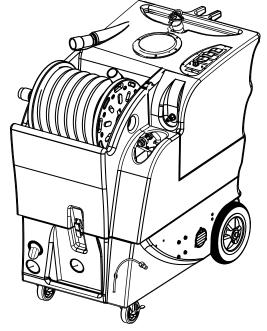


## KING COBRA® 1200 PRO

# INFORMATION & OPERATING INSTRUCTIONS





MODEL: KC-1200-500-B



## 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 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.

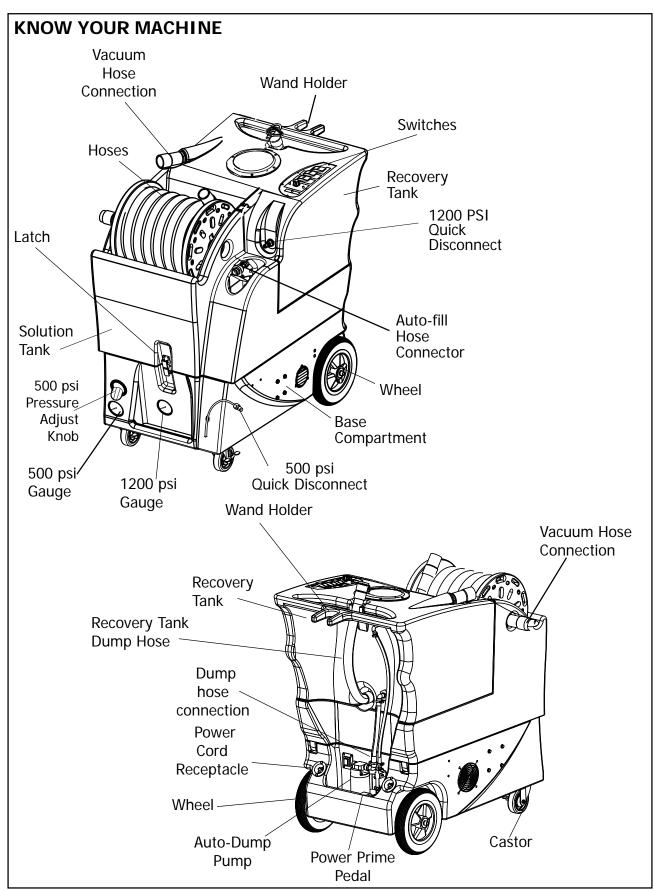
#### **CLEANING SOLUTIONS:**

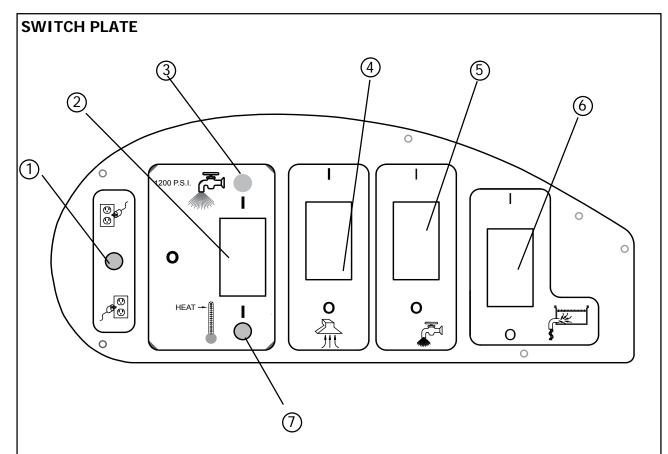
Select a proper pre-spray for the surface to be cleaned, and apply the pre-spray. Use a neutral pH rinse or detergent (6 to 10 pH) in the King Cobra to prevent premature wear of the pumps, seals, and other components. Damage caused by the use of improper or strong chemicals is not covered by warranty.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





- 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 switch allows you to select either the 1200 psi pump without heat or the 500 psi pump and heat. \*NOTE: Both the 1200 psi pump and the heat exchanger can not operate at the same time. This switch allows you to select the pump, but it does not turn on either pump.
- 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 solution pump either 1200 psi or 500 psi, depending on where you have set the pump selection switch (2).
- This last switch turns on the automatic pump-out pump. Use this when you want the machine to automatically pump out the recovered solution.
- 7 This light will turn on when you have selected heat instead of the 1200 psi pump.

#### REFER TO THE DIAGRAMS ON THE PREVIOUS PAGE

#### SET-UP and OPERATION 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. Connect the solution hose (from the reel) to the 1200 PSI Quick Disconnect on the front of the tank, below the switch plate.
- 6. 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.
- 8. 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:**

- 9. Your machine has two solution outputs. The solution output for the 1200 psi pump is a quick disconnect located just below 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.
- 10. Turn on the vacuum (3) and turn on the Automatic pump-out pump (5), if you have set-up the dump hose. Begin cleaning.
- 11. 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.
- 12. 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.
- 13. Unplug the power cords.
- 14. Clean the machine and the tool. Never store your machine outside, and keep it from getting too hot or too cold.

## SET-UP and OPERATION 500 PSI AND HEAT

- 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.

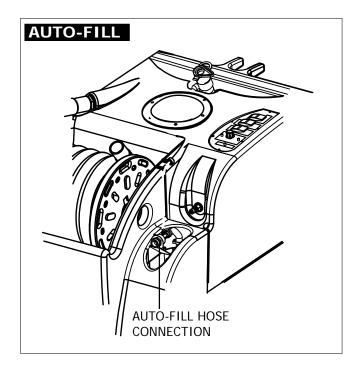
#### REFER TO THE AUTO-FILL AND AUTO-DUMP INSTRUCTIONS ON THE FOLLOWING PAGES.

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**

#### 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.
- The auto-fill float will automatically shut-off the flow of incoming water when the tank is nearly full, and it will allow the valve to open again once the water level has dropped to a predetermined level.



#### **AUTO-DUMP**

#### 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.

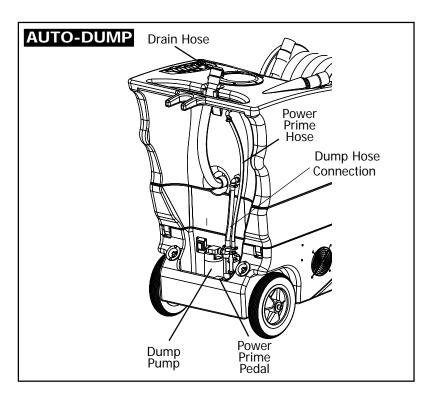
- Attach a 3/4" garden hose to the dump pump outlet fitting on the back of the base of the machine.
   Refer to illustration below.
- · Run the other end of the hose into a drain.
- Turn ON the dump pump switch (switch is located on the switch panel on the top of the machine).
- NOTE: the dump pump is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

  After each job: run clear water though 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.

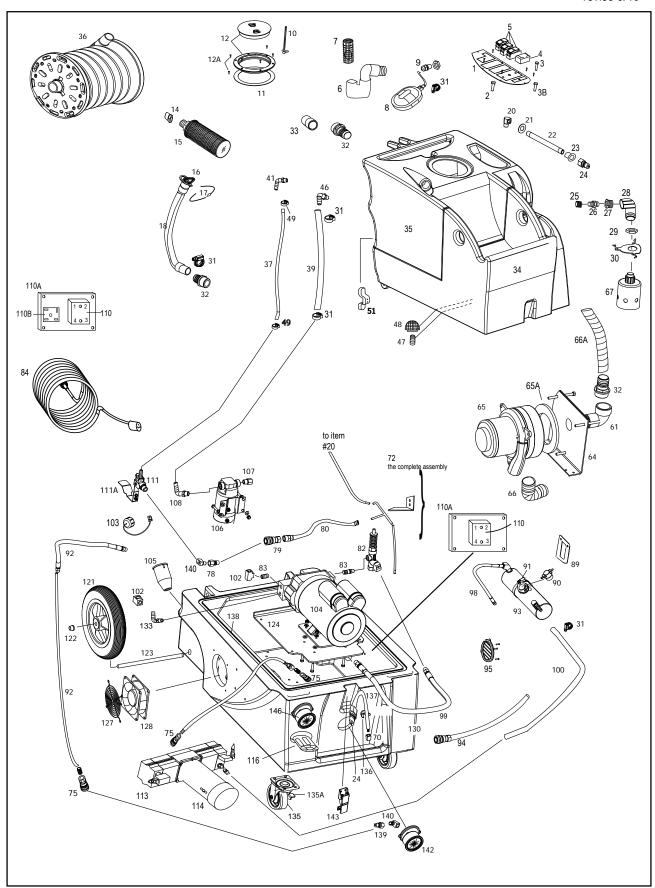
CAUTION: always use a defoamer in the recovery tank to prevent water or foam from entering the vacuum motor.





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.





<u>ITEM</u>	PART No.	DESCRIPTION	<u>ITEM</u>	PART No.	<u>DESCRIPTION</u>	
1	1303	Switch Plate	94	SYP1	Priming hose, for 500 psi	
2	78	Light, green, 1200 psi pump	95	928	Louver, 3", includes screws	
3	78B	Light, red, heat	98	FP534	Hose, heater to outlet	
3B	227	Light, green, dual circuit	99	925	Hose Assembly, 32", bypass	
4	56220001	Switch, 3-way; ON-OFF-ON				
5	FP345	Switch, ON/OFF, with actuator	100	1581A	Hose, ¼" x 24" pump to heater	
6	FP364	Elbow, PVC, includes ball float	102	1553	"T", with elbows	
7	929B	Filter, ball float	103	237	Cap with chain	
, 8#	2068	Float-Auto-Dump	104	FP373	1200 psi pump & motor, complete	
9#	230	Cord Retainer	105	1062	Receptacle, power cord	
10	805	Chain, lid retaining	106#	957	Pump, auto-dump	
11	1074		107#	1324	Hose Connector, dump pump out	
12	2086A	Gasket, recovery lid Lid, and ring, 6"	108#	1325	Elbow, nylon, auto-dump in	
12A	1156					
	937	Screw, 8-32 x 1-1/8"	110	4405A	Relay, 20 Amp	
		Bushing, PCV	110A	2025	Heat sink plate	
15	2069	Filter, Auto-fill	110B	1579	Rectifier, bridge	
16	1060C	Plug, drain hose	111	1164	Valve, power prime	
17	1130	Strap, Velcro	111A	1299	Pedal, power prime	
18		Hose, drain	113	FP507	500 psi pump, complete, no motor	
	91	Elbow, 90 degree, brass, 1/4 mpt	114	1582	Motor, for 500 psi pump	
21	1141	Washer, S/S	116	FP509	Unloader complete, 500 psi	
22	1146	Pipe, S/S, 1/4 mpt both ends	121	2084A	· · · · · · · · · · · · · · · · · · ·	
23	1143	Spacer, insulated			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 20-3/4"	
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	2014	Fan, cooling, 100CFM	
29	2170	Locknut, 1"	130		Base compartment, black	
30	1320A	Bracket, Auto-fill valve mounting	133	1081	Elbow, 90 degree, pump inlet	
31	1518	Hose clamp, 2-1/4"				
32	907	Hose Barb, 1-1/2" hose	135	905	Castor, 4"	
33	1137	Adaptor, ABS, 1-1/2"	135A	905A	Brake, for castor	
	KCR-RED	Holding Tank, white	136	1413	Clip Holder, for hose	
	KCR-RED	Recovery Tank, white	137	FP416	Hose assy, 500 psi, outlet	
36	FP414	Reel, with hoses, complete	138	1043A	Gasket, 93.5"	
37	1309	Hose, power prime outlet, 3/8" X 21.25"	139	219	Quick disconnect, male	
39#	946A	Hose-1/2 x 17	140	91	Elbow, 90°	
41	1115	Elbow, 90°, 3/8" hose X 1/4 mpt	142	2166	Gauge, 1200 psi pressure	
46#	1113	Elbow, 90°, 1/2" hose X 1/2 mpt	[]#	1506	Hose, pump to gauge	
47	92B	Nipple, PVC, 1/2 npt				
48	207A	Filter, Pump inlet	143	908A	Latch	
49#	1347	Clamp, nylon	146	2165	Gauge, 500 psi pressure	
	P388	Cord Wrap, black	[ ]#	1506	Hose, pump to gauge	
61	1131	Elbow, PVC, 1-1/2"				
64	926	Manifold, vacuum	[] = Not Shown			
65	FP323	Vacuum motor, w/gasket, complete	# = Ne	# = New or revised since last update		
65A	959	Gasket, vac motor			•	
66	430	Vacuum hose, 1-1/2" X 7.75"				
66A	1136	Vacuum hose, 1-1/2" X 25, clear	MISCELLANEOUS PARTS			
67	1310A	Float, Auto-fill, high temp.	·			
70	1280	Elbow, brass, 1/4 fpt X 1/4 fpt	1160K		ngs, 1200 psi pump	
72	1530	Junction, fluid direction	1159B	Pump comple	ete, no motor, 1200 psi motor	
75	220	Quick disconnect, female, open	1160A	Plunger & sea	als, 1200 psi pump	
78	219	Quick Disconnect, male, open	1159		for 1200 psi pump	
79	220	Quick Disconnect, female, open	FP469		plution w/swivel, 16-1/2", no reel	
80	1309	Hose, power prime inlet, 32"		-	es tool #1157.	
82	1164	Valve, pressure regulator, 1200 psi	EDSEC			
83	92A	Nipple, S/S, 1/4 mpt	FP256		t, inlcudes cutout, bimetallic switch,	
84	1057B	Power Cord		& heat sink gr		
89			FP508	Pump & motor complete, 500 psi		
	455	Bracket, heater mount	FP641	25 ft. solution	hose with 16-1/2" hose assy	
90	399	Thermostat switch	FP256		t, bimetallic switch, & heat sink grease	
	76A	Hose Clamp, 3"	FP372		se, unloader, cam &	
91						
91 92	FP420	Hose, Pump to Gauge, complete	11012			
		Hose, Pump to Gauge, complete Heat Exchanger, complete	11012		notor, 1200 psi pump	

### KING COBRA® 1200 PRO 120V

#### **SPECIFICATIONS:**

Rotomolded Body: Lifetime Warranty

Vacuum: 7.2" 3-stage, 140" of water lift

**VAC Shutoff:** Ball Float

Pump: Positive displacement, fully adjustable 0-500 psi &

Positive displacement, 1200 psi, 2.2 gpm

Heat: 2000 Watts, adjustable up to 212 °F

Capacity: 16 gallon solution tank; 14 gallon recovery tank

Cords: Two, detachable 12/3, hospital grade plugs

Size: 39" H X 21" W X 36" L

Auto dump: 5 gpm

Wheels: 10", locking, non-marking

Hoses: 25 ft hoses on a reel (patent pending)

Plus: Auto-fill and a Power Prime system for the 1200 psi

pump

#### **NOTES:**

