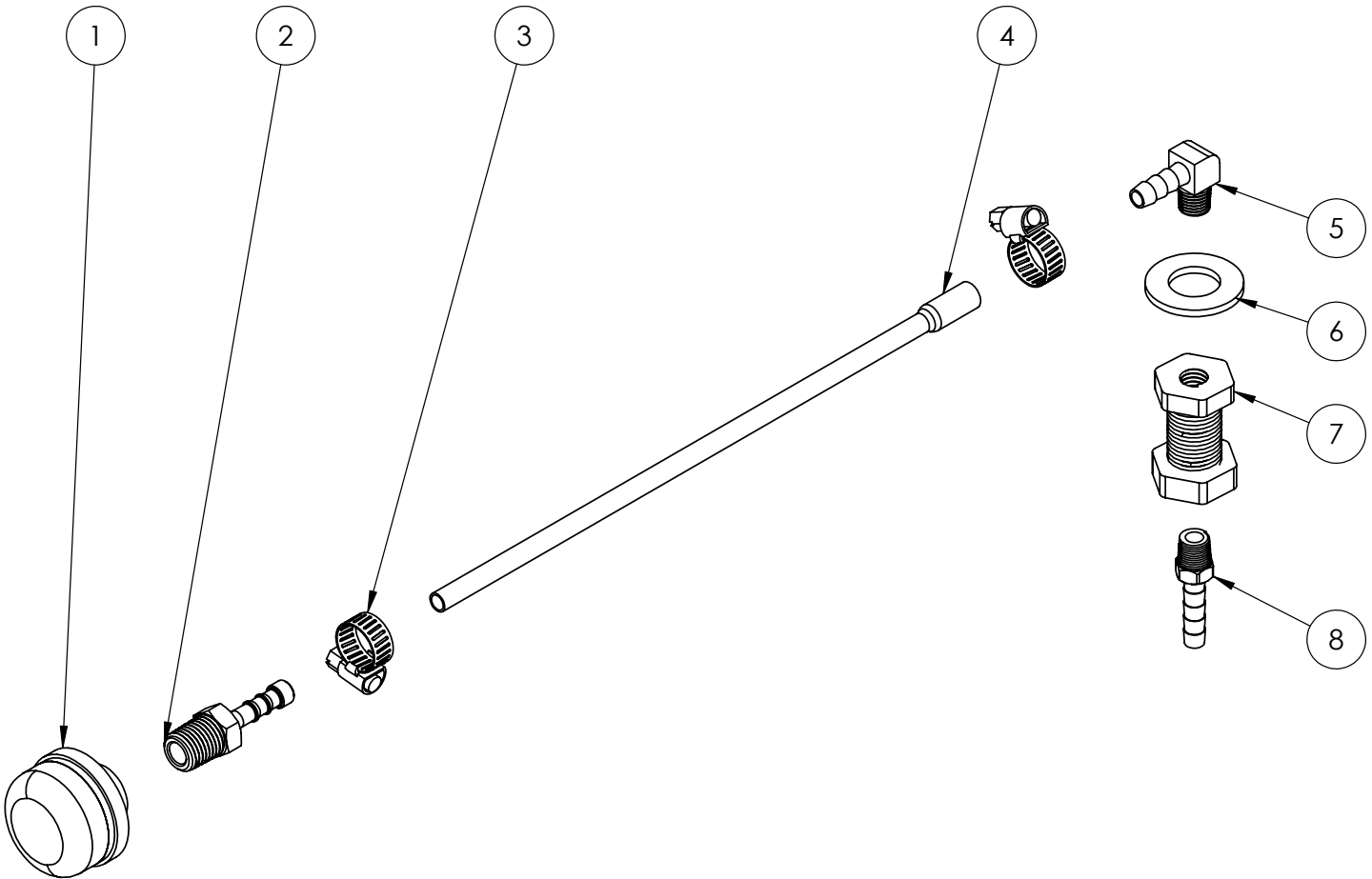
X9082-KIT Standpipe Kit



No.	Part No.	Qty	Description
1	X9082	1	PVC Pipe 1-1/2" x 6-1/2"
2	X9076	1	Bulkhead Fitting 1-1/2" MPT x 1-1/2" Female Slip
3	PX14A	1	Gasket



PX30-KIT Filter and Hose Assembly



No.	Part No.	Qty	Description
1	PX30	1	Solution Tank Filter
2	PX213	1	Nylon Fitting 1/4" MPT x 1/4" Hose Barb
3	7DL003	2	Hose Clamp
4	71817A	1	Braided Hose 1/4" 250 P.S.I.
5	7AT006	1	Brass Fitting 90° 1/4" Barb x 1/8" MPT
6	72115A	1	Washer
7	7AJ004	1	Brass Anchor Connector 1/8" FPT x MPT
8	PC66	1	Fitting 1/4" Barb x 1/8" MPT

For warranty information go to www.Powr-Flite.com