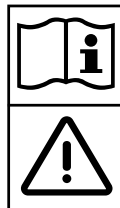
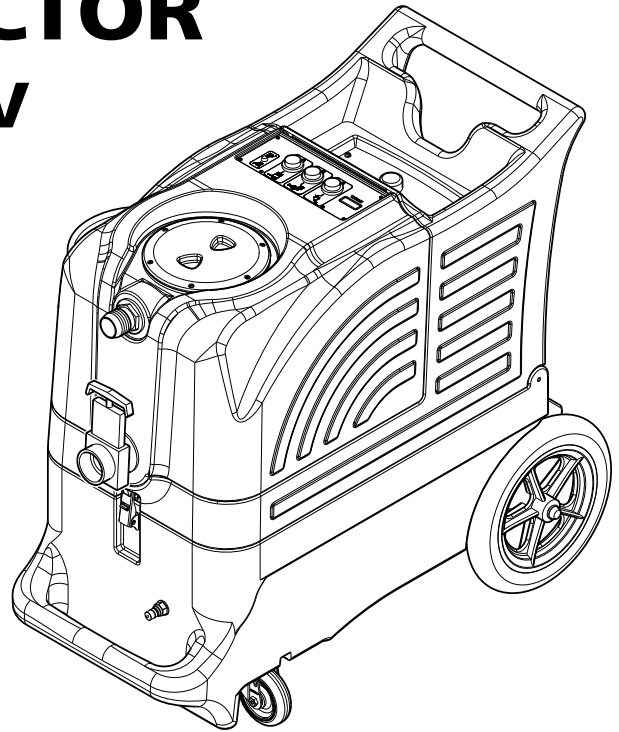




# ADVANTAGE-400H EXTRACTOR

**240V**

## INFORMATION & OPERATING INSTRUCTIONS



**CAUTION: DO NOT OPERATE MACHINE UNTIL YOU HAVE READ  
ALL SECTIONS OF THIS INSTRUCTION MANUAL**



### IMPROPER USE OF THE MACHINE WILL VOID THE WARRANTY

1. Always use a defoamer when foaming occurs to prevent vacuum motor damage.
2. Connect the machine to a properly grounded outlet, only.
3. Keep machine from rain and snow, extremes in temperatures, and store in a heated location. Use the machine indoors. Do not use outdoors.
4. Use approved chemicals only. NO SOLVENTS.
5. Wear gloves or use rags when removing quick disconnects to prevent burns.
6. Never use water above 54° C /130° F in the solution tank.

## IMPORTANT SAFETY INSTRUCTIONS

This machine is only suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices other than normal residential housekeeping purposes.

When using any electrical appliance, basic precautions should always be followed, including the following:

**NOTE:** Read all instructions before using this machine.



### **WARNING!**

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

- Do not leave the machine unattended when it is plugged in. Unplug the unit from the outlet when not in use and before servicing.
- Never turn on the solution pump without first connecting either the priming hose or your solution hose to your machine and to your tool.
- Always turn off the pump and release the pressure in the pump before disconnecting hoses
- To avoid electric shock, do not expose to rain or snow. Use and store indoors.
- 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 the manufacturer's recommended attachments.
- Never add water over 54° C/130° F to the solution tank.
- Do not use with damaged cord or plug. If the machine is not working as it should, has been dropped, damaged, left outdoors or dropped into water, return it to a service center.
- Do not pull by the cord, use the cord as a handle, close a door on the cord, or pull the cord around sharp edges or corners. Do not run the machine over the cord. Keep the cord away from heated surfaces. To unplug, grasp the plug, not the cord.
- Do not handle the plug, the cord or the machine with wet hands.
- Extension cords must be 12/3 and no longer than 15 meters. Replace the cord or unplug immediately if the ground prong becomes damaged.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep loose clothing, hair, 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, or any health endangering dusts. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Connect to a properly grounded outlet only.
- Liquid ejected at the spray nozzle could be dangerous as a result of its temperature, pressure, or chemical content.

## INSPECTION:

Carefully unpack and inspect your ADVANTAGE-400H for shipping damage. Each machine is tested and inspected before shipping. Any shipping damage incurred is the responsibility of the carrier. You should notify the carrier immediately if you notice damage to the box or to the machine or parts.

## CLEANING SOLUTIONS:

We recommend liquid cleaning chemicals. Powder chemicals may be used, but unless mixed very thoroughly they could cause a build-up in the pump, lines, heat exchanger and/or quick disconnects. Any problem caused by a chemical build-up is not covered by warranty. Use a neutral cleaner with a pH between 5 and 10 to avoid premature wear of the pump, seals, and/or other components.



**DANGER: DO NOT USE SOLVENTS, OR ANY CHEMICALS THAT MAY BE FLAMMABLE, EXPLOSIVE OR COMBUSTIBLE.**

## MAINTENANCE:

For optimum performance flush the machine with clear water at the end of each working day. Once a month, minimum, run a flushing compound through the machine to break up any mineral or chemical build-up that may have formed. The vacuum motor and the pump do not require any scheduled maintenance; however, the motor may require replacement brushes after 1000 - 1500 hours. Clean the body with an all-purpose detergent, and protect it with an automobile interior polish. Lubricate the wheels, castors, and quick disconnects with an all purpose silicone spray.

## PARTS AND SERVICE:

Repairs, when required, should be performed by your authorized distributor who maintains an inventory of original replacement parts and accessories. Call the distributor from whom you purchased this machine if you need parts and service. Be sure to specify the machine model. Have your serial number handy.

**Serial Number:** \_\_\_\_\_

**Model:** ADVANTAGE-400H-240

**Purchase Date:** \_\_\_\_\_

**Write the name and phone number of your distributor:**

\_\_\_\_\_

\_\_\_\_\_

**(and be sure to register your purchase to activate your warranty)**

# SWITCH PLATE

## MODEL (1):

This identifies the model of your Advantage machine.

## VACUUM SWITCH (2):

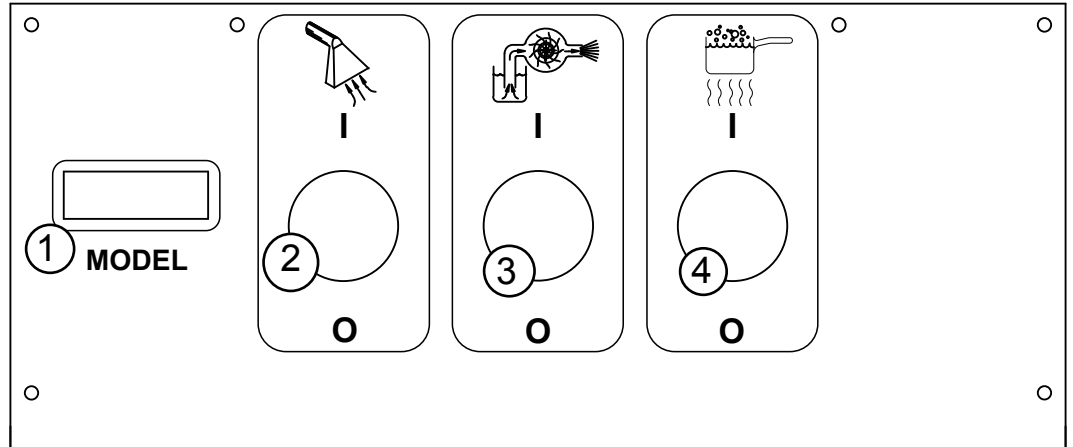
This push-button switch turns on the vacuum. The switch will illuminate when it is on.

## PUMP SWITCH (3):

The pump switch will illuminate when it is activated, and it will turn on the pump.

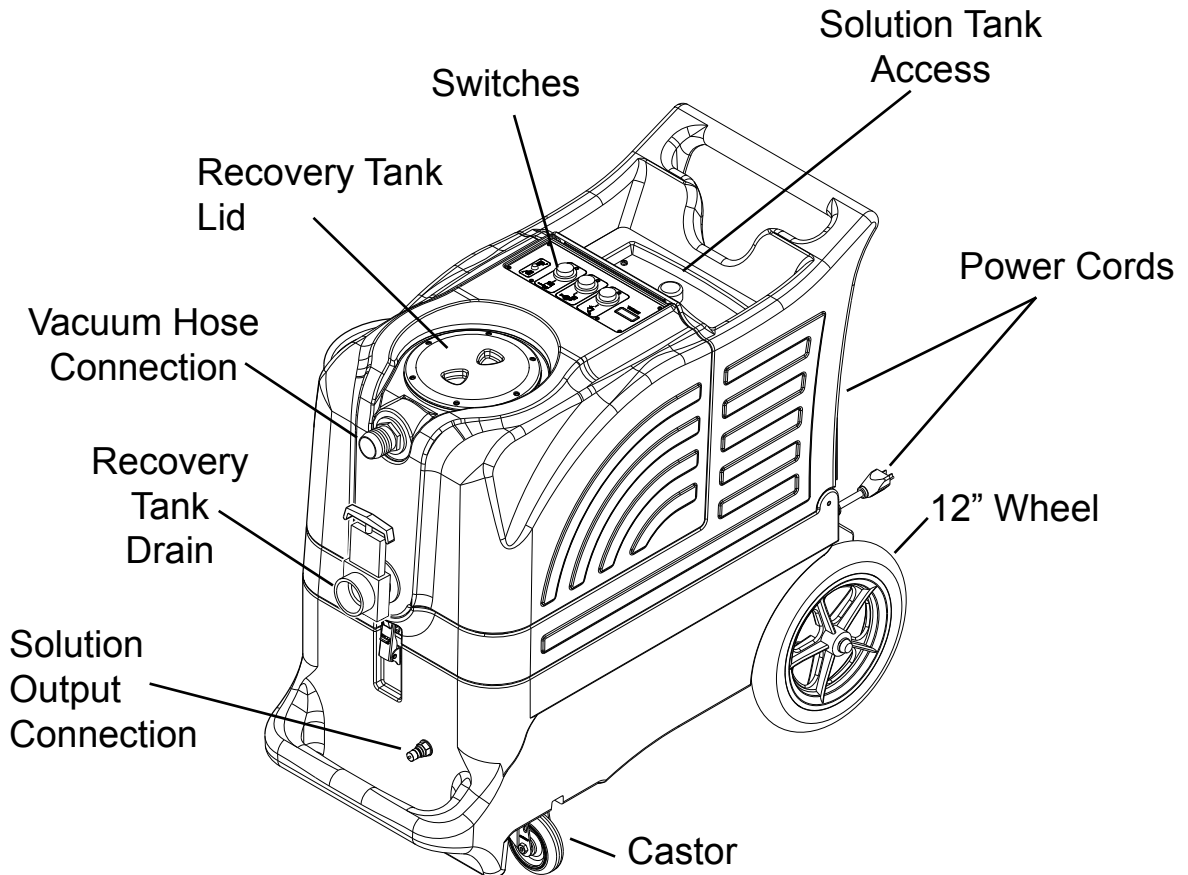
## HEAT SWITCH (4):

The heat switch will illuminate when it is activated and will turn on the heater. **NOTE:** if the green, two-circuit indicator light is not turned on, you may have both power cords on the same circuit and this can trip the circuit breaker in the wall.



---

# YOUR MACHINE



## SET-UP & OPERATION:

1. Inspect the machine, hoses, and cleaning tools for cleanliness and completeness.
2. Screw the lid on the recovery tank. Close the drain gate.
3. Fill the holding tank with clear water.

**NOTE:** although this machine is designed to supply instant hot water, the addition of warm water to the solution tank would increase heater efficiency. Never use water above 54° C / 130° F in the solution tank.

4. Turn off all the switches. Plug the power cords into properly grounded outlets. Do not connect both cords to the same outlet, otherwise the current draw could trip the circuit breaker in the wall.
5. Connect the priming hose to the machine, and position the open end of the hose over the solution tank. Turn the pump ON (3) to prime the air out of the pump. When the water is clear (no air in it) turn the pump off, and remove the priming hose. **NOTE:** if priming is difficult, place the open end of the priming hose into the Vacuum inlet hose barb, and turn the vacuum on. Use your hand to block the open area in the hose barb. This will allow the pump and the vacuum to work together to get the water moving. Priming may take 20 - 60 seconds, and the solution tank should be full.

Once the pump has been primed, turn off the motor(s) off. Remove priming hose.

6. Turn on the Heat switch (4), and wait two minutes for the heat exchanger to reach temperature.
- 7.. Pre-spray with the detergent of your choice. If you choose to add a detergent to the solution tank, be sure to mix well, and always follow the use & dilution instructions on the chemical label. Use a chemical with a pH between 5 and 10.
8. Attach the solution hose to the solution quick disconnect on the front of the machine, and slide the vacuum hose cuff over the hose barb on the recovery tank. Attach the other ends of the hoses to the cleaning tool.
9. Turn on the vacuum (2).
10. Turn the pump ON and begin cleaning.
11. Use defoamer any time foaming occurs to prevent damage to the motor or other components. **NOTE:** foam will not lift the ball float.
12. Monitor the water level in the solution tank. Do not let the pump run dry.
13. When the solution tank gets low, turn off the pump and the vacuum. Empty and clean the recovery tank. Fill the solution tank,
14. When finished with the job, remove any unused solution from the solution tank, and run a few gallons of clean water through the system. Drain the recovery tank by opening the drain gate over a drain or a bucket. Disconnect the hoses from the cleaning tool.

## AUTO VACUUM SHUTOFF:

When the recovery tank is full, the ball float will shut-off the suction to prevent the machine from overflowing.

**NOTE:** the float may not work if there is foam in the tank. Always use defoamer to prevent overflow.



**CAUTION:** Use care when handling hazardous chemicals.

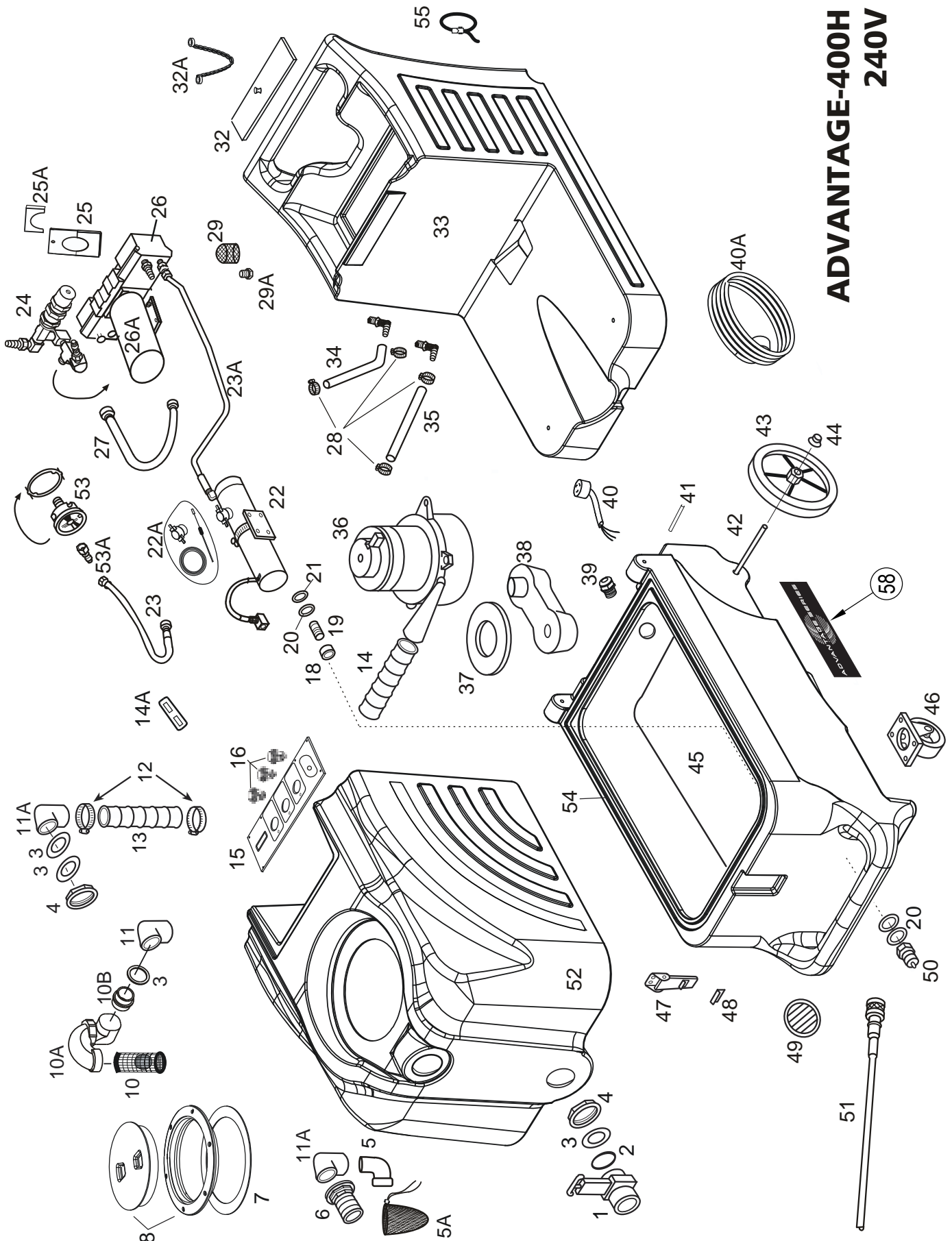
**CAUTION:** Never leave the pump running when you are not actively using it.

**CAUTION:** Do not use solution with a pH value less than 5 or greater than 10.

**CAUTION:** always use a defoamer in the recovery tank to prevent water or foam from entering the vacuum motor.

**CAUTION:** always make sure the ball float cage is free of debris and the ball can travel freely before you operate the machine.

# ADVANTAGE-400H 240V



## ADVANTAGE 400H 240V

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1#	903USP	1	Drain Gate	33	TKC-6	1	Solution tank, white
2#	187USP	1	O-ring	34	946	17"	Hose, pump inlet, 1/2" ID X 17"
3	187B	2	Gasket	35	925	18"	Hose, pump bypass, 3/8" ID X 18"
4#	185USP	1	Nut, 1-1/2"	36	2189	1	Vacuum, 3-stage
5	1140	1	Elbow	37	2013	1	Gasket, vacuum
5A	FP619	1	Pre-filter bag with cord lock	38	MA-6	1	Manifold, vacuum
6	907	1	Hose Barb, vacuum inlet	39#	230USP	2	Retainer, cord pigtail
7	1074	1	Gasket	40#	298USP	2	Plug European Style, 2 round prongs
8	2086A	1	Lid with Ring, 6"	40A	2019	2	Power cord, 7.6M
10	929B	1	Ball Float, vac shut-off	41	801	2	Hinge pin
10A	1154A	1	Adapter, ABS trap	42	910-1863	1	Axle Rod (18.63" long)
10B	1154	1	Adapter, ABS	43	2092	2	Wheel, 12 inch
11#	922USP	2	Elbow, PVC, FPT	44#	27AUSP	2	Axle cap
12#	156USP	2	Hose Clamp	45	BMPE-1	1	Base-Black
13	430	27"	Hose, vacuum, 2"ID X 27"	46#	905USP	2	Castor
14	430A	1	Hose, vacuum, 2"ID X 14.5"	47#	56471194	1	Latch
14A	4404C	1	Bar, vacuum hose hold-down	48	909A	1	Catch, for latch
15	2167	1	Switch Plate	49#	459USP	1	Louver, 2-1/2"
[ ]	2167-1C	1	Overlay	50#	45USP	1	Quick disconnect
16#	1650	3	Switch, push-button, ON/OFF	51	SYP1	1	Priming hose
18	116A	1	Bushing, fiber, heat resistant	52	VT-29	1	Recovery tank, white
19#	92AUSP	1	Nipple, 1/4 mpt, S/S	53	2165	1	Pressure gauge
20#	115USP	3	Washer, fiber, heat resistant	53A#	219USP	1	Quick disconnect
21	31	1	Washer, brass	54#	FP228A	84"	Gasket
22	FP664	1	Heat Exchanger, Complete	55	1603	2	Strap, cord wrap
22A	FP256	1	Heat Repair kit	58#	2162	1	Label Advantage Series
23	1284	1	Hose, pulsation dampening				
23A	1581A	1	Hose, pump to heater				
24	945D	1	Pressure regulator valve, unloader				
25	1554	1	Mount, pressure reg.				
25A	1555	1	Clamp, pressure regulator to mount				
26	FP613	1	Pump, complete, 400 psi				
26A	2064	1	Motor, pump drive				
27	1506	1	Hose assembly, 21"				
28#	166USP	4	Hose clamp				
29	207A	1	Filter, pump inlet				
29A#	92BUSP	1	Nipple				
32	2175	1	Lid, Solution tank				
32A#	805USP	1	Chain, 8"				

### MISCELLANEOUS PARTS

[ ]	950CP	1	Pump rebuild kit, valves & o-rings
[ ]#	250USP	1	Pump rebuild kit, plunger and seals
[ ]	950D	1	Cam/bearing

[ ] = Not Shown

# = Revised or new since last update

# ADVANTAGE 400

## TROUBLE SHOOTING:

<b><u>IF THIS OCCURS</u></b>	<b><u>CHECK THIS</u></b>
NO SPRAY	Solution tank is empty, or filter is plugged up. Clogged spray tip. Pump not running. Valve on wand not operating. Solution hose not completely connected to hose or to machine.
PUMP DOES NOT RUN	This pump motor runs on AC voltage, so it should start running as soon as you turn on the switch. If the pump motor does not start running, check the wiring to the switch and to the motor. Check the switch to see if it is 'open.'
LOW SUCTION	Debris is plugging cleaning tool or vacuum hose. Drain gate is not completely closed, or seals are damaged. Vacuum lid is not closed completely or is damaged.
NO SUCTION	Ball in the float is blocking air flow. Turn off the vacuum so the ball will drop down. No power to motor. Does the switch light up? If not, the switch may be bad or there may be no power getting to the switch. Check wiring connections. Test the switch. Test the vacuum motor.
LOW HEAT	Spraying for too long will significantly drop the heat. Try spraying for 8 - 10 seconds, or about three strokes. Heat exchanger needs to be flushed. Wrong tool being used. Too much water passing through. Longer hose or larger diameter hose, than standard.
NO HEAT	Heat is not turned on. No power in the wall outlet - check to see if the breaker has tripped. No power to the heat switch - check wiring for 'opens.' No power out of heat switch. Replace switch. Call your distributor for additional help.

## SPECIFICATIONS:

**Rotomolded Body: Lifetime Warranty**  
**Vacuum: One, 3-stage**  
**VAC Shutoff: Ball Float**  
**Pump: 27 Bar/400 PSI, positive displacement, adjustable**  
**Waterlift: 29.9 KPA**  
**Heat: 82° C, Maximum**  
**Heater: 2000 Watts**  
**Weight: 45 kg**  
**Dimensions: 45.7W x 96.5L x 87.6H (cm)**