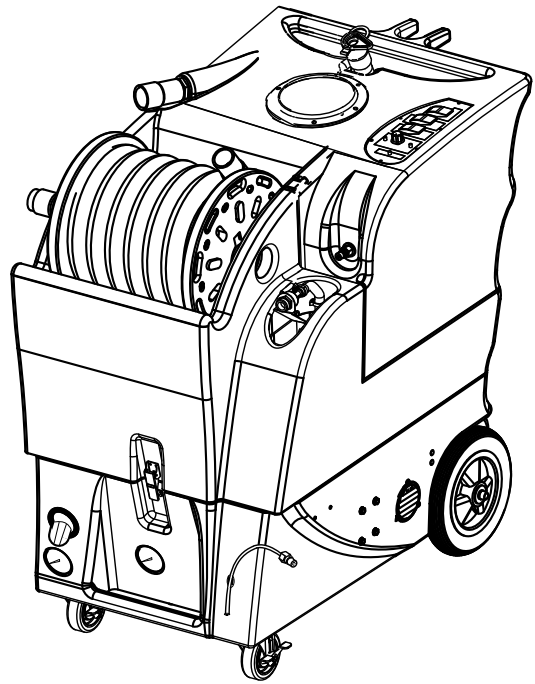


# KING COBRA® 1200 PRO 230V

## 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. Before each use, remove the spray tool from the hose, and check to make sure the spray nozzles are securely tightened to the spray tool. A loose nozzle could fly off during use.
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. Never allow the spray to remain fixed in one spot.
5. Use approved chemicals only. NO SOLVENTS.
6. Wear gloves or use rags when removing quick disconnects to prevent burns.
7. 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:

- Before each use, remove the spray tool from the hose, and check to make sure the spray nozzles are securely tightened to the spray tool. A loose nozzle could fly off during use.
- Never use solvents.
- 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 the machine 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.
- 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.
- Do not use with a damaged cord or cord end. If the cord or unplug becomes damaged have it repaired immediately by an authorized service center.
- 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 the machine to pick up flammable or combustible liquids such as gasoline or use it 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. Use caution.
- Always read chemical MSDS sheets before use.

**INSPECTION:**

Carefully unpack and inspect your KING COBRA-1200 PRO 230V 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:**

Select a proper pre-spray for the surface to be cleaned, and apply the pre-spray. Use a neutral pH rinse or detergent (6 to 10 pH) in the King Cobra to prevent premature wear of the pumps, seals, and other components. Damage caused by the use of improper or strong chemicals is not covered by warranty. Powdered chemicals are not recommended.

**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, pump motors, and the pumps do not require any scheduled maintenance; however, the motors may require replacement brushes after 1000 - 1500 hours, and the high pressure pumps and unloader valves may require rebuild kits after 500 -1000 hours (refer to machine part list for numbers). 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.

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

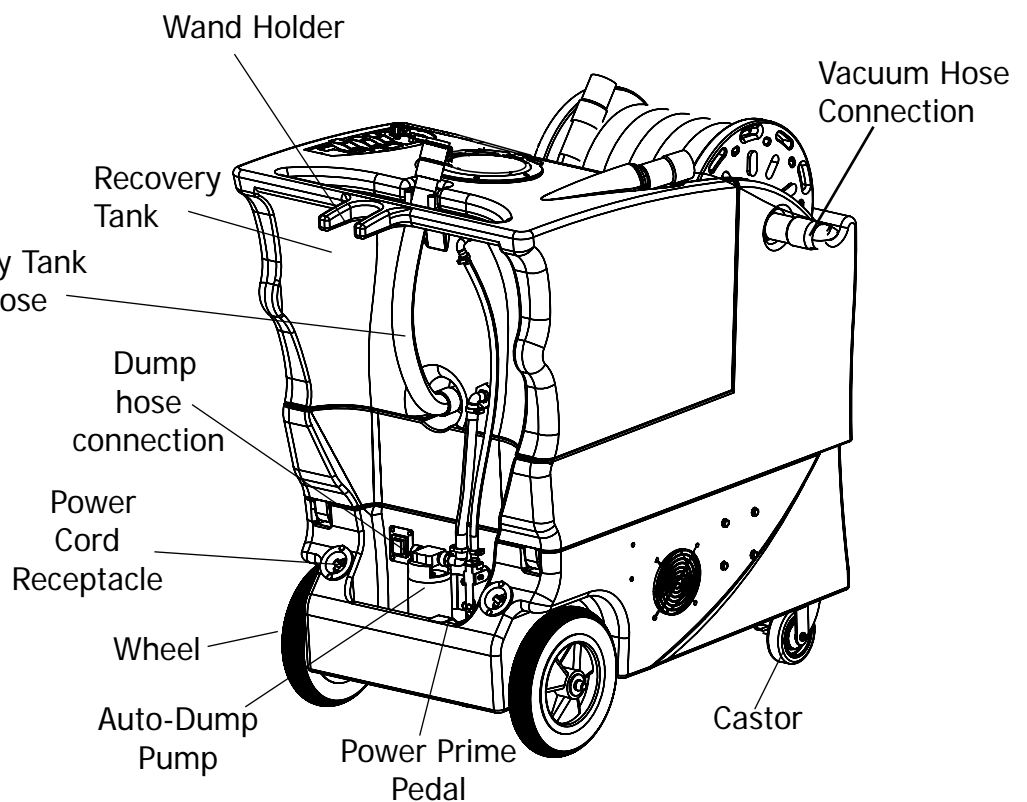
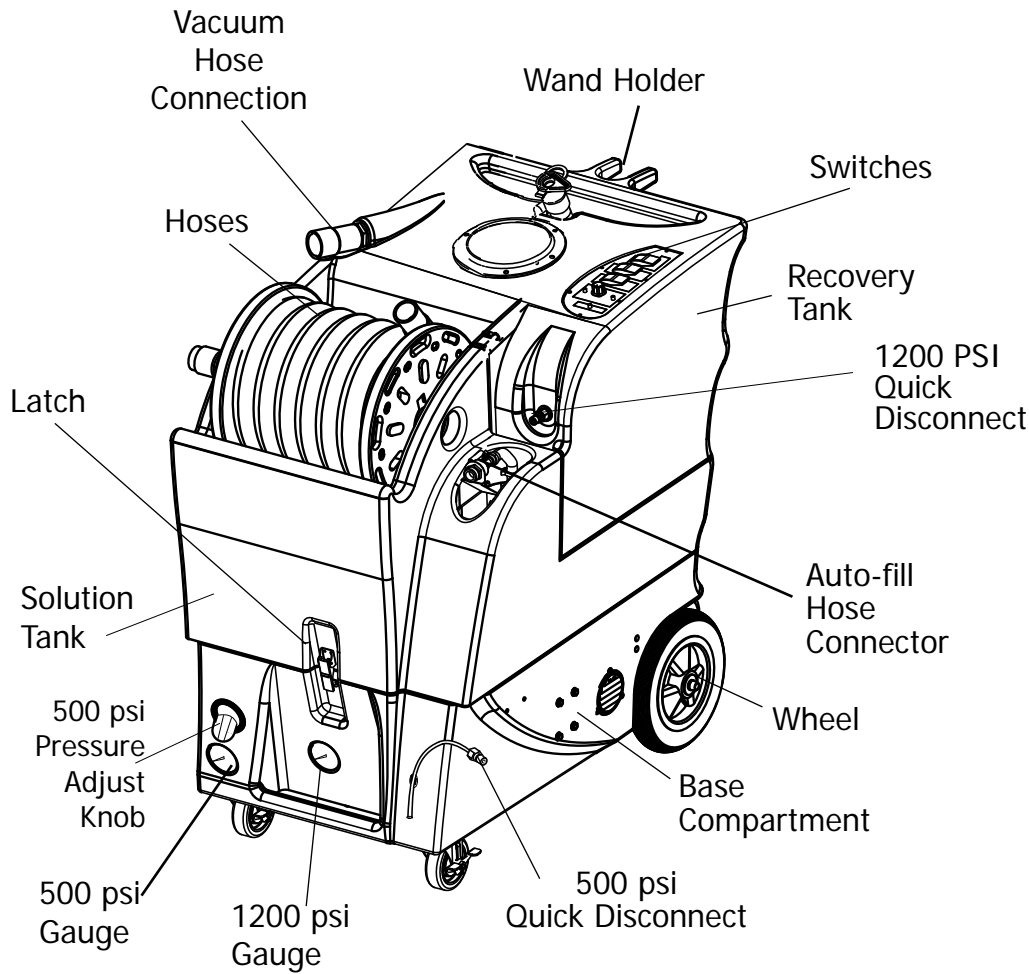
**(and be sure to register your purchase to activate your warranty)**

**Serial Number:** \_\_\_\_\_ **Model:** **KING COBRA-1200 PRO 230V**

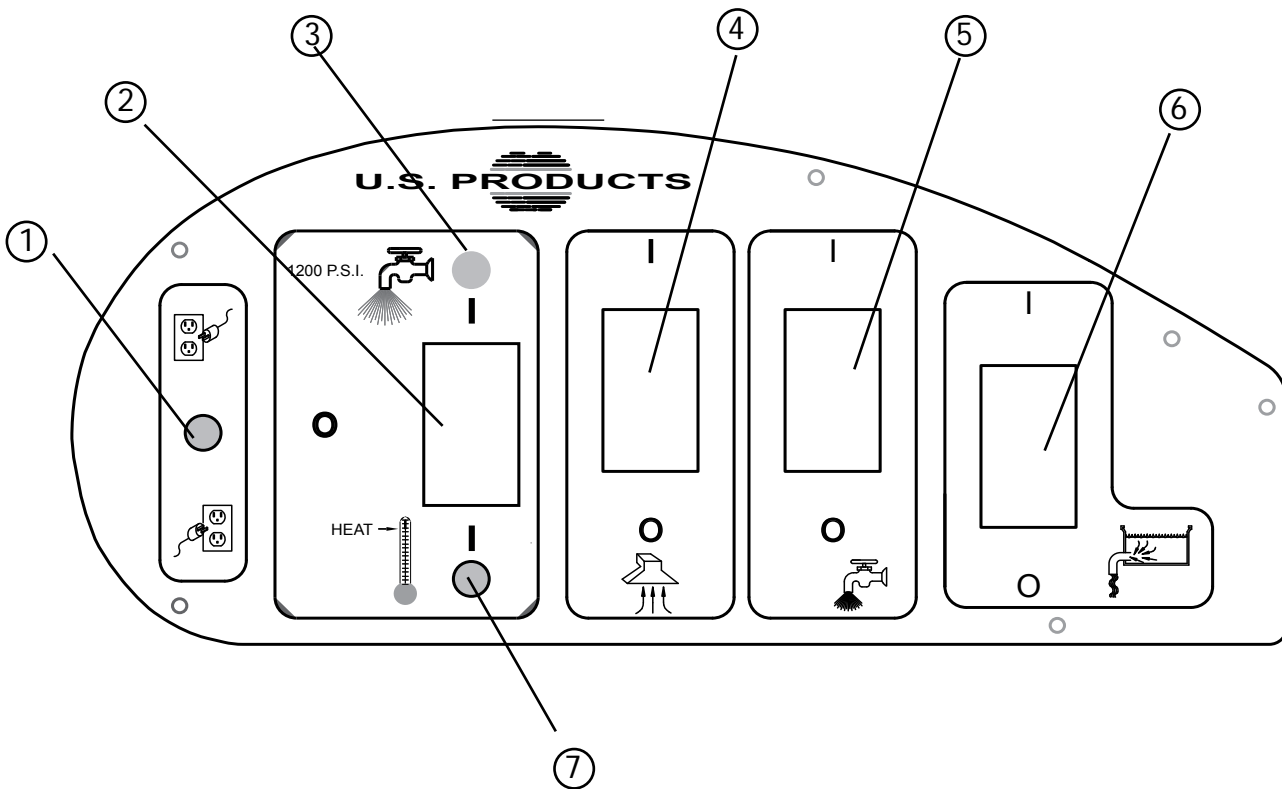
**Purchase Date:** \_\_\_\_\_

**Write the name and phone number of your distributor:**  
\_\_\_\_\_  
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# KNOW YOUR MACHINE



## SWITCH PLATE



1. This green light will turn on when the two power cords are plugged into separate circuits. Try different outlets with one cord until you can get a green light, otherwise a circuit breaker in the wall may trip.
2. This selector switch determines whether you will use the 1200 psi pump or the heater. You can select either, but not both at the same time. The heater will only work with the 500 psi pump. The center position is OFF, and neither the 1200 psi pump nor the heater is turned on. **CAUTION:** do not operate the 1200 psi pump and the 500 psi pump at the same time.
3. This light will turn on when the switch is set to the 1200 PSI pump.
4. This switch turns on the vacuum.
5. This switch turns on the 500 psi solution pump. **CAUTION:** do not run both solution pumps at the same time.
6. This last switch turns on the automatic pump-out pump. Use this when you want the machine to automatically pump out the recovered solution. **CAUTION:** do not turn on this pump until you have connected the pump-out hose.
7. This light will turn on when you have selected heat instead of the 1200 psi pump.

## OPERATION REFER TO THE DIAGRAMS ON THE PREVIOUS PAGE

### **1200 PSI HIGH PRESSURE WASHER**

- 1 Before each use, inspect the machine, hoses, and cleaning tools for cleanliness and completeness. Make sure the hoses are in good condition and the spray nozzle(s) is tight.
2. When not using the auto-dump feature, just make sure the brass cap is screwed tightly on the hose connector fitting on the rear of the machine. If you choose to use the auto-dump, connect the dump hose to brass hose fitting on the back of the machine, and place the open end of the hose in a drain. Make sure the drain hose (recovery tank) is closed, and the lid is tight on the recovery tank.

#### **REFER TO THE AUTO-FILL AND AUTO-DUMP INSTRUCTIONS ON THE FOLLOWING PAGES.**

3. If you choose to use the auto-fill feature, connect the fill hose to the auto-fill connector (located over the solution tank fill hole). Turn on the water source, and allow the tank to fill with water. When using the auto-fill system, the auto-fill float will automatically turn on and turn off as the tank empties and then fills. **NOTE:** If you are not going to use the auto-fill system, just fill the tank with water and cleaning chemical. Follow chemical directions regarding dilution and mixing. Do not use harsh chemicals; they may damage seals in pumps and valves, and cause the pump to wear prematurely.

**NOTE:** Never use water with a temperature exceeding 130 °F / 54 °C.

#### **REFER TO THE AUTO-FILL AND AUTO-DUMP INSTRUCTIONS ON THE FOLLOWING PAGES.**

4. Pre-spray the area to be cleaned, with a pump-up sprayer, while the tank is filling. Follow chemical directions.
5. Plug in the two power cords. Do not connect both cords to the same outlet. The green, 'separate circuit' locator light (1) on the switch plate should light up. If the locator light does not come on, check the circuit breaker box in the wall, and/or try different outlets until it does turn on. Although all systems in the machine may work correctly if you are not on two circuits, a circuit breaker in a wall panel may trip. If you make sure the green light is turned on, you will prevent tripped circuit breakers. Turn on the 1200 PSI pump by placing the HIGH PRESSURE/HEAT selection switch (2) in the UP position, to select the 1200 PSI Pump. **NOTE:** both the 1200 PSI pump and the heat can not operate at the same time. **NOTE:** this switch (2) is off when it is set to the middle position and neither the 1200 PSI pump nor the heater is selected.
6. Prime the 1200 psi pump using the 'power prime' system: turn on both the pump and the vacuum (3), cover the hole in the vacuum hose barb on the top of the machine with your hand, then depress the Power Prime Pedal (located on the back of the machine). This will pull trapped air through the pump and into the recovery tank, priming the pump. You should notice a change in the 'tone' of the pump (smoother, with less rattle), and the water being pulled into the recovery tank will change from a white, sputtering flow to a clear, solid stream. **NOTE:** priming requires a full Holding tank, and it may take between 20 to 90 seconds. Once the pump has primed, release the Power Prime Pedal, and turn both the pump and the vacuum off. Momentarily depress the Power Prime pedal again to release any built-up back pressure. Proceed to Step 9.



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

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

**CAUTION:** Always use a defoamer when foaming occurs to prevent vacuum motor damage.

**DANGER:** Do NOT use solvents, or any chemicals that may be flammable, explosive or combustible.

## OPERATION OF THE 1200 PSI PUMP CONTINUED:

7. Your machine has two solution outputs. The solution output for the 1200 psi pump is a quick disconnect located just above the fill hole on the holding tank, on the front face of the machine (the 500 psi outlet is a quick disconnect on the end of a short length of hose, on the front of the base section of the machine). Attach the solution spray hose from the reel to the 1200 psi solution quick disconnect. Attach the vacuum hose on the reel to the hose barb on the front of the recovery tank. Pull the hoses out from the reel. Attach the other ends of the hoses to the cleaning tool.
8. Turn on the vacuum **(3)** and turn on the Automatic pump-out pump **(5)**, if you have set-up the dump hose. Begin cleaning.
9. When the job is finished, turn off the water source (if you are using the auto-fill feature), and turn off the pumps. Disconnect the vacuum hose from your cleaning tool, and vacuum any remaining solution from the holding tank into the recovery tank.
10. Completely drain the recovery tank by pouring the dirty water out through the drain hose on the rear of the machine. Disconnect the solution hose from the cleaning tool, and reel the hoses onto the hose spool.
11. Unplug the power cords.
12. Clean the machine and the tool. Never store your machine outside, and keep it from getting too hot or too cold.

## OPERATION

### 500 PSI AND HEAT

1. Before each use, inspect the machine, hoses, and cleaning tools for cleanliness and completeness. Make sure the recovery tank drain hose is closed, and the lid is tight on the recovery tank. Make sure the hoses are in good condition and the spray nozzle(s) is tight.
2. If you choose to use the auto-dump feature, connect the dump hose to brass hose fitting on the back of the machine, and place the open end of the hose in a drain. Make sure the drain hose, on the rear of the recovery tank, is closed and the lid is tight on the recovery tank. If you choose not to use the auto-dump feature, make sure the brass cap is screwed onto the hose connector on the back of the machine and the dump pump switch is turned off.

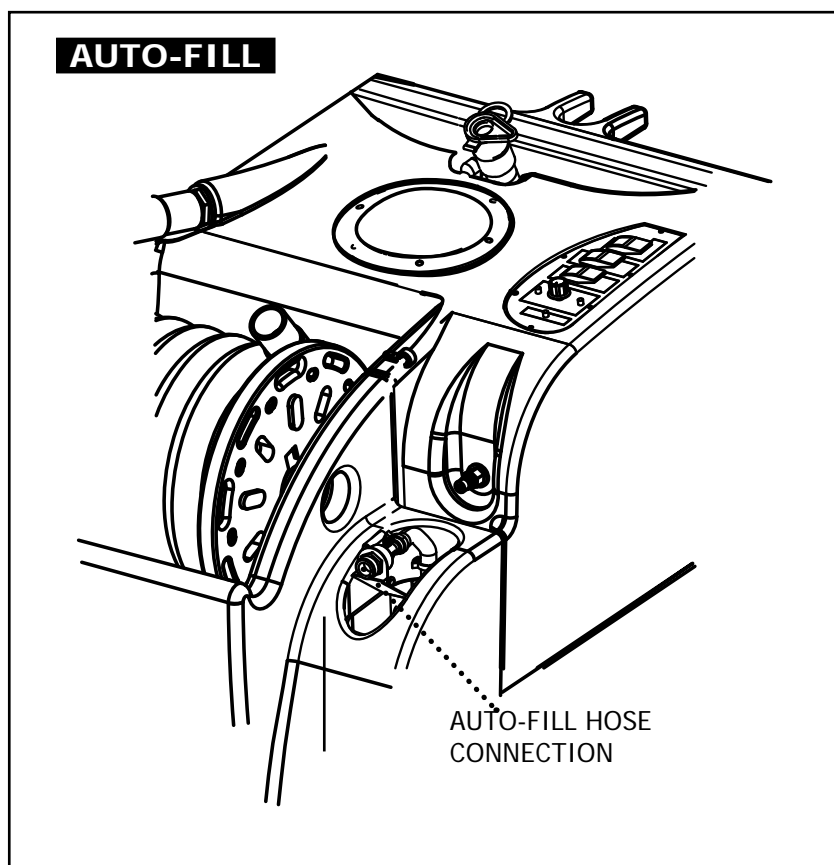
#### **REFER TO THE AUTO-FILL AND AUTO-DUMP INSTRUCTIONS ON THE FOLLOWING PAGES.**

3. If you choose to use the auto-fill feature, connect the fill hose to the auto-fill connector (located over the solution tank fill hole). Turn on the water source, and allow the tank to fill with water. **NOTE:** Do not turn the water pressure on high; just turn the water on. When using the auto-fill system, the auto-fill float will automatically turn on and turn off as the tank empties and then fills. If you are not going to use the auto-fill system, just fill the tank with clean water and a liquid cleaning chemical. Follow chemical directions regarding dilution and mixing. **CAUTION:** Do not use harsh chemicals in your King Cobra 1200 Pro; they may damage seals in pumps and valves and could cause the pump to wear prematurely. **NOTE:** using warm water in the tank may improve the efficiency of the heat exchanger when cleaning with heat, but never use water with a temperature exceeding 130 °F / 54 °C.

## AUTO-FILL

### 1 Operation:

- Attach a 3/4" garden hose to the auto fill valve, and connect the other end of the hose to your water source.
- Make sure the float that hangs from the auto fill valve into the tank is free of obstruction and can move freely.
- Turn on the water supply. **NOTE:** Do not turn the water pressure on high; just turn the water on.





## **AUTO-DUMP**

### **1 Operation:**

**Before each use:** if necessary, unscrew the stainless steel filter at the bottom of the recovery tank and clean it. Also make sure the float in the recovery tank is clean.

- Attach a 3/4" garden hose to the dump pump outlet fitting on the back of the base of the machine. Refer to illustration below.
- Run the other end of the hose into a drain.
- Turn ON the dump pump switch (switch is located on the switch panel on the top of the machine).
- **NOTE:** the dump pump is 'self-priming.' You should see water start to flow within 30 seconds of the pump turning on. If water does not begin to flow, check the filter to see if it is plugged with debris.

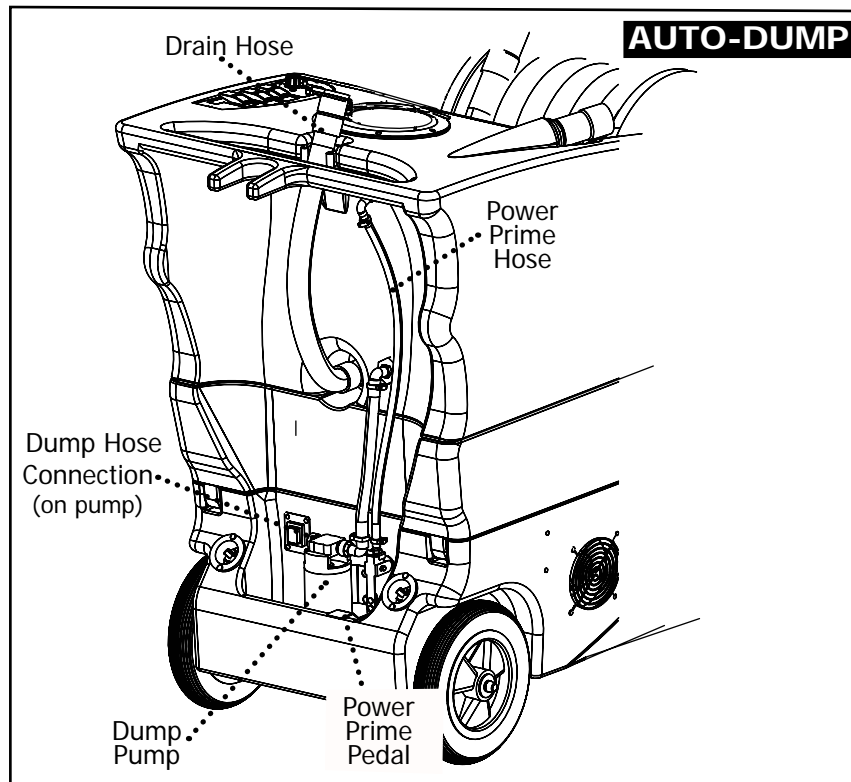
**After each job:** run clear water through the dump pump to wash out any chemical residue. Remove and clean the stainless steel filter in the bottom of the tank. Reinstall the filter once it is clean. Clean and empty the recovery tank.



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

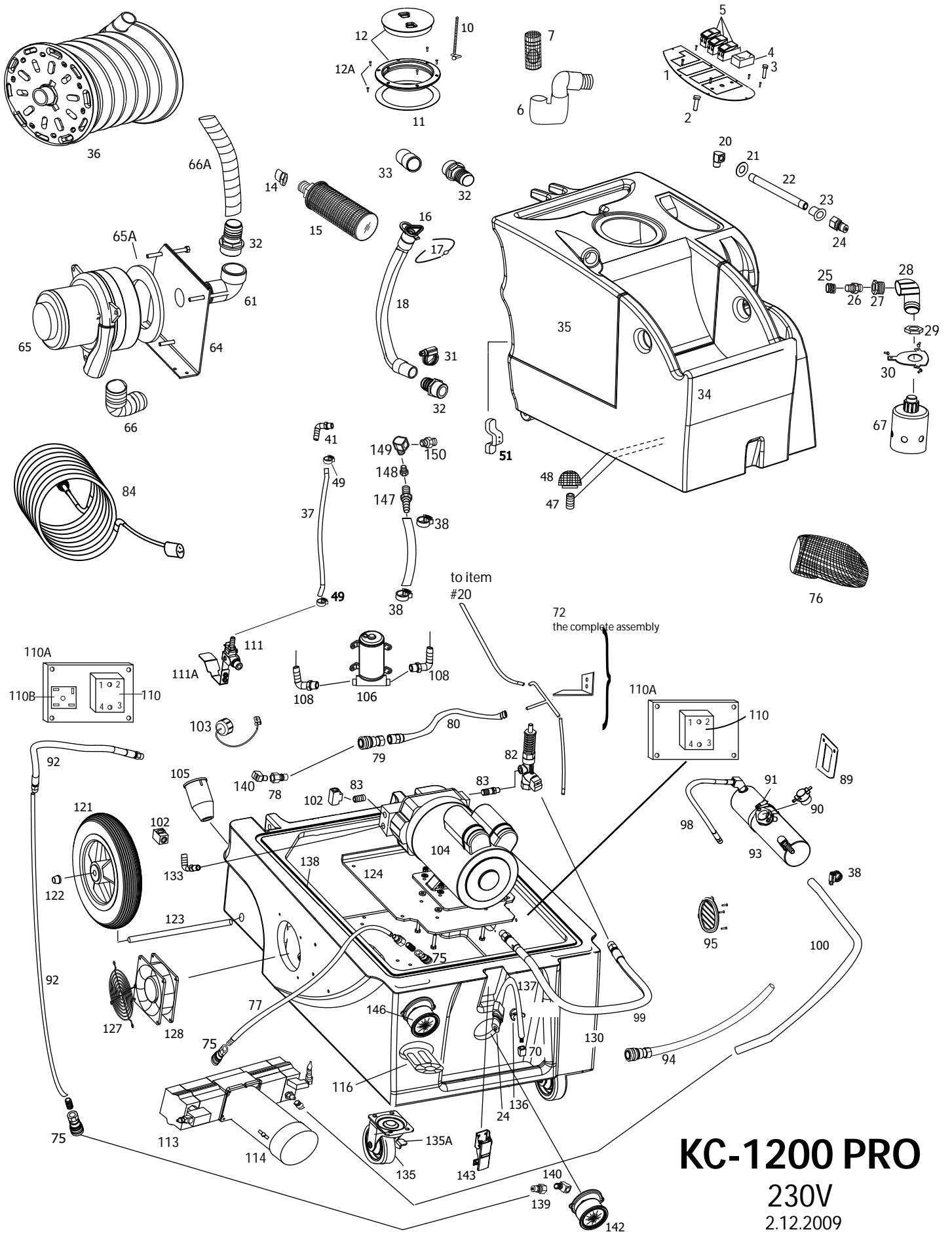


**CAUTION: always use a defoamer in the recovery tank to prevent water or foam from entering the vacuum motor.**



**DANGER: always unplug the King Cobra from the electrical outlet(s) before cleaning or maintaining. Certain internal components are electrically live, even with switches in their OFF position.**





# KC-1200 PRO

230V  
2.12.2009

# KING COBRA-1200 PRO

## PART LIST

### 230 V

<u>ITEM PART No. DESCRIPTION</u>			<u>ITEM PART No. DESCRIPTION</u>		
1	1303A	Switch Plate	94	SYP1	Priming hose, for 500 psi
2	78	Light, green, 1200 psi pump	95	928	Louver, 3", includes screws
3	228	Light, red, heat	98	FP534	Hose, heater to outlet
4	56220001	Switch, 3-way; ON-OFF-ON	99	1162	Hose Assembly, 32", bypass
5	2138	Switch, ON/OFF, with actuator	100	1581A	Hose, 1/4" x 24" pump to heater
6	FP364	Elbow, PVC, includes ball float	102	152	"T", brass/ 1/4 npt
7	929B	Filter, ball float	103	237	Cap with chain
10	805	Chain, lid retaining	104	1159A	1200 psi pump & motor, complete 230V
11	1074	Gasket, recovery lid	105	1062	Receptacle, power cord
12	2086	Lid, and ring, 6"	106	2067B	Pump, auto-dump, 230V
12A	1156	Screw, 8-32 x 1-1/8"	108	1546	Elbow, nylon, auto-dump in
14	937	Bushing, PCV	110	4405A	Relay, 20 Amp
15	2069B	Filter, Auto-fill	110A	2025	Heat sink plate
16	1060C	Plug, drain hose	110B	1579	Rectifier, bridge
17	1130	Strap, Velcro	111	1164	Valve, power prime
18	1060B	Hose, drain	111A	1299	Pedal, power prime
20	91	Elbow, 90 degree, brass, 1/4 mpt	113	950F	500 psi pump, complete, no motor 230V
21	1141	Washer, S/S	114	1582	Motor, for 500 psi pump
22	1146	Pipe, S/S, 1/4 mpt both ends	116	FP509	Unloader complete, 500 psi
23	1143	Spacer, insulated	121	2084A	Wheel, 10"
24	45	Quick Disconnect male, 1/4 pt	122	27A	Axle cap
25	1184	Hose connector, inlet water supply line	123	910-20.75	Axle, 1/2" X 20-1/2"
26	1533	Connector, male garden hose	124	1158	Plate, pump mounting
27	1571	Bushing, 1" x 1/2"	127	2015	Guard, fan
28	1534	Elbow 1", 90°	128	2018	Fan, cooling, 100CFM
29	2170	Locknut, 1"	130	BKCR BLK	Base compartment, black
30	1320A	Bracket, Auto-fill valve mounting	133	1081	Elbow, 90 degree, pump inlet
31	156	Hose clamp, 2-1/4"	135	905	Castor, 4"
32	907	Hose Barb, 1-1/2" hose	135A	905A	Brake, for castor
33	1137	Adaptor, ABS, 1-1/2"	136	1413	Clip Holder, for hose
34	FP596	Holding Tank, white	137	FP416	Hose assy, 500 psi, outlet
35	VKCR-1	Recovery Tank, white	138	1043A	Gasket, 93.5"
36	FP414	Reel, with hoses, complete	139	219	Quick disconnect, male
37	1309	Hose, power prime outlet, 3/8" X 21.25"	140	91	Elbow, 90°
38	166	Hose clamp	142	2166	Gauge, 1200 psi pressure
41	1115	Elbow, 90°, 3/8" hose X 1/4 mpt	143	908A	Latch
46	1113	Elbow, 90°, 1/2" hose X 1/2 mpt	146	2165	Gauge, 500 psi pressure
47	92B	Nipple, PVC, 1/2 npt	147	165	Hose barb, 1/4 pipe x 1/2" hose
48	207A	Filter, Pump inlet	148	182	Bushing, 3/8 x 1/4 pipe
49	1401	Clamp, nylon	149	148	Elbow, 90°
51	FP388	Cord Wrap, black	150	239	Adapter, brass 3/4 hose
61	1131	Elbow, PVC, 1-1/2"			
64	926	Manifold, vacuum			
65	913A	Vacuum motor, w/gasket, complete			
65A	957	Gasket, vac motor			
66	430	Vacuum hose, 1-1/2" X 7.75"			
66A	1136	Vacuum hose, 1-1/2" X 25, clear			
67	1310A	Float, Auto-fill, high temp.			
70	1280	Elbow, brass, 1/4 fpt X 1/4 fpt			
72	1530	Junction, fluid direction			
75	220	Quick disconnect, female, open			
76	2088	Pre-filter, vacuum inlet			
77	1506	Hose, pump to gauge, 500 psi			
78	219	Quick Disconnect, male, open			
79	220	Quick Disconnect, female, open			
80	1162	Hose, power prime inlet, 32"			
82	1163	Valve, pressure regulator, 1200 psi			
83	92A	Nipple, S/S, 1/4 mpt			
84	2019	Power Cord			
89	455	Bracket, heater mount			
90	399	Thermostat switch			
91	76A	Hose Clamp, 3"			
92	FP420	Hose, Pump to Gauge, complete			
93	FP646	Heat Exchanger, complete			

# KING COBRA® 1200 PRO 230V

## SPECIFICATIONS:

<b>Rotomolded Body:</b>	<b>Lifetime Warranty</b>
<b>Vacuum:</b>	<b>7.2" 3-stage, 140" of water lift</b>
<b>VAC Shutoff:</b>	<b>Ball Float</b>
<b>Pump:</b>	<b>Positive displacement, fully adjustable 0-500 psi &amp; Positive displacement, 1200 psi, 2.2 gpm</b>
<b>Heat:</b>	<b>2000 Watts, adjustable up to 212 °F</b>
<b>Capacity:</b>	<b>16 gallon solution tank; 14 gallon recovery tank</b>
<b>Cords:</b>	<b>Two, detachable 12/3, hospital grade plugs</b>
<b>Size:</b>	<b>39" H X 21" W X 36" L</b>
<b>Auto dump:</b>	<b>5 gpm</b>
<b>Wheels:</b>	<b>10", locking, non-marking</b>
<b>Hoses:</b>	<b>25 ft hoses on a reel (patent pending)</b>
<b>Plus:</b>	<b>Auto-fill and a Power Prime system for the 1200 psi pump</b>

## NOTES:



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Coeur d'Alene, Idaho

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