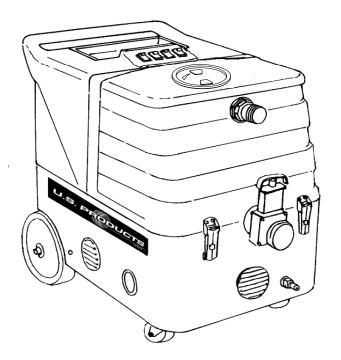


## COBRA®-300H EXTRACTOR 120V



## INFORMATION & OPERATING INSTRUCTIONS

#### DO NOT OPERATE MACHINE UNTIL YOU HAVE READ ALL SECTIONS OF THIS 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.
- 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-300H 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:**

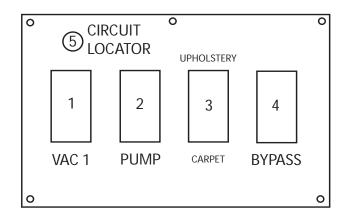
We recommend liquid cleaning chemicals, such as our Magic Fabric Cleaner. Powder chemicals may be used, but unless mixed very thoroughly they could cause a build-up in the pump, lines, heat exchanger and/or quick disconnects. Any problem caused by a chemical build-up is not covered by warranty. Use a 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. The vacuum motor, pump motor, and the pump do not require any scheduled maintenance; however, the motors may require replacement brushes after 1000 - 1500 hours, and the pump and bypass valve may require rebuild kits after 1000 - 1500 hours, typically (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.

(and be sure to mail your warranty card)

Serial Number: \_\_\_\_\_ Model: <u>COBRA-300H</u> Purchase Date:\_\_\_\_\_ Write the name and phone number of your distributor:



#### VACUUM (1), PUMP (2)SWITCHES:

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

#### CARPET/UPHOLSTERY SWITCH (3):

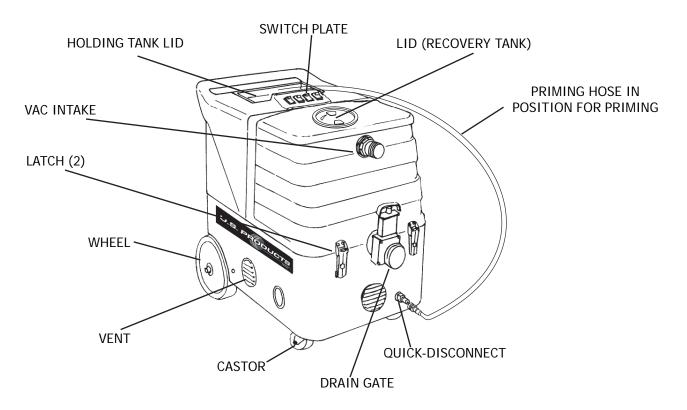
This switch is also powered by cord #1. The carpet setting (down position) is high pressure (approximately 300 PSI). The upholstery setting (up position) is low pressure (approximately 50 PSI with a K1 or V2 spray tip).

#### BYPASS SWITCH (4):

The bypass switch will illuminate when it is turned on, and it will completely bypass the circuit locator system. Use this feature only when the circuit locator light will not operate and you know each cord is on a separate circuit, otherwise a circuit breaker may trip.

#### CIRCUIT LOCATOR (5):

When this light is on, it indicates that cord #2 (identified by the red "H") is on a separate line from cord #1. Cord #2 supplies voltage to the heater.



#### 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 (not exceeding 130° F/54° C) to the holding tank would efficiency of the heater.

- 1. Plug in cord #1. Attach the priming hose to the machine (see illustration on previous page). Turn the pump on and set the switch to the upholstery setting. Run until the pump is fully primed, then turn off the pump. Remove the priming hose, and attach the cleaning hoses and tool.
- 2. Turn on the pump, and spray through the cleaning tool for a few seconds to fill the lines with solution.
- Plug in cord #2 (identified by a red "H" on the back of the extractor). 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 cords 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:**

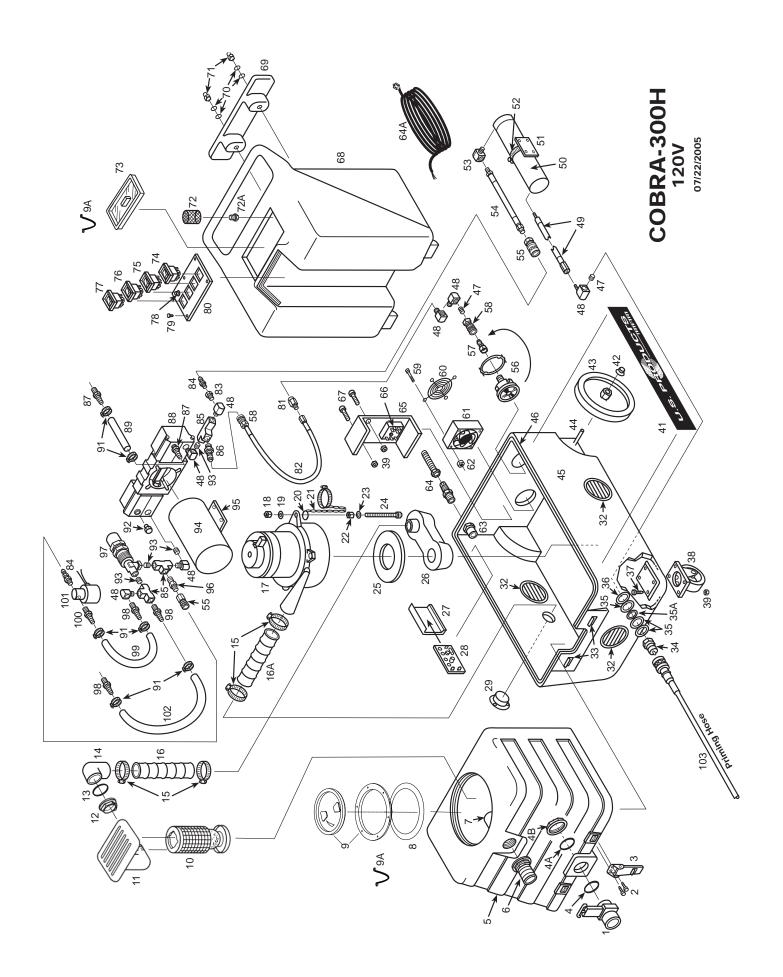
The bypass switch completely bypasses the circuit locator system. Use this feature when you cannot get the green light to come on and you believe that the two cords are on separate circuits.

CAUTION: If the bypass switch is on and the two cords are plugged into the same circuit, the circuit 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.



### COBRA-300H 120V PARTS LIST

ITEM :	<u># PART #</u>	DESCRIPTION	ITEM		DESCRIPTION
#1	903	Drain Gate (see Misc.)*	#64A	495A	Power Cord, 25', Yellow
#2	21	Screw, Button Head, 10/32 X 5/8"	#65	918	Heat Sink Plate
#3	908	Latch	#66	(see Misc.)	Thermistor Control with Potentiometer **
#4	187	O-Ring, Small	#67	4	Bolt, 1/4-20 x 1"
#4A	190	O-Ring, Large	#68	HT-2	Holding Tank
#4B	185	Nut, 1-1/2"	#69	CWBLK	Cord Wrap, Black
#5	FP208	Vacuum Tank, Complete, Cobra	#70	203	Washer, Plastic
#6	907	Hose Barb, 1-1/2"	#71	260	Nut, Acorn, 3/16"
#7	922	PVC Elbow, 1-1/2"	#72	207A	Filter, Pump Inlet, 40 Mesh, S/S
#8	1074	Gasket (Machines made after 2-15-05)***	#72A	92B	Nipple, PVC, 1/2 N.P.T.
#9	2086	Lid and Ring (Machines made after 2-15-05)***	#73	901	Lid, Holding Tank
#9A	FP436	Chain and Hardware	#74	FP312	Switch, Bypass
#10	924	Float, Ball & Cage	#75	FP311	Switch, Carpet/Upholstery
#11	FP193	Ball Float Assembly, Complete	#76	FP311	Switch, Pump
#12	185	Nut, 1-1/2″	#77	FP311	Switch, Vacuum
#13	190	O-Ring, Large	#78 #70	78	Light, Green (small)
#14	922	PVC Elbow, 1-1/2"	#79 #00	28	Screw, #4 x 3/8"
#15	156	Hose Clamp, (size 28)	#80	2005E	Switch plate
#16	FP171	Hose, Vacuum, Rubber, 2" x 20"	#81 #82	210	Snubber, Pressure
#16A	FP171D	Hose, Vacuum, Rubber, 2" x 19"	#82 #82	944	Hose, Pulsation Dampening, 28"
#17	FP323	Vacuum Motor, 3-stage, w/Connectors	#83	97	Bushing, Brass
#18	7	Nut, jam, 5/16″	#84	223	Quick Disconnect, Male, 1/8" Pipe Thread
#19	15	Washer, flat	#85	168	"T", Brass
#20	194	Split Ring	#86	221	Quick Disconnect, Male, Open, 1/4 p.t.
#21	FP233	Chain, 13"	#87 #89	165	Hose Barb
#22	320AB	Nut, Finish, 5/16"	#88 #80	950 FP170A	Pump, Raw, See Misc.
#23	34	Washer, Split lock	#89 #01		Hose, Pump Inlet, 1/2" X 16"
#24	179	Bolt, 5/16 x 4"	#91 #92	166 211	Hose Clamp
#25	959	Gasket, Vacuum Motor	#92 #93	92A	Plug, Brass
#26	MA-6	Manifold, Vacuum	#93 #94	92A 2060	Nipple, 1/4 p.t., S/S Motor, for Pump (120V)
#27	931	Mounting Track, Circuit Board	#94 #95	2060	
#28	923B	Circuit Board, Dual Cord Sensor****	#95 #96	105	Mount Plate, Pump Motor
#29	FP220	Flange, Exhaust, w/Hose & Hardware	#90 #97	FP238	Reducer Nipple, Brass
#32	928	Louver, 3" (includes screws)	#97 #98	164	Bypass Valve, Complete for Cobra-300H Hose Barb
#33	909A	Latch Strike, for Latch, S/S	#90 #99	FP169E	Hose, 3/8" X 8"
#34	45	Quick Disconnect, 1/4 n.p.t.	#99 #100	208	Hose Barb, Brass 1/8 p.t. x 3/8 hose
#35	115	Washer, Fiber	#101	2062	Solenoid (without fittings)
#35A	116	Bushing, Fiber	<i>"</i> 101	FP230	Solenoid (with fittings)
#36	31	Washer, Brass	#102	FP169C	Hose, Pump Bypass, 3/8" X 18"
#37	5	Bolt, 1/4-20 x 3/4"	#103	SYP1	Priming Hose Assy
#38	2002	Castor, Swivel, 3"	// 100	5111	Thining Hose Assy
#39 #41	8 2001 D	Lock Nut, 1/4-20	MISCELLANEOUS ASSEMBLIES/PARTS		
#41 #42	2001B	Label Axle Cap, Black			
#42 #43	27A 2003	Wheel, 8"	*F	P231	Drain Gate Assembly, Complete (with
#43 #44	2003 910	Axle, 18-13/16"			o-rings & nut)
#44 #45	BS-6	Base, Cobra, Black	FP	167F	Pump Complete (NO motor, solenoid, or
#46	FP439	Gasket, Cobra Base		0405	hoses)
#47	92A	Nipple, S/S, 1/4 p.t.	FP	212B	Pump & Motor Complete (NO solenoid,
#48	91	Elbow, Brass			mount bracket, mount bracket or hoses)
#49	2023A	Hose Assembly, Heater Outlet, 29-1/2"		950	Cam/Bearing Assembly
#50	FP159D	Heat Exchanger, Complete		291	Bypass Valve Rebuild Kit
#51	455	Mount, Heat Exchanger		229	Valve/O-Ring Kit, for 300 PSI pump
#52	76	Hose Clamp		250	Piston/Seal Kit, for 300 PSI pump
#53	103	Elbow, 1/8 f.p.t. x 1/8 m.p.t.	F	P194A	Thermistor Control Kit with Potentiometer &
#54	224	Hose Assembly, 8"	**□	D1040	Probe & Circuit Board
#55	222	Quick Disconnect, Female, Open, 1/8 p.t.	^^F	P194C	Thermistor Control Kit with Potentiometer, Probe
#56	951	Pressure Gauge, 2-1/2"	***		& Thermal Cutout & Circuit Board
#57	219	Quick Disconnect, Male, 1/4 p.t.		FP201	Dome, Vacuum (Machines made before 2-15-05)
#58	222	Quick Disconnect, Female, Open, 1/8 p.t.		2009	Gasket for Dome (Machines made before 2-15-05)
#59	2B1	Screw, 6/32 x 2-1/4"	^^ <b>^</b> F	P2008	Dome & Gasket Complete (Machines made
#60	2015	Guard, Fan	* * 1	*000	before 2-15-05) Circuit Board, Dual Card Sansar (Mashinas mada
#61	2013	Fan, Cooling	~ * 7	* * 923	Circuit Board, Dual Cord Sensor (Machines made
#62	16	Locknut, 6/32"			before 7-21-05)
#63	937	Reducer, PVC	/R	OTE: Home	in kits not sold sonaratoly)
#64	184	Cord Retainer	(N	JE. Rems	in kits not sold separately.)

#### **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 DOEN'T RUN	No power to pump. Test the switch. Test the motor directly to AC power.
LOW SUCTION	Debris plugging cleaning tool or vacuum hose. Drain gate is not completely closed, or seals are damaged. Vacuum lid is not closed tight.
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, larger diameter hose, or larger spray tip), 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 power cord for 'opens'. No power out of bypass switch, follow troubleshooting steps to isolate the problem. Call your distributor for additional help.

#### **SPECIFICATIONS:**

Rotomolded Body:	Lifetime Warranty
Vacuum:	One, 3-stage, 7.2"
VAC Shutoff:	Ball float
Pump:	Positive displacement, 300 psi carpet, 75 psi upholstery
Waterlift:	140″
Heat:	212° F
Heater:	2000 Watts
Wand:	Stainless steel, double bend, twin tip
Weight:	99 lbs.
Dimensions:	26.5H x 18W x 28.75L (inches)



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