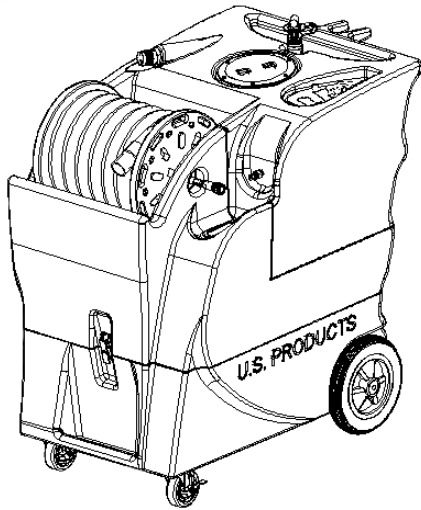




KING COBRA[®] 310 120V



INFORMATION & OPERATING INSTRUCTIONS

**DO NOT OPERATE MACHINE UNTIL YOU HAVE READ
ALL SECTIONS OF THE INSTRUCTIONS**

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.

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.

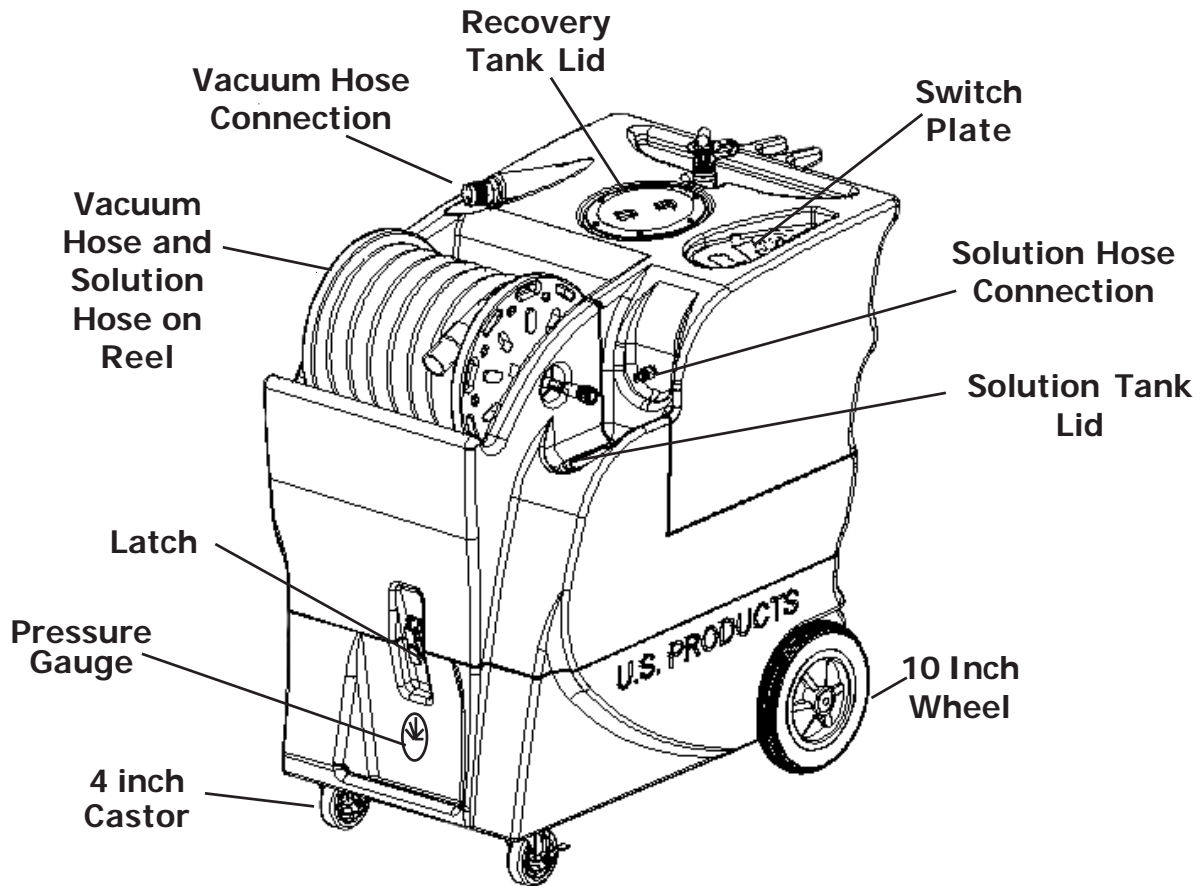
When using any electrical appliance, basic precautions should always be followed, including the following:

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, 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 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 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 50 feet. 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 KING COBRA-310 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, such as our Magic Fabric Cleaner. 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 6 and 9 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. U.S. Products "X-1500" is recommended. Lubricate the wheels, castors, and quick disconnects with an all purpose silicone spray. The vacuum and the pump do not require any maintenance. Clean the body with an all purpose detergent, and protect it with an automobile interior polish.

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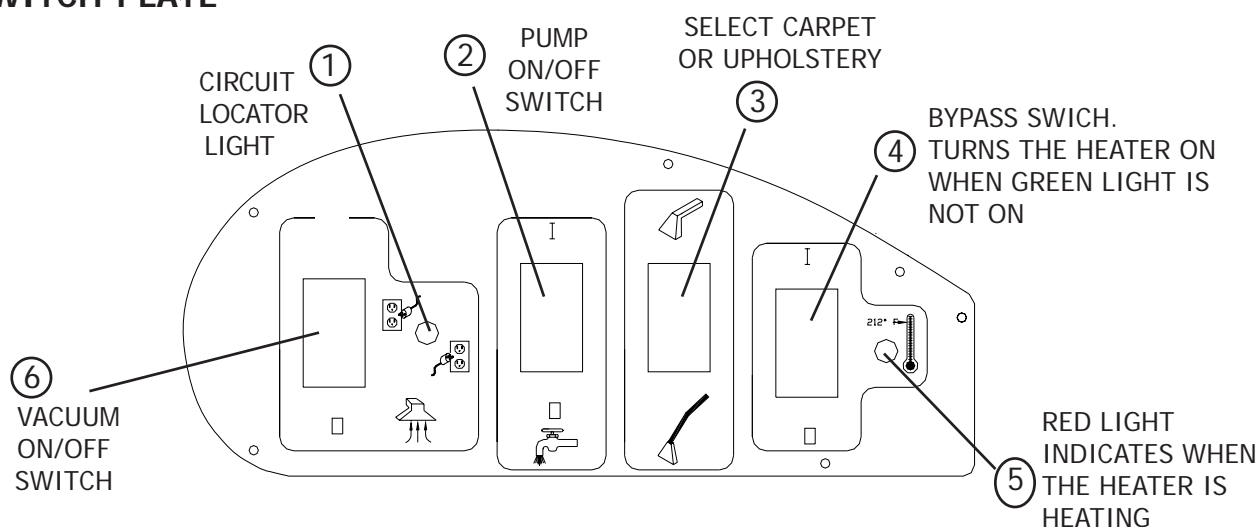
Record the serial number and model of your new extractor here:

(and be sure to mail your warranty card)

Serial Number: _____ **Model:** KING COBRA-310 **Purchase Date:** _____

Write the name and phone number of your distributor:

SWITCH PLATE



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 140° F / 60°C) in the tank.
- 3 Plug in the power cords. Do not connect both cords to the same outlet; the green circuit locator light (1) on the switch plate should light up. If the locator light does not come on, try different outlets until it does. If you are certain the cords are on separate circuits, turn the bypass switch (4) on. **CAUTION:** using the bypass switch (4) when the cords are on the same circuit may cause the breaker in the wall to trip. **NOTE:** the red light (5) will turn on only when the heat exchanger is actively heating.

- 4 Connect the priming hose to the machine, turn the pump ON (2) and 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 (6). 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 is primed, turn the pump and the vacuum off. Remove the priming hose.
- 5 Add liquid cleaning chemical, with a pH between 6 and 9, to the solution tank.
- 6 Attach the spray hose to the solution quick disconnect and the vacuum hose to the hose barb on the recovery tank. Pull the hoses out of the reel. Attach the other ends of the hoses to the cleaning tool.
- 6 Allow the heat exchanger two minutes to reach operating temperature. The red light (5) will go out when the heater has reached operating temperature. **NOTE:** the red light will be on nearly all the time as you clean.
- 7 Turn the pump on and set the pressure selection switch (3) to the desired spraying pressure 300 or 50 PSI). Turn the vacuum on (6).
- 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 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 by placing the dump hose over a drain, or into a bucket, and remove the hose cap. Disconnect the hoses from the cleaning tool, and reel the hoses up onto the hose spool.

NOTE: to remove the reel, with the hoses, from the machine, pull the vacuum hose loose from the hose barb on the front of the tank. Disconnect the solution hose quick coupling. Push the vacuum hose into the center of the spool. Grasp the spool on both sides, and lift it off the machine. **NOTE:** before servicing any component in the base cabinet, the hoses and spool must be removed from the machine before the tanks can be lifted open.

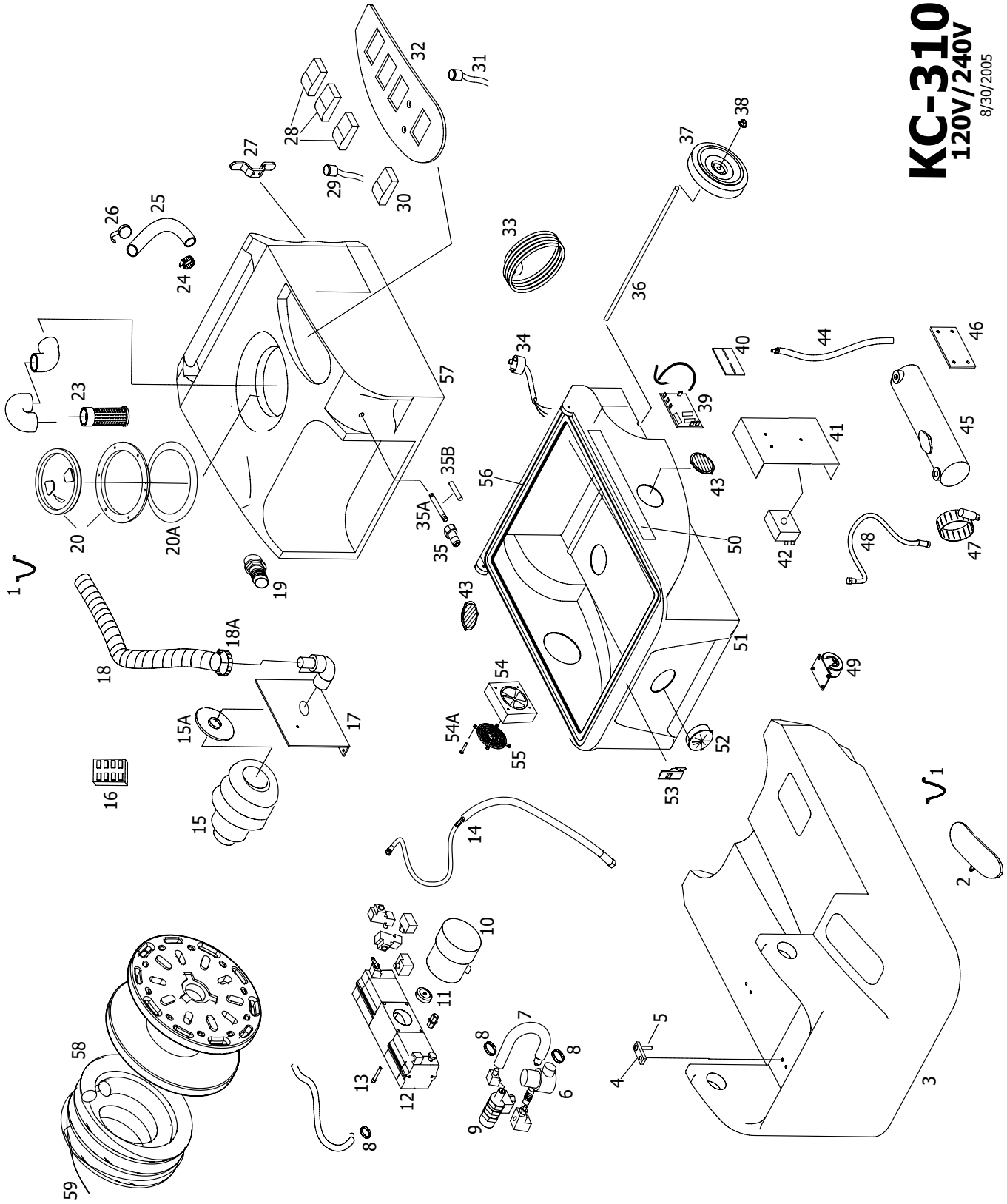
ELECTRIC CIRCUIT LOCATOR

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 circuit locator light. This helps to prevent tripping circuit breakers. **NOTE:** if the green, 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 switch is turned on when both cords are on the same circuit, the breaker in the wall may trip.

BALL FLOAT SHUT-OFF

When the recovery tank is full, the ball float will disable the vacuum suction. This will prevent water from entering the vacuum motor. The float may not work properly if the vacuum inlet float filter is dirty or if there is heavy foam in the tank.

⚠CAUTION: to avoid vacuum motor damage, always make sure the float filter is clean and that the ball can travel freely before you operate the machine. Always use a defoamer any time foam is present.



KC-310
120V/240V
 8/30/2005

KING COBRA-310 EXTRACTOR

120V PART LIST 240V

<u>ITEM</u>	<u>PART No.</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART No.</u>	<u>DESCRIPTION</u>
1	805	Chain, lid, 8"	43	928	Louver, 3", includes screws
2	901B	Lid, solution tank	44	FP348C	Hose, pump to heater
3	HKCR1	Holding tank, white	45	FP357	Heat exchanger, complete, 120V
4	1088	Glide, teflon		FP359	Heat exchanger, complete, 240V
5	178	Screw, 6-32 X 1/2"	46	455	Mount, heat exchanger
6	2062	Solenoid valve, 120V	47	76	Hose clamp
	2063	Solenoid valve, 240V	48	FP348A	Hose, heater to outlet
7	925	Hose, 3/8" X 20-1/2"	49	905	Castor, 4"
8	166	Hose clamp	50	966A	Label, KC-310
9	945	Valve, pump, bypass	51	BKCR-BLK	Base, black
10	2060	Motor, pump, 120V	52	951A	Pressure gauge
	2064	Motor, pump, 240V	53	908A	Latch, rubber
11	950A	Cam/bearing assembly	54	2014	Fan, 100 CFM, cooling, 120V
12	FP363	Pump complete, no mtr or soleniod		2018	Fan, 100CFM, cooling, 240V
13	1147	Cap screw, pump to motor	54A	2B1	Screw, 6-32 X 2-1/4"
14	FP356	Hose assembly, pump to gauge	55	2015	Guard, cooling fan
15	913	Vacuum motor, 3-stage, 120V	56	FP351	Gasket, 84"
	913A	Vacuum motor, 3-stage, 240V	57	VKCR-1	Vacuum tank, white
15A	959	Gasket, vacuum motor	58	FP350A	Vacuum hose, complete
16	4405A	Relay, 120V/240V, vacuum	59	FP350B	Pressure line, complete
17	926	Manifold, vacuum motor mount			
18	946	Hose, vacuum inlet, 1/2" X 22"			
18A	156	Hose clamp			
19	907	Hose barb, for vacuum hose			
20	2086	Lid, vacuum with ring			
20A	1074	Gasket, lid			
23	FP364	Ball float Assembly			
24	156	Hose clamp			
25	1060B	Hose, drain, 1-1/2" x 24"			
26	1060C	Plug, drain hose			
27	CWKC-BLK	Cord wrap, Black	FP194C		Heat repair kit includes probe, thermistor control, thermal cutout and circuit board 120V
28	FP345	Switch and acuator, motors	FP194A		Heat repair kit includes probe, thermistor control and circuit board 120V
29	78	Light, green, 120V	FP226C		Heat repair kit includes probe, thermistor control, thermal cutout, 240V
30	FP346	Swtich and actuator, heat / bypass	FP352		Pump & motor complete, 120V
31	78B	Light, red, 120V	FP353		Pump & motor complete, 240V
	228	Light, red, 240V	FP354		Pump with solenoid (no mtr), KC-310- 120V
32	2065C	Switch plate, 120V	FP355		Pump with solenoind, (no mtr) KC-310- 240V
	2065D	Switch plate, 240V	*923		Dual circuit sensor PCB. 120V only (Machines made before 7/22/05)
33	1057B	Cord, power, 25 ft, yellow	FP350		Hose reel assembly, complete
34	1062	Receptacle, power cord	FP350C		Vacuum hose and pressure line, complete, no reel
35	45	Quick disconnect, male, 1/4 p.t.			
35A	1146	Nipple, S/S			
35B	1144	Tubing, 4-3/4"			
36	910	Axle, cut to length, 21"			
37	2084	Wheel, 10"			
38	27A	Axle cap			
39	923B*	Dual circuit sensor PCB. 120V only			
40	FP336	PCB mount, snap track, 120V only			
41	918	Heat sink plate			
42	-----	See miscellaneous			

MISCELLANEOUS PARTS AND KITS

(parts in kits are not sold separately)

KING COBRA® 310 120V

SPECIFICATIONS:

Rotomolded Body: Lifetime Warranty
Vacuum: 7.2" 3-stage
VAC Shutoff: Ball float
Pump: Positive displacement, selectable
pressure setting
Waterlift: 140"
Heat: Instant to 212 °F
Heater: 2000 Watts
Wand: Stainless steel, double bend, twin tip
Weight: 129 lbs.



208-772-0573 • 800-257-7982 • FAX: 208-772-0577

Coeur d'Alene, Idaho

VISIT US AT: <http://www.usproducts.com>