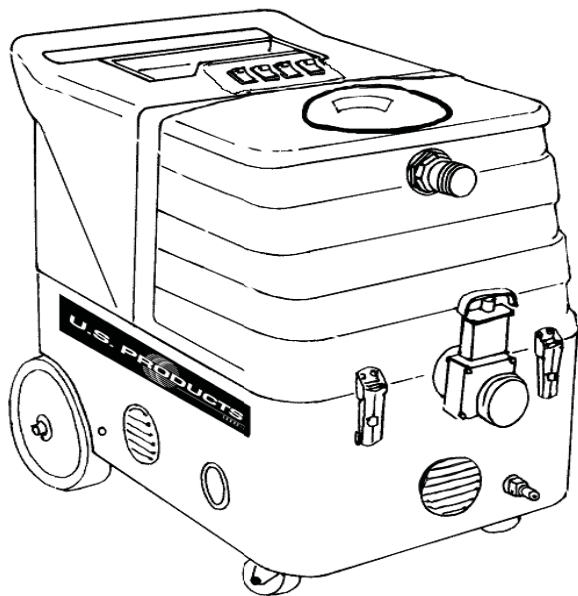




COBRA®-H EXTRACTOR 120V



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. Never allow the spray to remain fixed in one spot.
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, 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 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-H 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, 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.



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. Lubricate the wheels, castors, and quick disconnects with an all purpose silicone spray. The vacuum and the pump do not require any maintenance; however the vacuum motors may require new brushes after 1000 - 1500 hours. Clean the body with an all purpose detergent, and protect it with a common auto interior protectant.

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 or service. Be sure to specify the machine model. Have your serial number handy.

RECORD AND KEEP THE FOLLOWING INFORMATION

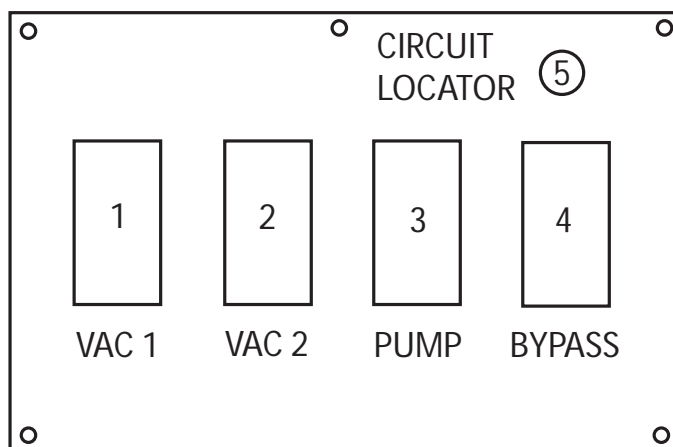
Serial Number: _____ Model: COBRA-H

Purchase Date: _____

Write the name and phone number of your distributor:

And don't forget to register your purchase to activate your warranty

SWITCH PLATE:



VACUUM (1), VACUUM (2), AND PUMP (3) SWITCHES:

These switches are all powered by cord #1. Switches are on when illuminated.

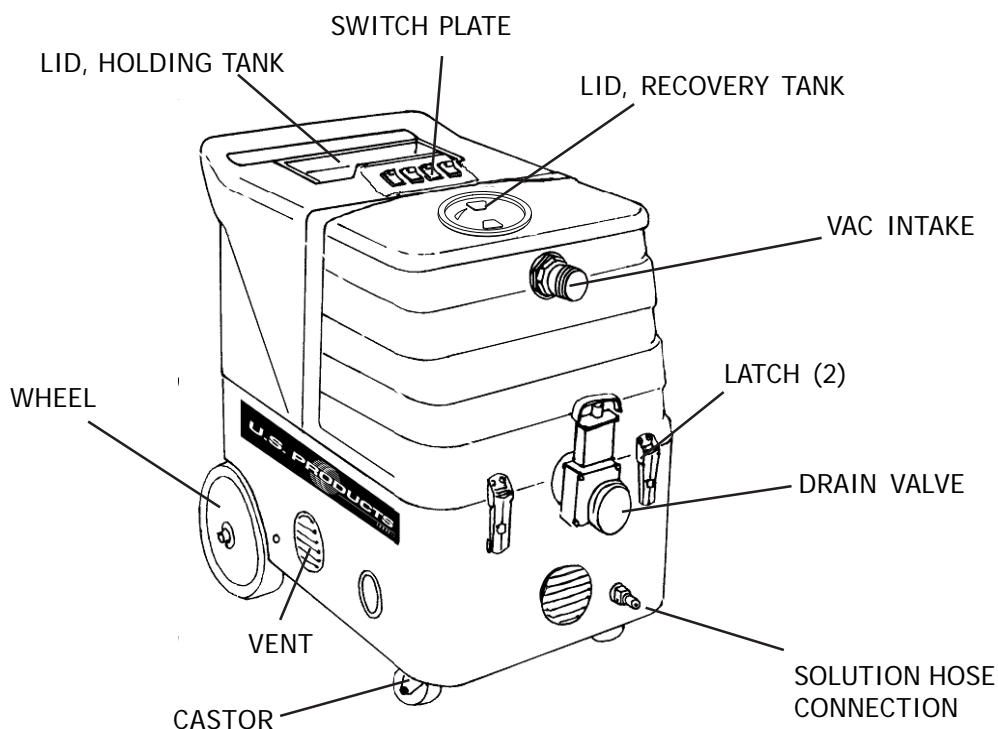
BYPASS SWITCH (4):

Turning on this switch (switch illuminates when on) bypasses the circuit locator system. See the next page for explanation of the bypass system.

GREEN INDICATOR LIGHT (5):

When this light is illuminated, it confirms that the machine is on two separate circuits.

YOUR MACHINE:



SET-UP:

Fill the holding tank with clear water and the detergent of your choice. Mix well. Although this machine is designed to supply instant hot water, the addition of warm or hot water to the holding tank would be a plus factor.

1. Plug in cord #1. This cord runs the pump and vacuums.
2. Turn on the pump and spray through the cleaning tool for a few seconds to fill the lines with solution.
3. Plug in cord #2 (identified by a red "H"). IF THE GREEN LIGHT ILLUMINATES, THE HEAT EXCHANGER WILL TURN ON AUTOMATICALLY (SEE NOTE BELOW). Wait 2 minutes for the heat exchanger to reach operating temperature. You may now begin cleaning. It will take about 10 seconds for the initial heat to reach the wand.

NOTE: If the green circuit indicator light does not illuminate when cord #2 is plugged in, then both cores are on the same circuit. Try other outlets until the light comes on. See bypass switch section (below) if you are unable to get a green light.

ELECTRIC CIRCUIT LOCATOR:

This unique, patented "smart system", operated by a solid state circuit, will inform the operator when the two cords are plugged into separate lines by illuminating the green indicator light. This helps prevent tripping circuit breakers.


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 VAC SHUTOFF:

When the recovery tank is full, the float system will shut off the incoming air flow and prevent water from entering the vacuum motors. The float may not work properly if the float filter is clogged or if there is foam in the tank.

 **CAUTION:** To avoid vac motor damage, always make sure the float filter is clean and the ball travels freely before turning on the machine, and use a defoamer whenever foam is present.

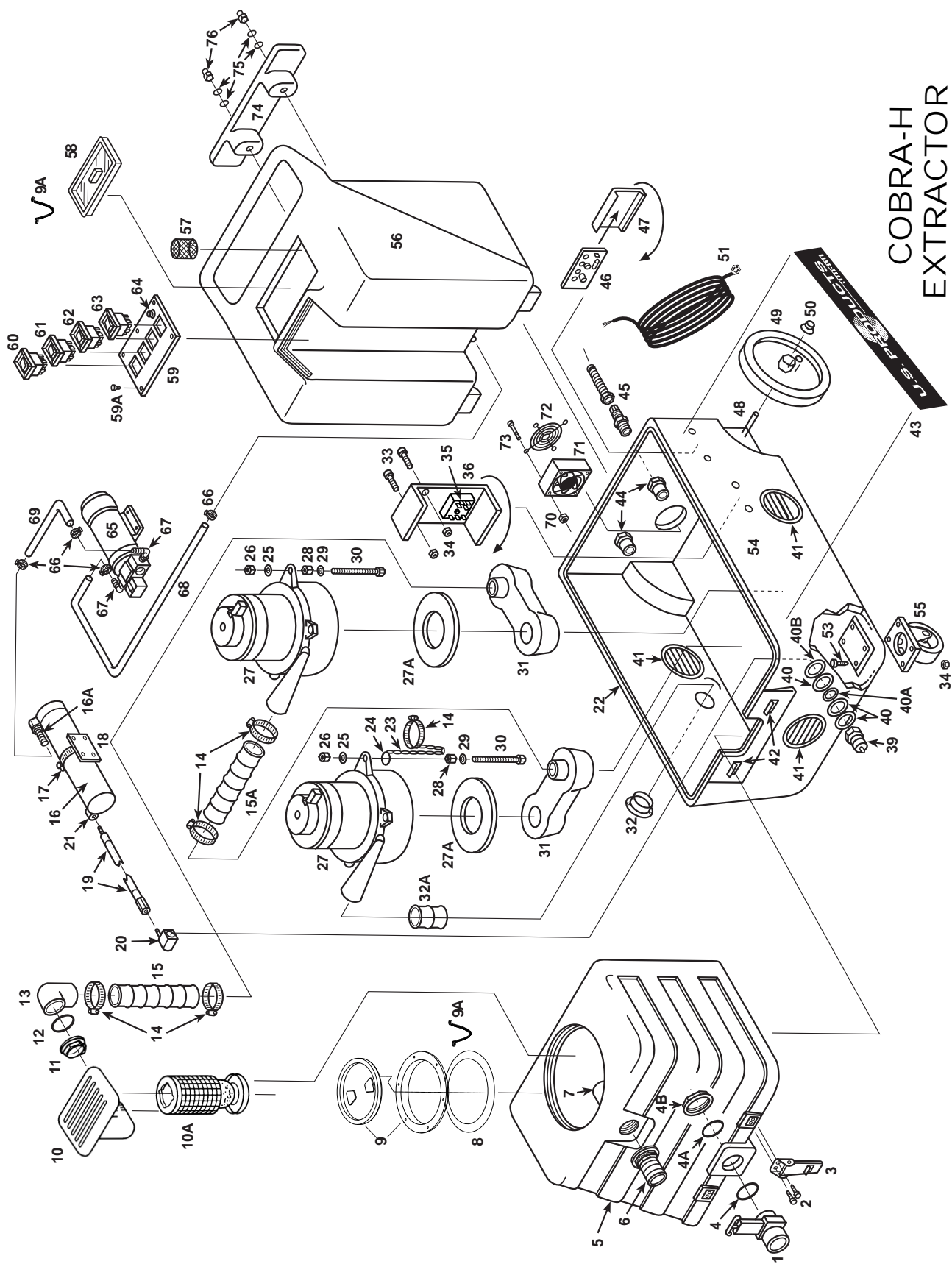
TROUBLE SHOOTING:

IF THIS OCCURS CHECK THIS

NO SPRAY	Solution tank is empty. Clogged spray tip. Pump not running. Valve on wand not operating
PUMP WON'T 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:	Two, 2-stage 5.7"
VAC Shutoff:	Ball float
Pump:	Demand pump, 100 psi
Waterlift:	150"
Heat:	212° F
Heater:	2000 Watts
Weight:	75 lbs.
Dimensions:	25.5H x 18W x 28.75L (inches)
revised 10/10	



COBRA-H EXTRACTOR

07/22/2005

COBRA-H 120V

PARTS LIST

ITEM No PART No DESCRIPTION

1	FP231A	Drain Gate Assembly
2	21C	Screw, 8-32 X 5/8", S/S
3	908	Latch
4	187	O-Ring, small
4A	187B	Washer, rubber
4B	185	Nut 1-1/2"
5	FP208	Vacuum Tank, complete
6	907	Hose Barb, 1-1/2"
7	922	Elbow, PVC, 1-1/2"
8	1074	Gasket (machines made after 2-15-05)*
9	2086	Lid & Ring (machines made after 2-15-05)*
9A	FP436	Chain and Hardware
10	FP193	Ball Float Assembly, complete
11	185	Nut, 1-1/2"
12	187B	Washer, rubber
13	922	PVC, elbow, 1-1/2"
14	156	Hose Clamp (size 28)
15	FP171	Hose, vacuum, rubber 2" X 20"
15A	FP171C	Hose, vacuum, rubber 2" X 16"
16	FP207	Heat Exchanger, complete
16A	208	Hose Barb
17	198	Hose Clamp
18	455	Mount, heat exchanger
19	2012	Hose 1/4" X 26", Outlet
20	91	Elbow, brass, 90 degree
22	FP439	Gasket, Cobra Base
23	FP233	Chain, 13"
24	194	Ring Clip
25	14	Washer, 1/4"
26	8	Lock Nut, 1/4-20
27	FP324	Vacuum Motor w/Gasket
27A	2013	Gasket, vacuum motor
28	136	Nut, 1/4-20
29	137	Washer, lock, 1/4"
30	135	Bolt, 1/4-20 x 3-1/2"
31	MA-6	Manifold, vacuum
32	FP220	Flange, exhaust, w/Hose
32A	430	Hose, 2" x 3"
33	4	Bolt, 1/4 X 1"
34	8	Lock Nut ,1/4-20
35	see Misc	Heat repair kit**
36	918	Heat Sink Plate
39	45	Quick Disconnect, male, 1/4 p.t.
40	115	Washer, Fiber
40A	116A	Bushing, Fiber
40B	31	Washer, Brass
41	928	Louver, 3" (includes screws)
42	909A	Latch Strike, for Latch, S/S

ITEM No PART No DESCRIPTION

43	2001A	Label, Cobra-H
44	937	Reducer, PVC
45	184	Cord Retainer
46	923B	PCB, dual cord sensor***
47	FP336	Mounting Track, PCB
48	910-16.93	Axle, 18-13/16"
49	2003	Wheel, 8"
50	27A	Axle Cap
51	495A	Power Cord, 25', yellow
53	5	Bolt, 1/4" X 3/4"
54	FP452	Base, Cobra, black
55	2002	Caster, swivel, #3"
56	HT-2	Holding Tank Cobra
57	207A	Filter, pump inlet, 40 mesh
58	FP221	Lid, holding tank
59	2005	Switch Plate
59A	28	Screw, #4 X 3/8"
60	FP578	Switch, Rocker (all)
64	78	Light, green
65	2007	Pump, 100 PSI
66	166	Hose Clamp
67	108A	Hose Barb/Elbow
68	FP165C	Hose, rubber, 3/8" X 13"
69	FP166	Hose, rubber, 3/8" X 48"
70	16	Lock Nut, 6/32
71	2014	Fan, cooling
72	2015	Guard, fan
73	2B1	Screw, 6/32 X 2-1/4"
74	CWBLK	Cord Wrap (Black)
75	203	Washer, plastic
76	260	Nut, acorn, 3/16"

MISCELLANEOUS ASSEMBLIES/PARTS

*FP2008	Dome & Gasket Complete (for machines made before 2-15-05)
**FP194A	Thermistor Control Kit with Potentiometer, Probe & PCB (for machines built after 7-2005)
**FP194C	Thermistor Control Kit, with Potentiometer, Probe, Cutout & PCB (for machines built after 7-2005)
***923	PCB for machines built before (2-05)

(NOTE: Items in kits not sold separately)



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