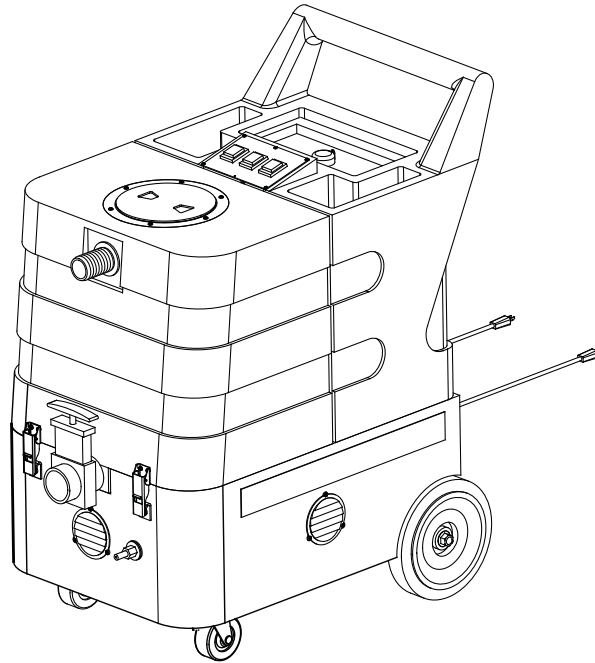


U.S. PRODUCTS

COBRA[®]-H2

OPERATOR'S MANUAL



**DO NOT OPERATE THE MACHINE UNTIL YOU HAVE READ THIS SECTION.
IMPROPER USE WILL VOID THE WARRANTY.**

- Always use a defoamer when foaming occurs to prevent vacuum motor damage.
- Never use water above 130° F (54°C).
- Do not use outdoors or where temperature is below freezing. Protect your machine from any extremes in temperatures.
- Do not let the pump run dry. Turn the pump off and refill the tank when cleaning solution gets low.
- Flush the machine with an acid de-scaler regularly (monthly or more often) to prevent a build-up of minerals or chemicals in the pump and heat systems. Follow the flush with a clear water rinse to remove any particles and to rinse the acid from the machine.
- Use approved chemicals only. All chemicals should be mixed thoroughly. Liquid chemicals are recommended to prevent powder buildups. A pH between 6 and 9 is recommended. The use of high alkaline detergents or strong acids will accelerate the wear of the pump and seals, and will void the warranty.
- All extension cords must have a rating of at least 12/3 (#12 cord). Extension cords should be no longer than 50 feet. Replace the plug immediately if the ground prong becomes damaged or is broken off.

INTRODUCTION

This manual will help you get the most from your COBRA-H2 Extractor. Read these instructions thoroughly before operating the machine. This product is intended for commercial use only.

UNCRATING

When the machine is delivered, carefully inspect the shipping carton and the machine for damage. If damage is evident, save the shipping carton so that it can be inspected. Contact the shipping company immediately for instructions on how to file a freight damage claim.

SERIAL NUMBER PLATE

The Serial Number of your machine is shown on the plate that is mounted on the floor of the base compartment. This serial number and model are needed when ordering replacement parts for the machine. Use the space below to note the Model and Serial Number of your machine for future reference.

MODEL : COBRA-H2

SERIAL No: _____

PARTS AND SERVICE

Call the distributor from whom you purchased your machine when you need parts or service. Please specify the Model and Serial Number when discussing your machine.

DISTRIBUTOR NAME AND PHONE No. _____

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.
- 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.
- Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.
- Do not handle the plug, the cord or the machine with wet hands.
- 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.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Connect to a properly grounded outlet only. See Grounding Instructions.
- Liquid ejected at the spray nozzle could be dangerous as a result of its temperature, pressure, or chemical content.

120VAC GROUNDING INSTRUCTIONS

This machine must be grounded. If it should electrically malfunction, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER!

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

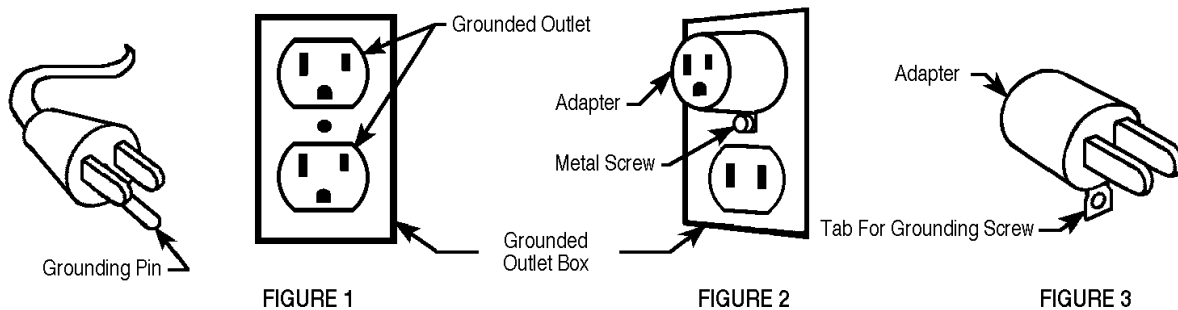
This appliance is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in Figure 1 below. A temporary adapter illustrated in Figures 2 and 3 may be used to connect this plug to a 2-pole receptacle as shown in Figure 2 if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet (Figure 1) can be installed by a qualified electrician. The green-colored rigid ear, tab, or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw. Grounding adapters are not approved for use in Canada.

Replace the plug if the grounding pin is damaged or broken.

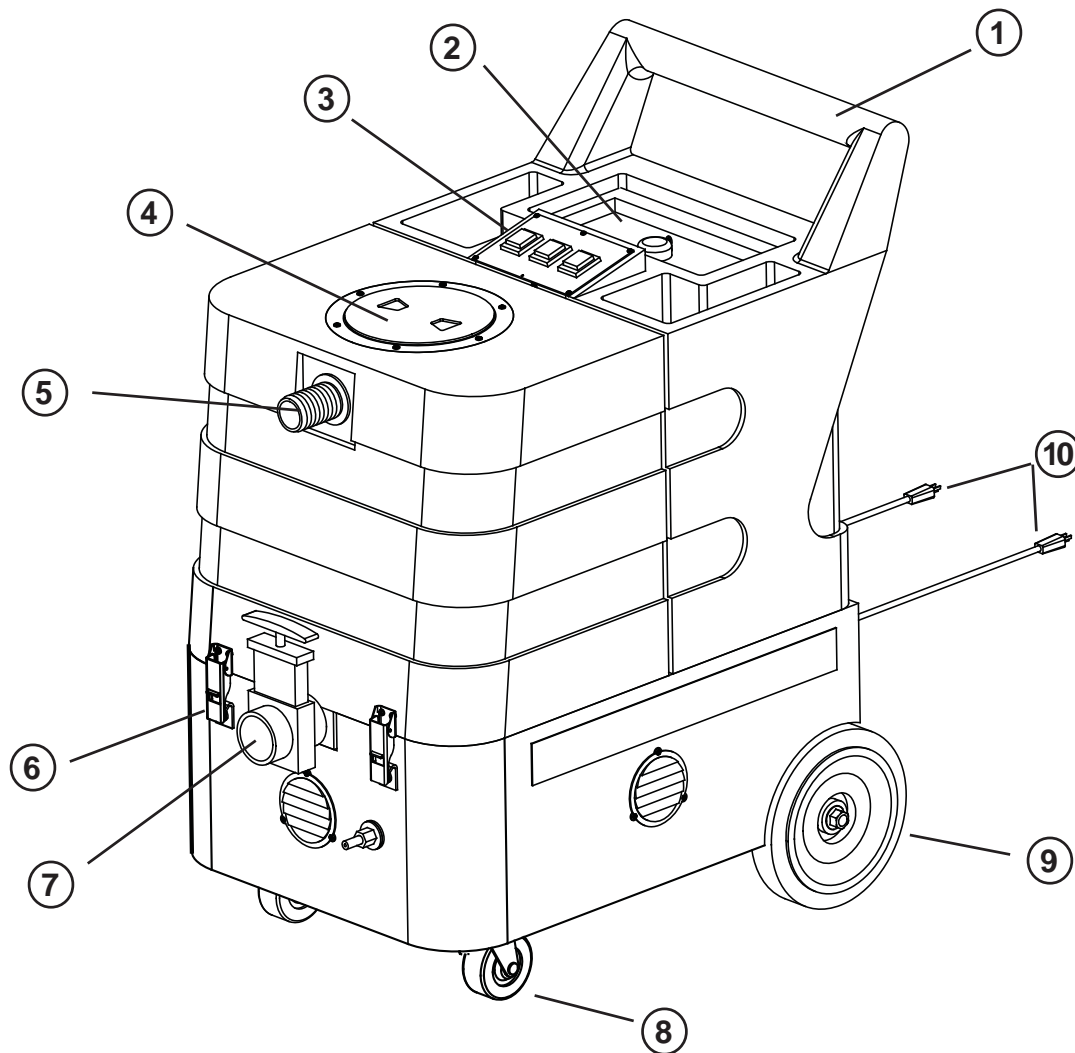
The Green (or Green/Yellow) wire in the cord is the grounding wire. When replacing a plug, this wire must be attached to the grounding pin only.

Extension cords connected to this machine should be 12 gauge, three-wire cords with three-prong plugs and outlets. DO NOT use extension cords more than 50 feet (15 m) long.

PLEASE NOTE: FOR NORTH AMERICA ONLY



BECOME FAMILAR WITH YOUR NEW EXTRACTOR



MACHINE DESCRIPTIONS

Operator Handle (1) - Operator holds this to move the machine from one location to another.

Solution Tank Lid (2) - Fill Solution Tank here with warm water and chemicals.

Switch Plate (3) - This is where the switches are located that operate the pump, vacuum and heater.

Recovery Tank Lid (4) - The Recovery Tank can be flushed out by running clean water into this opening with the Drain Gate (7) open. The vacuum float Shut-OFF can also be accessed through this opening for maintenance.

Vacuum Inlet (5) - This is where the vacuum hose attaches to the machine.

Latch (6) - Open the latches to access the base compartment, which contains the motors and heater.

Drain Gate (7) - Open this gate to drain the recovered solution out of the machine. Be sure to keep this gate clean.

Castor (8) - The castor swivels for easy maneuvering in tight spots.

Wheel (9) - Large, non-marking wheels for ease of transport.

Power Cords (10) - Two, 25 foot cords, rated 12 gauge, 3 wire. Do not use if either cord is damaged. The cord with the red "H" at the retainer is the cord that operates the heat. The other cord powers the vacuum, pump, and cooling fan.

SET-UP and OPERATION

- 1 Inspect the machine, hoses, and cleaning tools for cleanliness and completeness.
- 2 Fill the Solution Tank with warm water. Using warm water may be a benefit in cleaning effectiveness, but do not use hot water (above 130° F+ / 54°C) in the tank. Add liquid cleaning solution with a pH value of between 5 and 10. High pH detergents and/or acid rinses will accelerate the wear of the seals and will void the warranty.
- 3 Plug in the power cords. Do not connect both cords to the same outlet. If you are certain the cords are on separate circuits, turn the Heat switch on. **CAUTION:** using the Heat switch when the cords are on the same circuit may cause the circuit breaker in the wall to trip. **NOTE:** the cord with the red label "H" at the cord retainer supplies power to the heater. The other cord powers the vacuum, pump, and cooling fan.
- 4 Attach the spray hose to the solution quick disconnect on the front of the machine and attach the vacuum hose to the hose barb on the recovery tank. Attach the other ends of the hoses to the cleaning tool.
- 5 Allow the heat exchanger two minutes to reach operating temperature.
- 6 Turn the pump on. Turn the vacuum on. **NOTE:** the pump has a built in pressure switch; the pump runs only when you are spraying.
- 7 Begin cleaning using the correct hoses and tool.
- 8 Use defoamer in the recovery tank any time foaming occurs.
- 9 Monitor the water level in the solution tank. Do not let the pump run dry.
- 10 When the solution tank gets low, turn off the pump, fill the solution tank, empty and clean the recovery tank.
- 11 When finished with the job, remove any unused solution from the solution tank, and run a few gallons of clean water through the system to rinse out any detergent.

BALL FLOAT VACUUM SHUT-OFF

Prior to using the machine, always check that the float filter is clean and the ball can travel freely. When the recovery tank is full, the ball float will rise and will shut off the vacuum flow to prevent any more water from entering the tank. Turn off the vacuum, and empty the recovery tank.

NOTE: if foam is present or if the ball float is prevented from rising, the float will not be able to stop the air flow, and the tank may over fill.



CAUTION!

To avoid vacuum motor damage, always make sure the float filter is clean and the ball can travel freely prior to using the machine. And always use a defoamer when foaming occurs.

MAINTENANCE

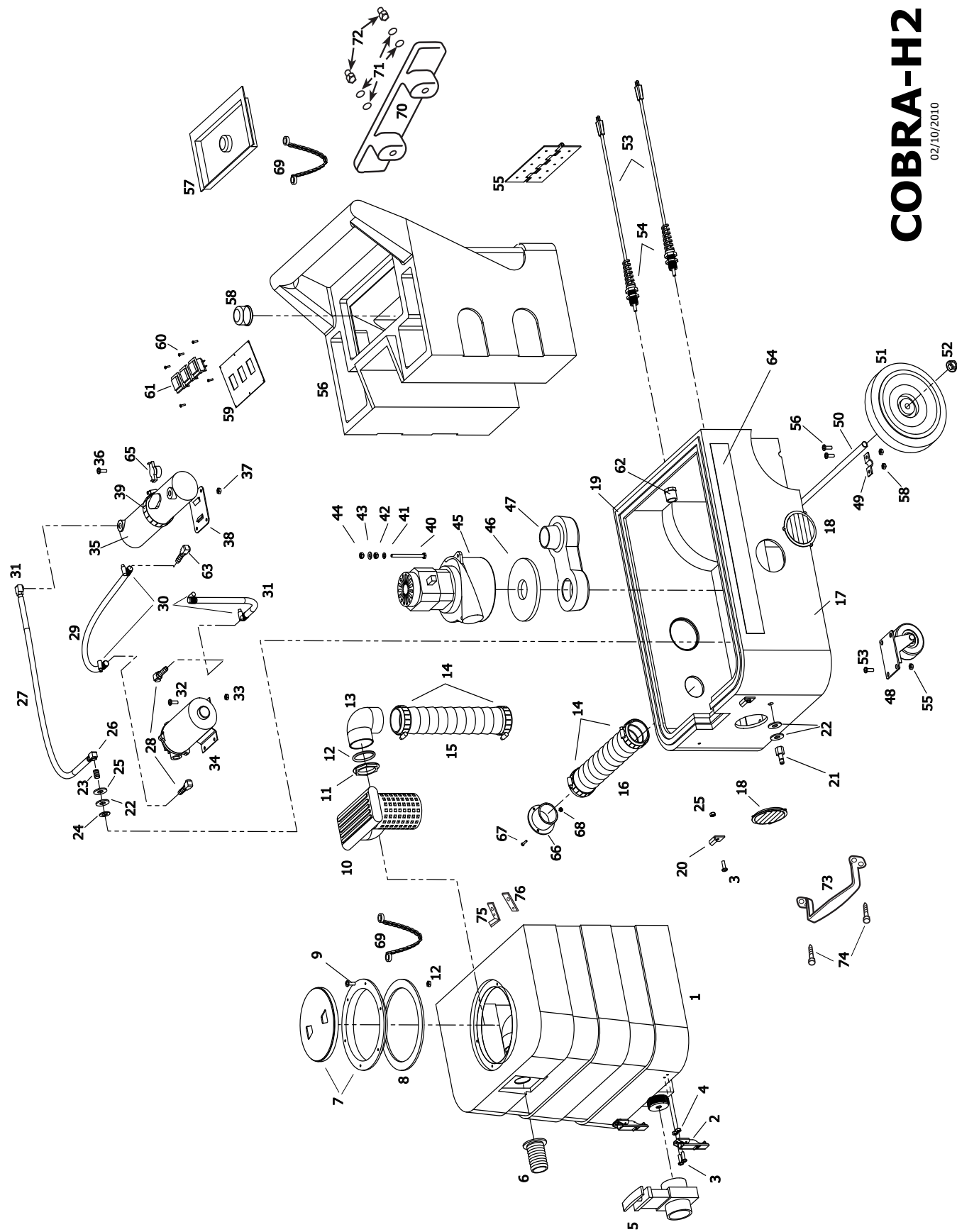
	Daily	Monthly	Yearly
FLUSH LINES & PUMP	X		
CLEAN VACUUM FLOAT FILTER	X		
CLEAN SOLUTION FILTER	X		
CHECK INLET AIRWAYS	X		
DESCALE MACHINE		X	
CHECK VACUUM MOTOR BRUSHES			X

TROUBLESHOOTING

IF PROBLEM OCCURS CHECK THIS

NO SPRAY	Solution tank is empty Clogged spray tip Pump not running Valve on tool not operating
PUMP DOESN'T RUN	Solution path is clogged. Pump only runs when spraying occurs Solution tank may be empty, or nearly empty No power to pump. Test the switch. Test the pump motor.
PUMP PULSATES	Partially clogged solution path (hose, heater, tool) Worn pressure switch in pump. Adjust pressure sensor in pump head.
LOW SUCTION	Debris plugging cleaning tool or vacuum hose Drain gate is not completely closed, or seals are damaged Internal vacuum hose is cracked Recovery tank lid is not closed, is cracked or gasket is damaged Recovery tank is warped or cracked Debris impeding air movement on vac motor impellers
NO SUCTION	No power to motor. Test the switch. Test the vacuum motor.
LOW HEAT	Trying to spray 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 switch is off No power in the wall outlet — check to see if breaker has tripped No power to heat switch — check power cord for 'opens' No power out of heat switch. Check power at Bi-metalic switch Follow troubleshooting steps to isolate the problem. Call your distributor.

If you are unable to diagnose the problem, contact the company from which you purchased your Cobra-H2



COBRA-H2

02/10/2010

COBRA-H2 EXTRACTOR 120V

PART LIST

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	VT-26	Recovery Tank	41	137	Washer, split lock
2	908	Latch	42	136	Nut, finish, 1/4
3	21C	Screw, 8-32 X 5/8"	43	14	Washer, flat
4	325	Locknut, 8-21	44	17	Locknut, 10-32
5	903D	Drain Gate, female threads	45	408B	Vacuum moto
6	907	Vacuum Inlet Hose Barb, 1-1/2"	46	2013	Gasket, vacuum motor
7	2086A	Lid, with ring	47	MA-6	Manifold
8	1074	Gasket	48	2002	Castor, 3"
9	382C	Screw, 8-32 X 1"	49	180	Bracket, axle mount
10	FP193	Ball Float, with manifold	50	910-16.93	Axle
11	185	Nut, aluminum, 1-1/2"	51	2003	Wheel, 8"
12	187B	Washer, rubber	52	27A	Axle Cap, wheel retaining
13	922	PVC Elbow	53	495A	Power cord, 12/3, 25 ft
14	156	Hose Clamp	54	184	Cord Retainer
15	430E	Hose, 2" X 25", ribbed	55	917	Hinge
16	430B	Hose, ribbed, 22" long	56	HT-23	Holding Tank
17	BS-6-1	Base compartment, black	57	901	Lid, solution tank cover
18	928	Louver, includes 3 screws	58	207A	Filter, pump inlet
19	FP228	Gasket	59	2006B	Switch plate
20	909A	Latch strike	60	28	Screw, #4 X 3/8"
21	45	Quick Disconnect, 1/4 n.p.t.	61	FP578	Switch, SPDT, with cover
22	115	Washer, fiber	62	937	Reducer, PVC
23	92A	Nipple, 1/4 n.p.t.	63	208	Hose barb
24	116A	Bushing, fiber	64	2001	Label
25	31	Washer, brass	65	399	Heat sensor & switch
26	91	Elbow, brass, 1/4 n.p.t.	66	440	Flange, exhaust
27	2012	Hose, 27"	67	22	Bolt, 10-32 X 5/8"
28	108A	Elbow / Hose barb	68	17	Locknut, 10-32
29	925	Hose, pump to heater, 3/8" x 48"	69	FP436	Chain, for lid
30	166	Hose Clamp	70	CWBLK	Cord Wrap
31	925	Hose, pump inlet, 3/8" X13"	71	203	Washer, plastic
32	138	Bolt, 1/4-20 X 1-1/4"	72	260	Nut, accorn
33	8	Locknut, 1/4	73	2010A	Handle, lift
34	2066	Pump, 150 psi	74	193	Bolt
35	FP511	Heat Exchanger, complete	75	4404B	Tank mate bar, with lip
36	5	Bolt, 1/4-20 X 3/4"	76	4404C	Tank mate bar
37	8	Lock nut, 1/4 -20			
38	455	Bracket, heater mount			
39	198	Hose Clamp			
40	270	Bolt, 1/4-20 X 5"			

MISCELLANEOUS PARTS / KITS

FP256B Heat repair kit, includes heat/temp. switch and cutout.



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