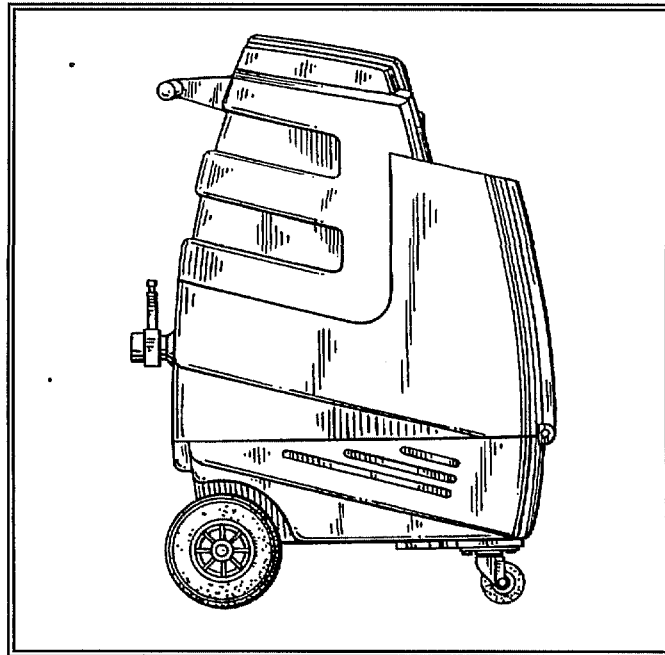


# PRODUCT MANUAL

## ***CARPET SCOUT*** *and* ***SEAHAWK***

*12 Gallon Extractors*



**ISSA** MEMBER  
The Experts  
on Cleaning and Maintenance

**CLEAN  
MASTER**  
CORPORATION

# SCOUT and SEAHAWK

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Machine Serial Number \_\_\_\_\_

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CLEANMASTER® Corporation  
Lynnwood, Washington

182-401

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Revised July 2, 1996

# *Machine Specifications*

	<b>Scout</b>	<b>Seahawk</b>	
<b>Solution Tank Size:</b>	12 gallons	12 gallons	
<b>Recovery Tank Size:</b>	11 gallons	11 gallons	
<b>Vacuum Motor:</b>	Two 2-stage 1 <sup>5</sup> / <sub>8</sub> HP 150" lift at 115 v	Two 3-stage 1 <sup>5</sup> / <sub>8</sub> HP 180" Lift at 115 v, 200 CFM	
<b>Solution Pump:</b>	100 PSI Diaphragm Pump	250 PSI Diaphragm Pump #1 #2	
<b>Circuitry:</b>	115 volts 50/60 hertz 15 amps 1725 watts	115 volts 50/60 hertz 14 amps 1610 watts	115 volts 50/60 hertz 10 amps 1150 watts
<b>Construction:</b>	Durable Rotationally-Molded Plastic Body, Hinged for Easy Access Two 8" diameter x 1 1/2" w Rear Wheels, Rigid-Mounted on Axle Two 3" diameter x 1 1/2" w Front Wheels with Swivel Caster		

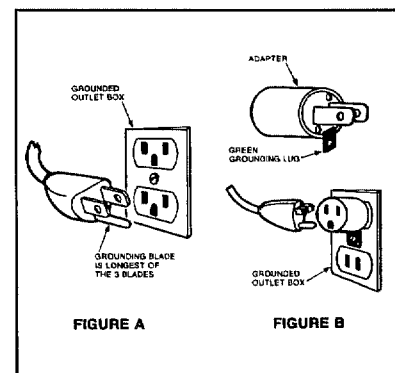
## Precautions

1. To avoid hazardous conditions, do not use your machine in areas where flammable and/or explosive vapors or dust are present.
2. Connect only to a grounded (3 wire) outlet. See illustration below.
3. **WARNING:** To reduce risk of electrical shock, use equipment indoors or contained within a vehicle (i.e. service van). Do not expose to weather.
4. Grounding Instructions:

The Scout and Seahawk should be grounded while in use to protect the operator from electrical shock. The power cords are equipped with suitable three conductor plugs. If grounded outlets are not available, use three way adapters (see Figure B). The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the grounding blade to a live terminal. Your terminal is designed to be used on less than 150 volts and has plugs resembling the one shown in Figure A. A grounding adapter is available locally for connecting plugs to 2-prong receptacles. The green (or green and yellow) right lug extending from the adapter must be connected to a properly grounded outlet.

**NOTE:** Use of extension cords is *NOT* recommended and may *VOID* the warranty. Replace or repair damaged cords.

5. Always disconnect the machine from the electrical outlet before servicing.
6. Water heaters, when required, should be installed in-line, downstream of this unit. Damage to pumps will occur if water temperature exceeds 160 degrees.
7. Empty entire machine of water before trying to lift.
8. Do not allow recovery tank to overfill with liquid or foam. If foam occurs, a defoamer should be used.



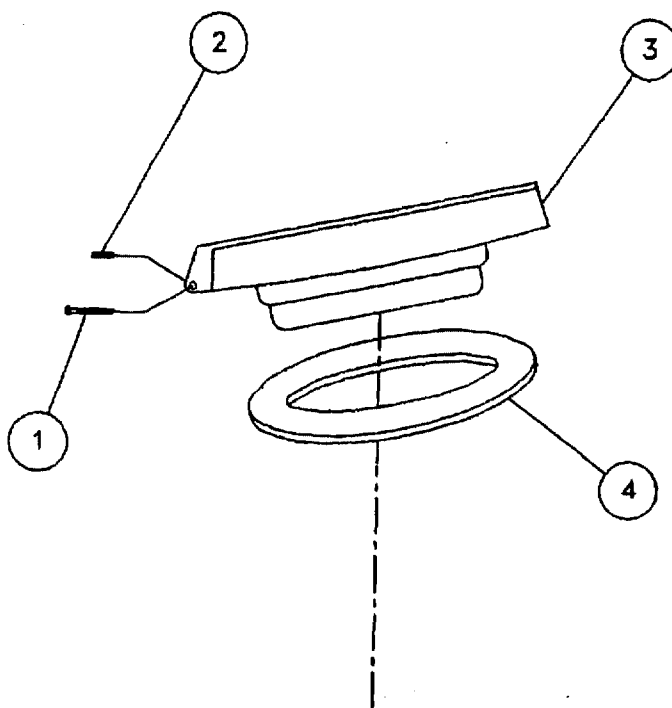
9. After each use of the machine, rinse out and empty the recovery tank. Then, with the recovery lid open and the vacuum hose off, run the vacuum motor to allow to dry.
10. When adding a heater to the Scout, the solution hose must be upgraded to a higher temperature hose.

## *Operation*

1. Remove the power cord and solution hose from the solution tank.
2. Check to be sure the Empty slide valve is closed.
3. Fill the solution side of the tank with warm water (not to exceed 160° F).
4. Put in the proper amount of cleaning solution for ten gallons of water.  
**CAUTION:** Only non-foaming cleaning solutions can be used and **absolutely no harsh solvents or petroleum products**. They will decrease the life of rubber gaskets, diaphragms and seals.
5. Close the recovery tank lid.
6. Hook up both the solution hose and the vacuum flex hose to their appropriate connections. Connect the other end to cleaning wand or tool.
7. Turn on the solution pump and depress the water valve on the wand until all air is pumped out of the system, and the pump is primed. Turn on the vacuum.
8. **For carpet:**  
Place the wand on the carpet. Depress the water valve and draw the wand back toward the operator at a moderate rate for about an arm's length at a time. Move the wand to the right or left, slightly overlapping until you cover a five foot square floor area. For further moisture recovery, the cleaned area may be vacuumed a second time without using spray solution.  
**Note:** At the first sign of foam in the recovery tank, a defoamer should be used.  
  
**For upholstery:**  
Place tool on upholstery. Depress the water valve and draw the tool back toward the operator at a moderate rate for about an arm's length at a time. Move the tool to the right or left, slightly overlapping until you cover the soiled area. For further moisture recovery, the cleaned area may be vacuumed a second time without using spray solution.  
**Note:** At the first sign of foam in the recovery tank, a defoamer should be used.
9. Repeat Step 8 until the solution tank is empty or until the job is completed.

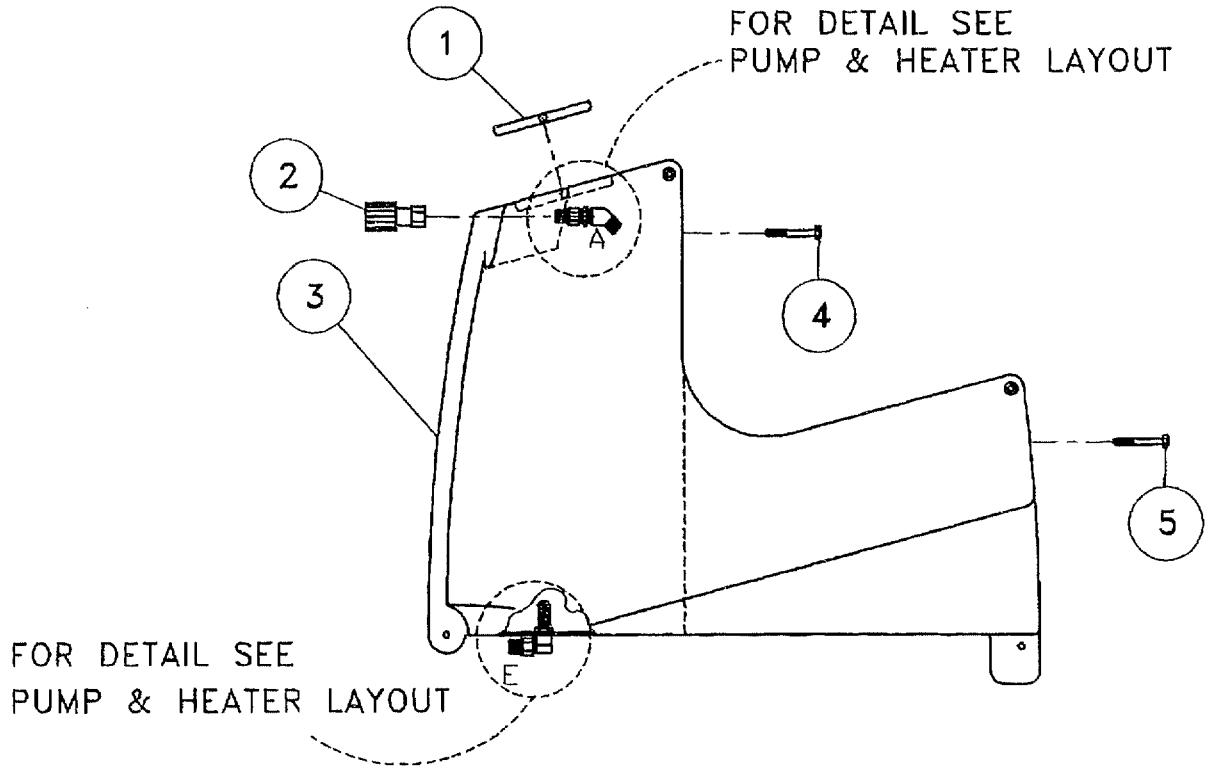
*Machine Parts*

**Vacuum Lid**



ITEM	PART NO	DESCRIPTION	QTY
1	H245	8-32 Stud (lid) x 1"	1
2	H208	8-32 x 1 ½ Socket Head	1
3	P704	Lid	1
4	G005	Lid Gasket	1

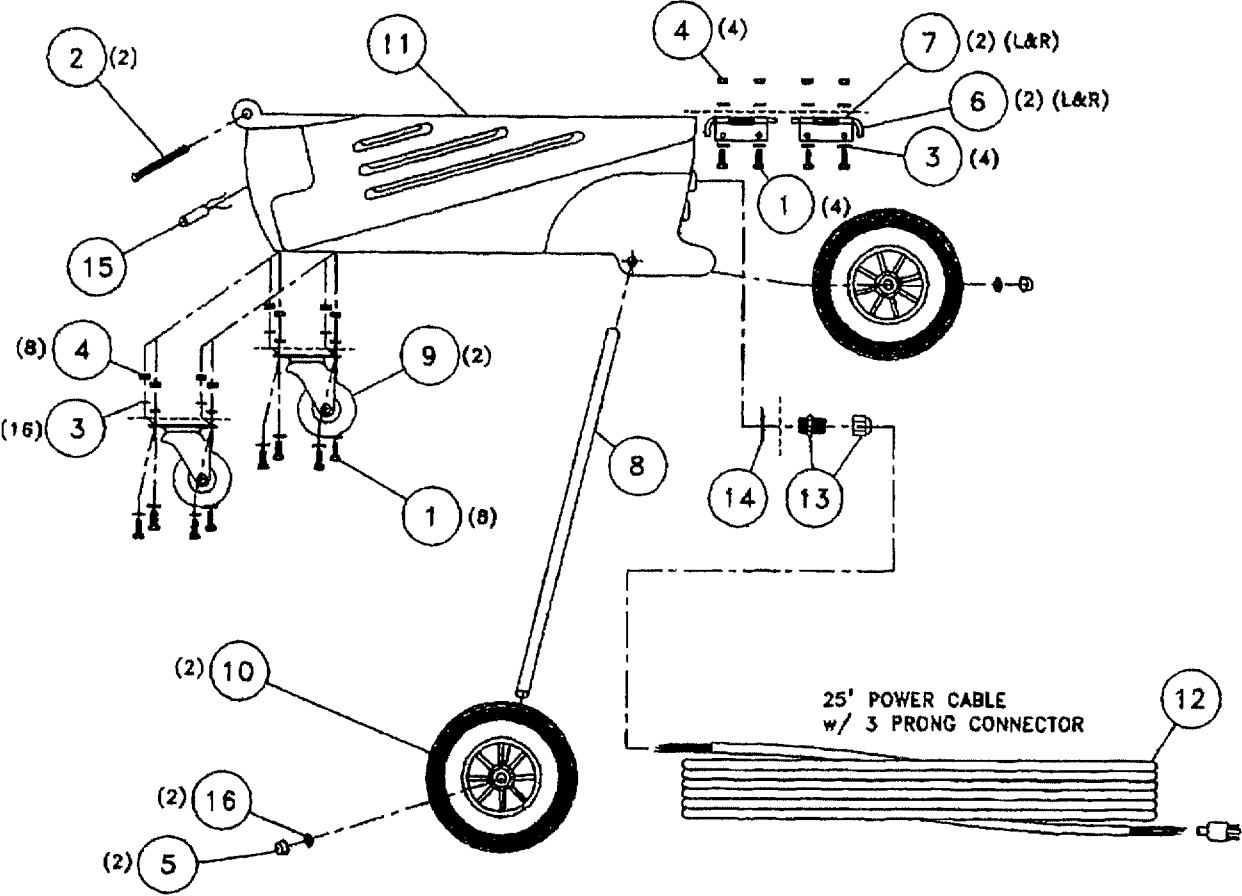
## Solution Tank



ITEM	PART NO	DESCRIPTION	QTY
1	P713	Lid (Solution Tank)	1
2	B101	¼ Male QD	1
3	P702	Solution Tank	1
4	H203	¼ - 20 x 1 ½ Bolt s/s	2
5	H204	¼ - 20 x 1 ¾ Bolt	2



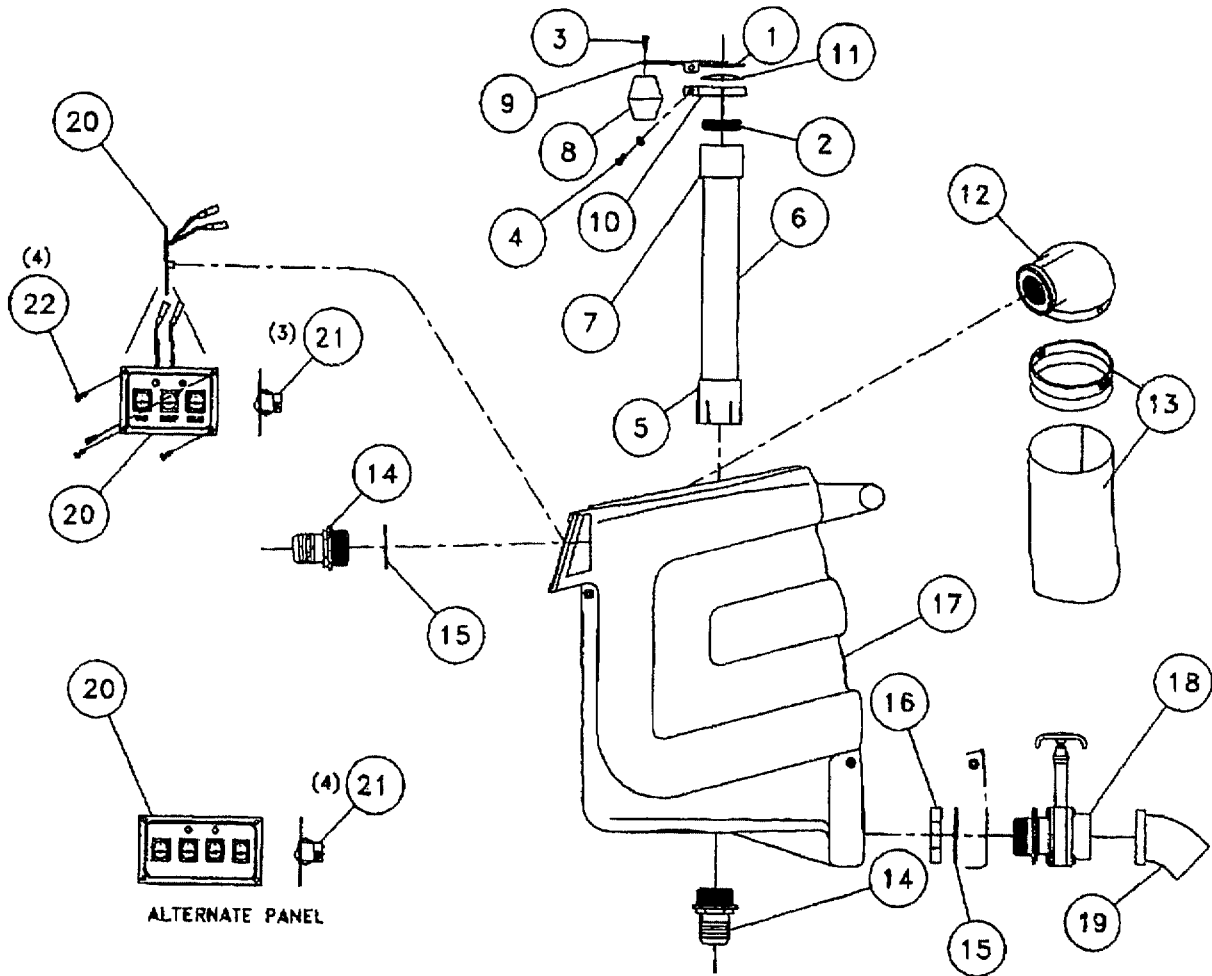
## Base



## Base Parts

ITEM	PART NO	DESCRIPTION	QTY
1	H202	¼ - 20 x ¾" Bolt	12
2	H205	5/16 18 3" Blk Bolt	2
3	H210	¼ Flat Washer	24
4	H216	¼ - 20 Locknut	12
5	H219	Axle Caps	2
6	H222	Rubber Sleeve Hinge Pins	2
7	H223	Hinge Pin Set	1
8	H224	Axle	1
9	H238	3" Castors	2
10	H239	8" Wheels	2
11	P701	Base	1
12	E534	30' 16/3 Gray	1
13	H220	Strain Relief	1
14	H221	Locknut	1
15	E512	Indicator Light	1
16	H212	9/16" ID x 1 ½" OD F.W.	4

## Vacuum Tank

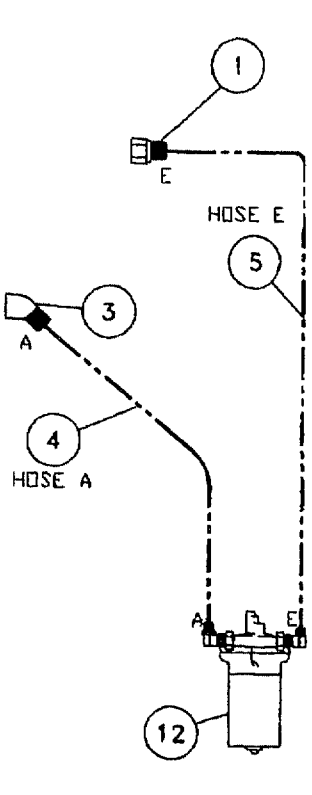


## Vacuum Tank Parts

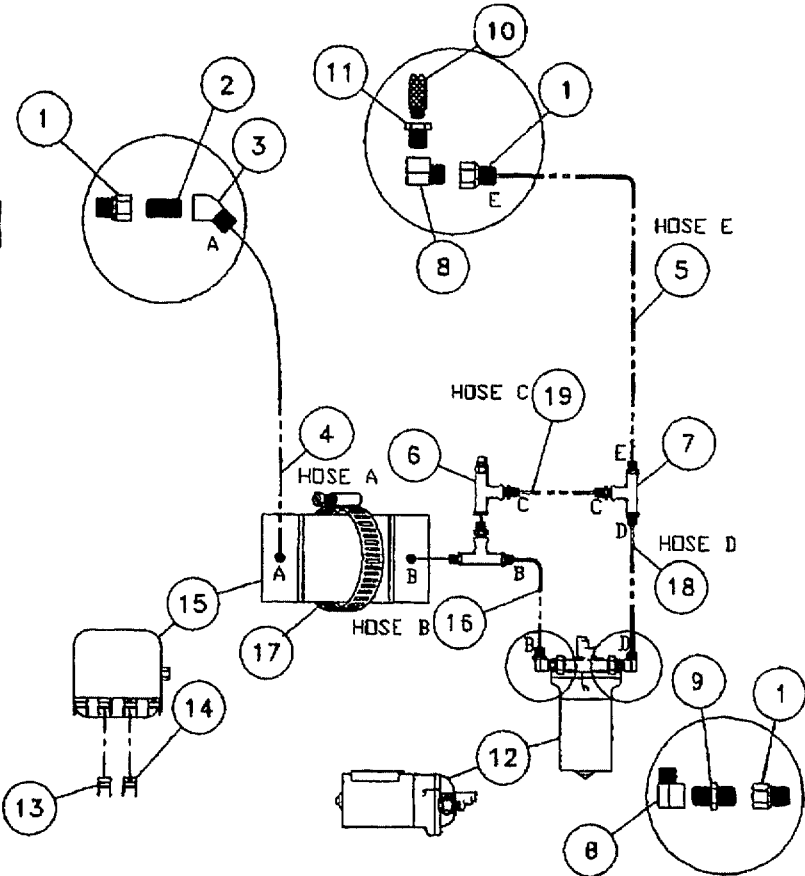
ITEM	PART NO	DESCRIPTION	QTY
1	G002	Float Flapper	1
2	G003	1.88 Filter Foam	1
3	H230	10 - 32 1/2" Screw	1
4	H231	10 - 32 1 Screw	1
5	H244	PVC FM.S x FM.T	1
6	H227	1 1/2" PVC Pipe 12 1/2"	1
7	H234	1 1/2 ABS Sleeve	1
8	H235	Float	1
9	H236	Lever Float	1
10	H237	Clamping Ring	1
11	PH622	Metal Screen	1
12	H243	PVC Elbow	1
13	P714	Blue Elbow	0
14	H229	1 1/2 M.T. x M.S. Inlet	2
15	G001	Thin Rubber Gasket	2
16	H228	1 1/2 Steel Locknut	1
17	P703	Vacuum Tank	1
18	H225	1 1/2 Drain Valve	2
19	H226	45° Drain Spout	1
20	E525	Four Hole Switch Plate	1
21	E501	Waterproof Switches	3
22	H246	8 - 32 x 3/8" Socket Head	4

## Pump and Heater Mounted in Chassis

Without Heater



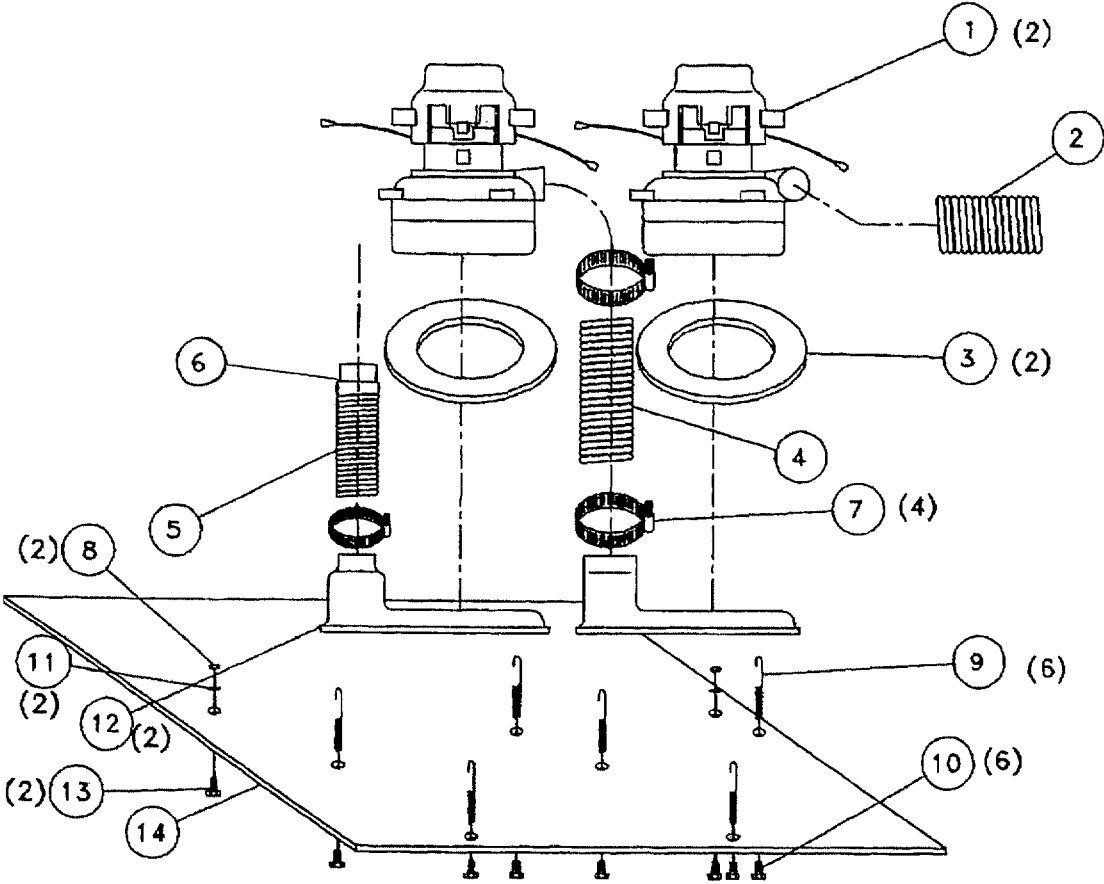
With Heater



## Pump and Heater Parts

ITEM	PART NO	DESCRIPTION	QTY
1	B111	¼ Extender Adapter	3
2	B106	¼ Close Nipple	1
3	B130	45° ¼ x ¼ M	1
4	A910	18" H.P. Hose	1
5	A912	23" H.P. Hose	2
6	B118	Relief Valve	1
7	B113	¼ Tee	1
8	B103	90° ¼" x ¼ M	4
9	B107	¼ Hex Nipple	3
10	B119	Filter Strainer	1
11	B104	⅛ x ¼ Bushing	1
12	C305	100 PSI Pump, 115 Volts	1
	C306	100 PSI Pump, 230 Volts	
13	E526	192° Thermostat (Automatic)	0
14	E527	275° Thermostat (Manual)	0
15	H273	Heater Casting	0
16	A909	7" H.P. Hose	0
17	H272	Heater Clamp, 6½"	0
18	A911	14" H.P. Hose	0

Vacuum Motors

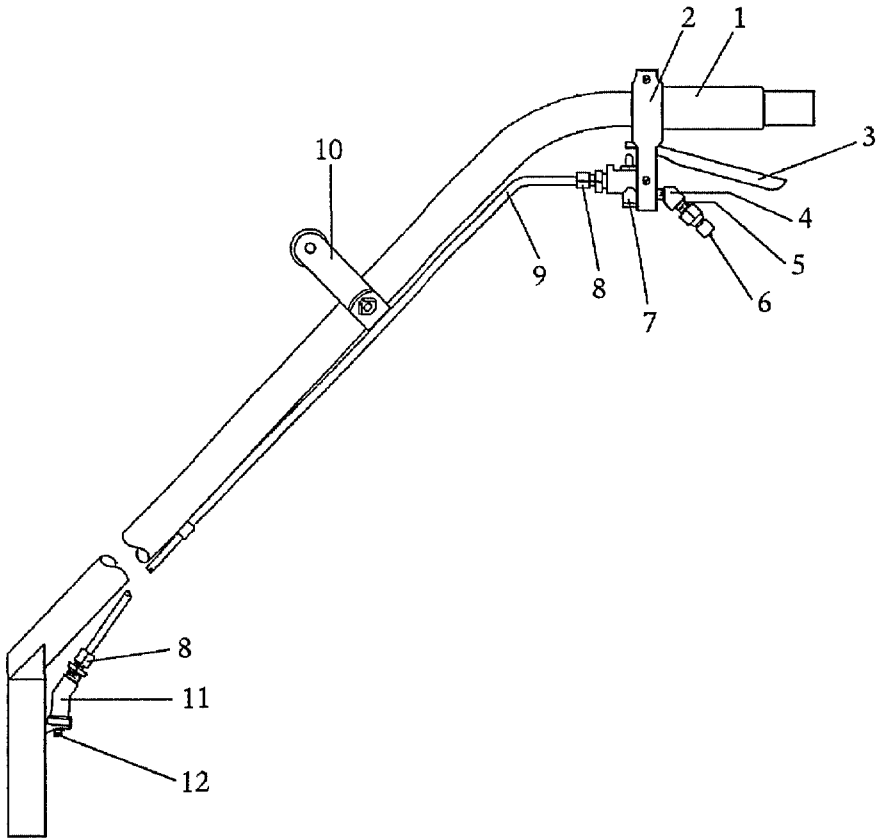


## Vacuum Motor Parts

ITEM	PART NO	DESCRIPTION	QTY
1	C301	Two Stage Vacuum Motor, 115 Volts	2
	C303	Two Stage Vacuum Motor, 230 Volts	
2	H248	2" Vacuum Hose, 4"	1
3	G004	Vacuum Gasket	4
4	H249	2" Vacuum Hose, 9"	1
5	H247	1 ½" Vacuum Hose, 20"	1
6	PH629	Blk Hose Cuff	1
7	H217	Hose Clamps	3
8	H216	¼ - 20 Locknut	2
9	H218	Springs	6
10	H201	¼ - 20 x ½ Bolts	6
11	H210	¼ Flat Washer	4
12	P705	Manifold	2
13	H202	¼ - 20 x ¾" Bolt	2
14	H253	Vacuum Mounting Plate	1



*Seahawk* **Cleaning Wand Parts**



## Wand Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	061-007	Handle Grip	1
2	015-203	Bracket, Low Pressure Wand Valve Holder	1
3	167-018	Trigger, Wand Low PSI	1
4	052-082	Elbow, ¼" Brass 45 Street	1
5	052-072	Nipple, ¼ Brass Close	1
6	052-050	Quick Connect, 440 Male with Viton	1
7	169-074	Valve, High PSI Brass	1
8	052-152	Compression, ¼" Male HydraHoe Fitting	2
9	168-001	Tube, HydraHoe Solution ¼" OD s/s	1
10	061-024	Handle Kit, Wand - Pressure Guide (see below)	1
11	052-450	Elbow, For Jet Assembly Wands	1
12	076-004	Jet, #11004 ¼" VV s/s	1
Handle Assembly (Item #10):			
	094-035	Nut, 5/16-18 s/s Nylock Half	2
	143-012	Bolt, 5/16-18 x ¾" HHC s/s	2
	061-006	Handle, Pressure Guide	1

## *Maintenance*

Depending upon the frequency of use, the Pump/Spray/Heater system of your Scout or Seahawk should be cleaned with a solution of two gallons of water and one quart of white vinegar, or an anti-browning solution mixed according to the manufacturer's directions. This will prevent a buildup of alkaline deposits in the pump and spray jet of your floor wand.

1. Make sure that all excess cleaning solution has been drained from the solution tank.
  2. Add water and vinegar or anti-browning solution.
  3. Attach the solution hose and wand. Turn on the pump and the heater.
  4. Allow the water and vinegar or anti-browning solution to circulate through the pump, heater, solution hose and floor wand. (Make sure that you are in an appropriate area for this operation.)
  5. As soon as it is apparent that the solution (not residual water or cleaning chemicals) is being sprayed out of the jets, turn off the pump and allow the unit to sit for approximately five minutes to allow any alkaline residues to dissolve.
  6. Empty the solution through the wand.
  7. Rinse the system with one gallon of clear water by pumping through the wand.
- NOTE:** If your machine is used on a daily basis or several times each week you should follow the above procedure every two to four weeks. If the unit is used once per month or less frequently.

**CAUTION:** When a portable in-line water heater is in use, always use approved high temperature hose. This hose connects the machine's pump to the cold water inlet of the heater and the hot water outlet of the heater to the wand. This hose, so connected, increases the life of the pumps.

At least once each month inspect all of the vacuum hoses, filters and electrical cords for cracking or fraying. Defective parts should be repaired or replaced.

At least every week apply silicone lubricate to all pressure fittings.

## *Troubleshooting Guide*

No	Problem / Possible Cause	Solution
<b>1</b>	<b>Vacuum power is weak.</b>	
1.1	Lint on top of the automatic shut-off screen in the recovery tank.	Remove any lint.
1.2	The vacuum hoses are not securely attached.	Push the vacuum hose cuff further onto the extractor hose connector.
1.3	The slide dump valve is open.	Close the valve securely.
1.4	The flex hose is clogged or broken.	Check and/or replace the hose.

No	Problem / Possible Cause	Solution
<b>2</b>	<b>Vacuum motor is not running.</b>	
2.1	The circuit breakers are tripped.	Locate a heavier circuit or reduce the load.
2.2	The electrical connections are not secure.	Recheck all of the electrical connections.
2.3	A switch is burned out.	Remove and replace the switch.
2.4	Field armature is shorted out.	Remove and replace the motor.
2.5	The motor is burned out.	Remove and replace the motor.

No	Problem / Possible Cause	Solution
<b>3</b>	<b>Water is blowing out of the vacuum discharge.</b>	
3.1	The recovery tank automatic shut-off is not operating properly.	Check for proper water level in the float. Clean the filter.
3.2	The water level is high.	Reduce the water level in the vacuum tank.
3.3	The foam level is high.	Add defoamer to the solution tank.

No	Problem / Possible Cause	Solution
<b>4</b>	<b>The diaphragm pump is not priming.</b>	
4.1	The suction hose is loose.	Tighten the hose clamp.
4.2	The suction hose filter is clogged.	Clean the filter.
4.3	The front screws on the pump are unevenly tightened.	Retighten the screws uniformly.
4.4	There is debris in the pump.	Clean the pump.
4.5	The valve assembly is worn out.	Remove and replace the valve.

No	Problem / Possible Cause	Solution
<b>5</b>	<b>The pump is pulsating.</b>	
5.1	This is normal when using the hand upholstery tool.	Use a larger v-jet.
5.2	There is an obstruction in the pump, hoses, quick coupler or v-jet.	Check and clean the hoses, quick coupler and/or v-jet.

No	Problem / Possible Cause	Solution
<b>6</b>	<b>The diaphragm pump motor is not running.</b>	
6.1	The quick coupler is loose.	Reconnect the quick coupler.
6.2	The pressure switch is open.	Remove and replace the switch.
6.3	The rectifier is open.	Remove and replace the rectifier.
6.4	The motor is burned out.	Remove and replace the motor.
6.5	The panel switch is burned out.	Remove and replace the panel switch.
6.6	This is normal when the hand trigger valve is closed.	Activate the trigger valve.
6.7	There is an obstruction in the pump discharge hoses quick coupler and/or v-jet.	Check and clean the hoses, quick coupler and/or v-jet.

## *Repair Guide*

### **Removal of Vacuum Motor:**

1. Disconnect unit from power source.
2. Disconnect wiring.
3. Loosen vacuum hoses.
4. Remove vacuum motor.

### **Reinstallation of Vacuum Motor:**

1. Carefully seat motor against mounting plate.
2. Install gasket around vacuum horn.
3. Reconnect wiring.  
**CAUTION:** Ground wire must be reconnected to insure operator safety.
4. Reconnect vacuum hoses.
5. Tighten motor bolts.

### **Removal of Diaphragm Pump and Motor:**

1. Disconnect unit from power source.
2. Disconnect wiring.
3. Remove two (2) screws.
4. Remove pump by moving forward and up.
5. Remove hose fitting. Hoses and fittings to be used on reinstallation of new pump.

### **Reinstallation of Diaphragm Pump and Motor:**

1. Install hoses and fittings.
2. Install pump using two (2) screws.
3. Reconnect wiring.  
**CAUTION:** Ground wire must be reconnected to insure operator safety.

### **Removal of Diaphragm Pump From Motor:**

1. Remove two (2) screws.
2. Pry off top bearing.
3. Remove pump.
4. Reverse procedure for installation.

### **Replacement of Diaphragm Pump Parts:**

1. Remove pump and motor per instructions above.
2. See pump breakdown.

## *Warranty Repair Policy*

When requesting warranty information, call or write and provide the following information:

1. When and where the equipment in question was purchased.
2. Model and serial number of machine.
3. Part number and description of part.
4. Description of failure or defect.

Upon receipt of the above information, a Material Return Authorization will be issued.

All packages should be prepaid and clearly marked with the Material Return Authorization number. If these conditions are not met, shipment will be refused.

After evaluation, the item(s) will be repaired or replaced at our discretion.

If failure or defect is the result of physical abuse, or if the warranty period has expired, repairs will be charged to the customer.

For service, contact the distributor where the machine was purchased or call our Customer Service Department.

Monday through Friday • 8:00 am To 5:00 pm PST

Parts: (206) 775-7276  
Service: (206) 775-7275  
Parts and Service FAX: (800) 426-4225



PST



ROCK MT.



CENTRAL



EASTERN



## 5 - 3 - 1 WARRANTY

CleanMaster products are warranted to be free of defects in material for a period of either 5 years, 3 years, or 1 year as noted below:

- \* 5 Years on Roto Cast Molded Tanks
- \* 3 Years Prorated on Drive Motor Gearbox Assembly (RX-Express Only)
- \* 1 Year on Vacuum Motors, Pumps, Switches, Fittings, Etc.
- \* 1 Year on HushhVac Vacuums

During this warranty period, we will repair or replace, at our sole option, free of charge, any parts shown to be defective in either material or workmanship. Said parts must be returned with postage or freight pre-paid. Specific parts, such as switches, vacuum motors, pumps, fittings, etc., are also warranted for a period of 1 year from date of original purchase.

This warranty is for replacement of defective parts or workmanship only. IT DOES NOT PROVIDE FOR REPLACEMENT OF COMPLETE UNITS DUE TO DEFECTIVE PARTS. It does NOT cover normal wear items such as hoses, power cords, bumpers, carbon brushes, gaskets, etc., which require replacement as a result of ordinary usage. Also, failures caused by abuse, neglect, alterations or operation contrary to manufacturer's recommendations are not warranted.

Replacements parts are warranted only for the remainder of the original warranty period.

This warranty does not cover labor or other charges in connection with replacement parts. NO LOCAL SERVICE OR REPAIR CHARGES ARE ALLOWED UNLESS PRIOR AUTHORIZATION IS OBTAINED.

There are no other warranties, expressed or implied, made with respect to this equipment. The manufacturer assumes no responsibility for damages resulting from the use or misuse of this equipment.

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