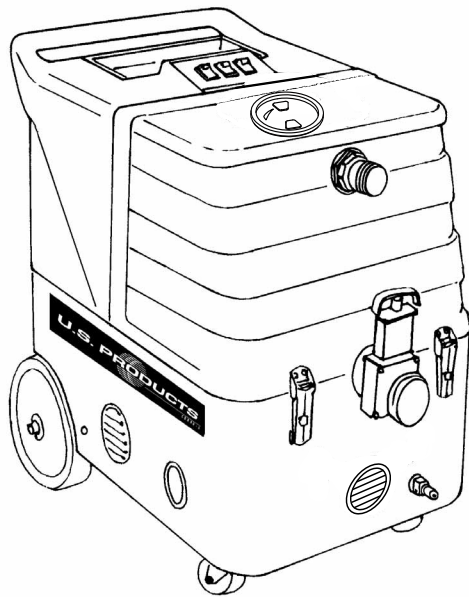
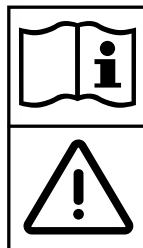




COBRA[®]-H1 EXTRACTOR 120V



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. Keep machine from rain and snow, extremes in temperatures, and store in a heated location. Use the machine indoors. Do not use outdoors.
3. Do not let the pump run dry.
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 130 °F/54 °C 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.
- To avoid electric shock, do not expose to rain or snow. Store and use machine indoors only, store in a heated location. Do not let the machine or wand freeze.
- 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 130 °F/54 °C 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 cords, use the cords as a handle, close a door on the cord, or pull the cords around sharp edges or corners. Do not run the machine over the cords. Keep the cords 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 50 feet. Replace the cord or plug 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 COBRA-H1 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. Damage caused by the use of strong chemicals is not covered by the warranty.

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 motors and the pump do not require any scheduled maintenance; however, the vacuum motors 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.

WARNING!

The Products sold with this Manual contain or may contain chemicals that are known to certain governments (such as the State of California, as identified in its Proposition 65 Regulatory Warning Law) to cause cancer, birth defects or other reproductive harm. In certain locations (including the State of California) purchasers of these Products that place them in service at an employment job site or a publicly accessible space are required by regulation to make certain notices, warnings or disclosures regarding the chemicals that are or may be contained in the Products at or about such work sites. It is the purchaser's responsibility to know the content of, and to comply with, any laws and regulations relating to the use of these Products in such environments. The Manufacturer disclaims any responsibility to advise purchasers of any specific requirements that may be applicable to the use of the Products in such environments.

MODIFICATIONS

Modifications and additions to the cleaning machine which affect capacity and safe operation shall not be performed by the customer or user without prior written approval from Nilfisk-Advance Inc. Unapproved modifications will void the machine warranty and make the customer liable for any resulting accidents.

SAVE THIS INFORMATION

Serial Number: _____ Model: COBRA-H1-A

Purchase Date: _____

Write the name and phone number of your distributor:

Be sure to register your warranty online at www.usproducts.com/warranty

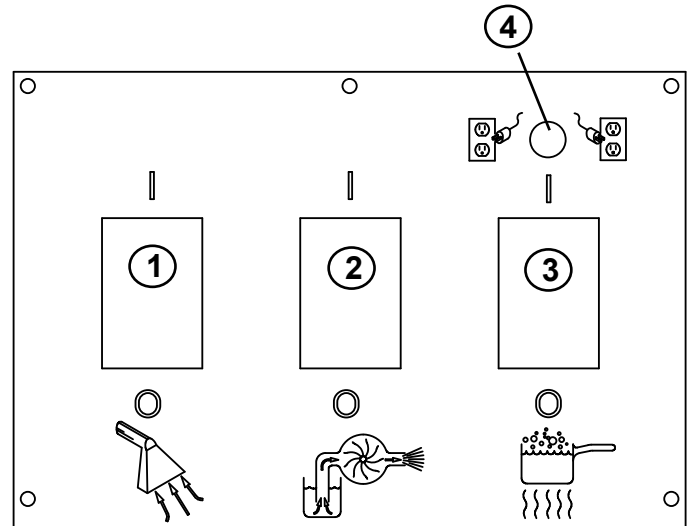
SWITCH PLATE

1 = VACUUM ON/OFF SWITCH

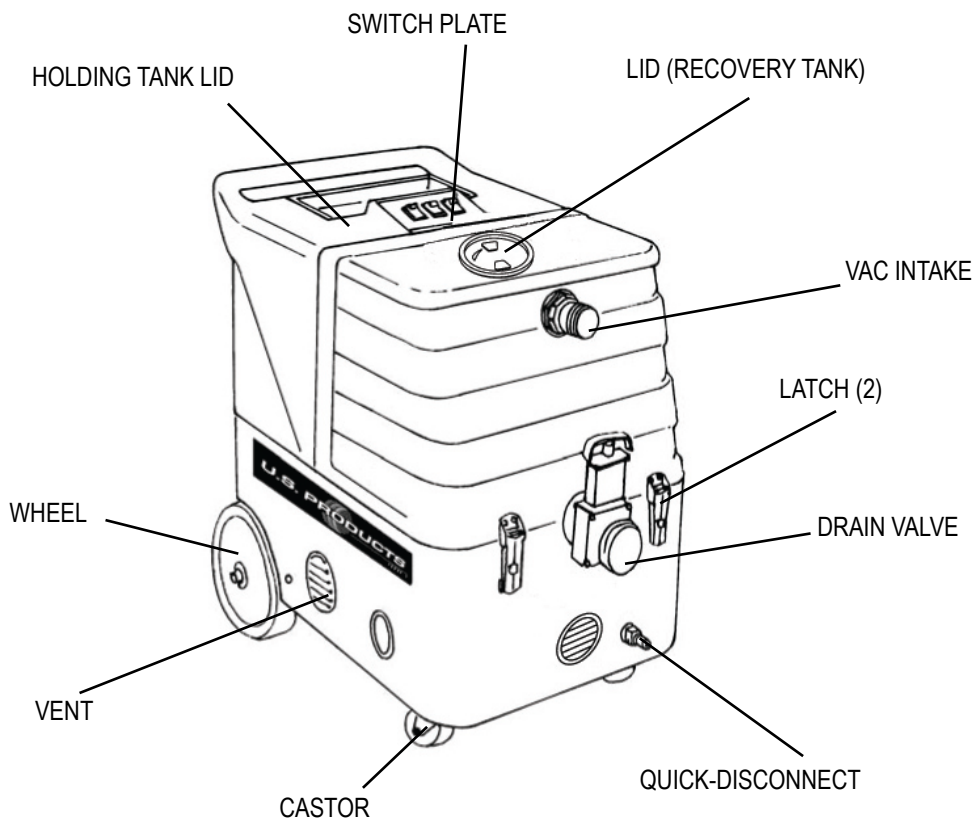
2 = PUMP ON/OFF SWITCH

3 = BYPASS ON/OFF SWITCH

4 = GREEN LIGHT. INDICATES WHEN THE CORDS ARE ON TWO SEPARATE CIRCUITS.



COBRA-H1 KNOW YOUR MACHINE



OPERATION

- 1 Inspect the machine, hoses, and cleaning tools for cleanliness and completeness.
- 2 Fill the solution tank with water. Using warm water may be a benefit in cleaning effectiveness, but do not use hot water above (130 °F/54 °C) in the tank.
- 3 Plug in the power cords. Do not connect both cords to the same outlet; the green, circuit locator light **(4)** on the switch plate should light up. If the locator light does not come on, try different outlets with one of the cords until it does. If you are certain the cords are on separate circuits, but the green light still does light up, turn the Bypass switch **(3)** on.
CAUTION: using the Bypass switch when the cords are on the same circuit may cause the circuit breaker in the wall to trip. **NOTE:** the receptacle on the left (viewed from behind the machine) powers the heater.
- 4 Add liquid cleaning solution, with a pH of between 6 and 9, to the solution tank.
- 5 Attach the spray hose to the solution quick disconnect and the vacuum hose to the hose barb on the recovery tank. Pull the hoses off the reel to the desired length. Attach the other ends of the hoses to the cleaning tool.
- 6 Allow the heat exchanger two minutes to reach operating temperature.
- 7 Turn on the pump **(2)**. Turn on the vacuum **(1)**.
- 8 Begin cleaning using the correct hoses and tool.
- 9 Use defoamer in the recovery tank any time foaming occurs.
- 10 Monitor the water level in the solution tank. Do not let the pump run dry.
- 11 When the solution tank gets low, turn both the pump and the vacuum off, fill the solution tank, empty and clean the recovery tank.
- 12 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.

DUAL CORD SENSOR CIRCUIT:

This unique, patented system is operated by a solid state circuit. It will inform the operator when the two cords are plugged into separate circuits by turning on the green, circuit locator light. This helps to prevent tripping circuit breakers.

NOTE: if the circuit locator light does not illuminate when the cords are plugged in, then both cords are on the same circuit. Try other outlets with one of the cords until you get the locator light to come on.

NOTE: if the bypass, or heat, switch is turned on when both cords are on the same circuit, the breaker may trip.

BYPASS SWITCH:

The bypass switch completely bypasses the circuit locator. Use this feature when you cannot get the green light to come on and you believe that the two cords are on separate circuits.

CAUTION!

If the bypass switch is on and the two cords are plugged into the same circuit, the breaker may blow.

BALL FLOAT VACUUM SHUT-OFF

Prior to using the machine, always check that the float filter is clean and the ball can travel freely. When the recovery tank is full, the ball float will rise and will shut off the vacuum flow to prevent any more water from entering the tank. When this occurs, turn off the vacuum and empty the recovery tank.

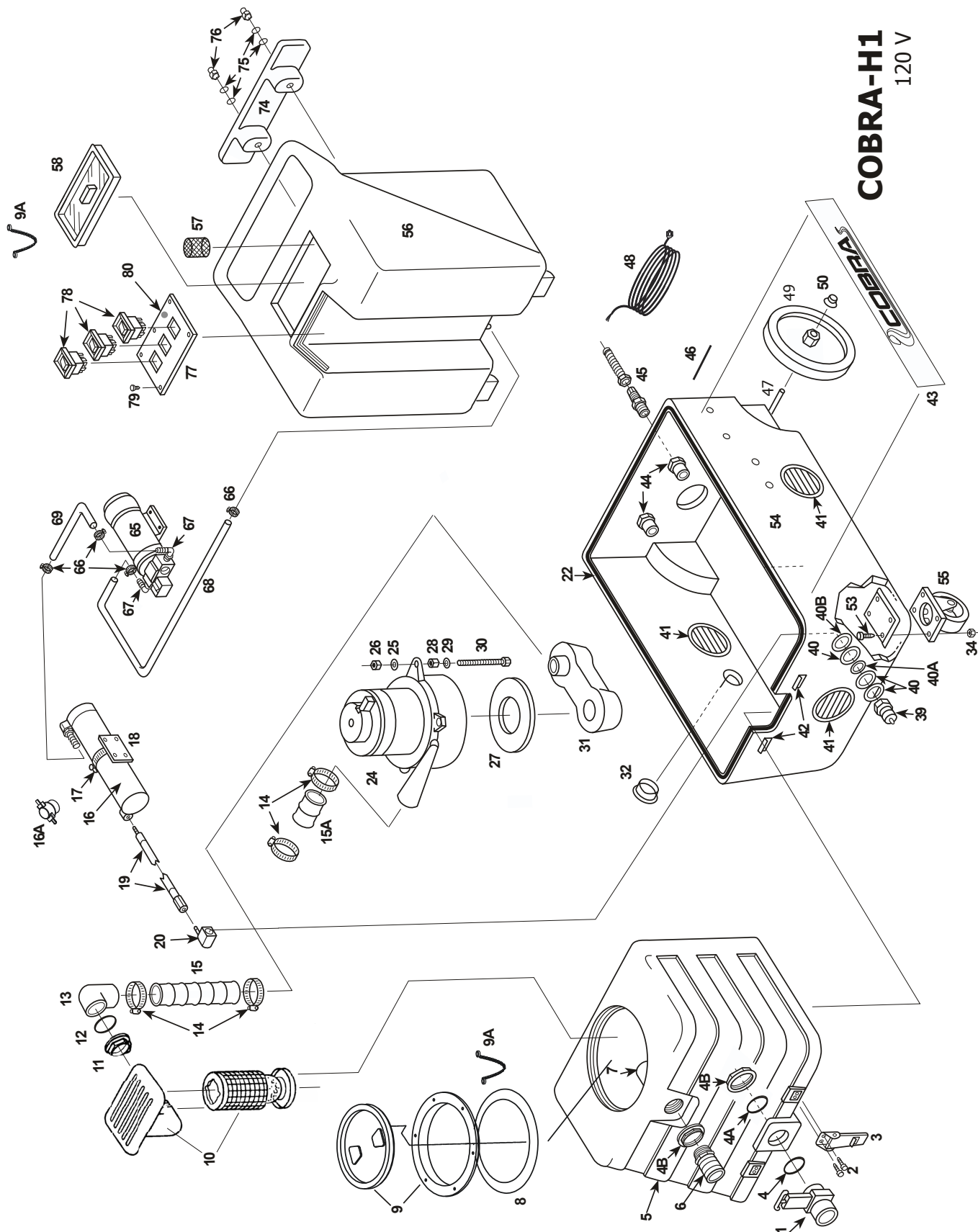
NOTE: if foam is present, or if the ball float is prevented from rising, the float will not be able to stop the air flow, and the tank may over fill. Water damage to the vacuum motors is not covered by warranty.

CAUTION!

To avoid vacuum motor damage, always use a defoamer any time foam is present.

COBRA-H1

120 V



COBRA-H1 120V

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1#	903USP	1	Drain Gate (see Misc.)*	49	2003	2	Wheel, 8"
2#	21	4	Screw, Button Head, 10/32 X 5/8"	50#	27AUSP	2	Axle Cap, Black
3#	56471194	2	Latch	54	BS-6	1	Base, Cobra, Black
4#	187USP	1	O-ring	55	2002	2	Castor, Swivel, 3"
4A#	187B	2	Washer, flat Rubber	56	HT-2	1	Holding Tank
4B#	185USP	1	Nut, 1-1/2"	57	207A	1	Filter 40 Mesh S/S 1/2npt Fem
5	VT-2	1	Vacuum Tank, White	58#	901USP	1	Lid, Holding Tank
6	907	1	Hose Barb, 1-1/2"	65#	53869A	1	Pump, 100 PSI
7#	922USP	1	Elbow, 90 PVC 1-1/2" Slip x FPT	66#	166USP	3	Hose Clamp 3/8-7/8
8	1074	1	Gasket (Machines made after 2-15-05)	67	108A	2	Hose Barb Nylon 90 3/8 X 3/8
9#	2086A	1	Lid and Ring (Machines made after 2-15-05)	68	925	1	Hose, Pump inlet, 3/8" x 13"
#	56380968	1	O-Ring for 2086A Lid	69	925	1	Hose, pump outlet, 3/8" x 48"
9A	FP436	2	Chain and Hardware	74	CWBLK	1	Cord Wrap, Black
10	FP193	1	Float, Ball & Cage	75	203	4	Washer, Plastic
11#	185USP	1	Nut Die Cast Alum 1-1/2 N	76	260	2	Nut, Acorn, 3/16"
12#	187USP	1	O-Ring-BUNAN-1-3/4ID x .125 thick	77	2005D	1	Switch Plate Cobra-H1
13#	922USP	1	PVC Elbow, 1-1/2"	78	FP578	3	Switch, rocker, w/cover
14#	156USP	4	Hose Clamp, (size 28)	79	28	5	Screw, #4 x 3/8"
15#	430B	1	Hose, Vacuum, Rubber, 2" x 21"	80	227	1	Light, Green
15A#	430B	1	Hose, Vacuum, Rubber, 2" x 21"	[]#	4339	2	Label, Caution
16	FP511	1	Heat Exchanger, complete	[]#	4325A	1	Label Logo 31/32 Dia.
16A			see Misc. Parts List	[]#	4325C	1	Label Heat Designation Power
17	76	1	Hose Clamp	[]#	56380692	1	Label Danger Electric Shock
18#	455USP	1	Mount, Heat Exchanger	*#	56044511	1	Literature Pack
19	2012	1	Hose, Heater to Outlet				
20#	91USP	7	Elbow, Brass				
22	FP228B	1	Gasket				
24	408B	1	Vacuum Motor, 3-stage				
25	14	4	Washer Flat 3/16 Zinc Plat				
26	8	15	Lock Nut, 1/4-20				
27	2013A	1	Gasket 1 Side Adhesive 5 1/2				
28	136	6	Nut 1/4-20 Finish Zinc Plate				
29	14	17	Washer Flat 3/16 Zinc Plat				
30	270	3	Bolt 1/4 -20 X 5 Full Three				
31#	MA-6	1	Manifold, Vacuum				
32#	FP220	1	Flange, Exhaust, w/Hose & Hardware				
34	8	8	Lock Nut, 1/4-20				
39#	45USP	1	Quick Disconnect, 1/4 n.p.t.				
40#	115USP	3	Washer, Fiber				
40A#	116A	1	Bushing, Fiber				
40B#	31USP	1	Washer, Brass				
41#	SUB928	3	Louver, 3" (includes screws)				
42	909A	2	Latch Strike, for Latch, S/S				
43	2001	2	Decal-Cobra				
44	937	2	Reducer Bushing PVC 3/4" X 1/2"				
45#	184USP	2	Cord Retainer With Flex Protector				
46	801C	2	Rod Stainless/Steel 1/4 X 4				
47#	910-1693	1	Axle Rod Zinc Plated				
48	495A	2	Power Cord, 25', Yellow				

MISCELLANEOUS PARTS

FP256 Heat repair Kit, includes cutout & thermostat switch

NOTE: Items in kits not sold separately.

= Revised or new since last update

[] = Not Shown

* = Optional, Not Included

TROUBLE SHOOTING:



ALWAYS UNPLUG THE MACHINE BEFORE DISCONNECTING OR CONNECTING ANY WIRES OR COMPONENTS.

<u>IF THIS</u>	<u>CHECK THIS</u>
NO SPRAY	Solution tank is empty. Clogged spray tip. Pump not running. Valve on wand not operating
PUMP DOES NOT RUN	No power to pump. Test the switch. Test the pump motor. Replace if necessary.
LOW SUCTION	Debris plugging cleaning tool or vacuum hose. Drain gate is not completely closed, or seals are damaged. Vacuum lid is not closed or gasket is damaged.
NO SUCTION	No power to motor. Test the switch. Test the vacuum motor.
LOW HEAT	Spraying too long. Try spraying for 12-15 seconds per cycle. 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. Either the green light must be on or the bypass switch must be turned on. No power in the wall outlet - check to see if the breaker has tripped. No power to the bypass switch - check wiring for 'opens'. No power out of bypass switch, follow troubleshooting steps to isolate the problem or call your distributor for additional help

SPECIFICATIONS:

- Rotomolded Body:** Lifetime Warranty
- Vacuum:** 3-stage
- VAC Shutoff:** Ball float
- Pump:** Demand pump, 100 psi
- Waterlift:** 140"
- Heat:** 212° F
- Heater:** 2000 Watts
- Wand:** Stainless steel, single bend, twin tip
- Weight:** 75 lbs.
- Dimensions:** 25.5H x 18W x 28.75L (inches)



425-322-0133 / 800-257-7982 / FAX: 425-322-0136
 11015 - 47th Ave. W. / Mukilteo, WA 98275
 VISIT US AT: <http://www.usproducts.com>