

**ESTEAM CLEANING SYSTEMS**

# **E1700 150 MODELS**

## **OWNER'S MANUAL**

Congratulations on your selection of a new E1700 Series soil extractor built in Canada by "Esteam Cleaning Systems." Our goal has been to produce the best high performance line of carpet cleaning equipment on the market today. Reading your owners manual will help to achieve maximum benefit from your purchase.



VERSION 02 (JAN 15,2007)

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## INTRODUCTION

Be it a small residential job or a large commercial contract, Esteam industrial carpet cleaning extractors are right for your needs. The E1715 is an economical, compact, portable soil extractor with the power and capabilities required by professional cleaning technicians.

Only the highest quality components go into our equipment, to deliver you strength and reliability in a long life, high performance machine. The E1715 's housing is made of high impact, unbreakable polyethylene. We are so confident in the housing that we put a lifetime guarantee on it.

The E1715 incorporate a unique dual vacuum system. Two vacuum motors hooked up in sequence produce 150" of water lift and 185" of water lift with optional 2-3 stage. To compliment the vacuum lift the E1715 comes with a 150 PSI Diaphragm pump. The E1715 comes complete with an optional 200°F internal heater.

The E1715 's clean water solution tank has a 17 gallon capacity and the dirty water recovery tank has a 14.5 gallon capacity. Built into the recovery tank the E1715 comes standard with high water automatic shut off. You never have to fear overfilling your recovery tank as the vacuums will automatically stop extracting when the recovery tank becomes full.

## SPECIFICATIONS E1715

	<b><i>E1715 E1715-20</i></b>	<b><i>E1715-05 E1715-20-05</i></b>	<b><i>E1715-10 E1715-20-10</i></b>
<b><i>ELECTRICAL</i></b> Amps Volts	One cord 15 amps 115 volts (220volts)	Two cords 15 amps per cord 115 volts (220 volts)	Two cords 15 amps per cord 115 volts (220 volts)
<b><i>VACUUM MOTOR</i></b>  Cfm's Vacuum lift	2-2 stage  94 150"	2-3 stage High Performance 101 185"	2-2 stage  94 150"
<b><i>PUMP</i></b>	150 psi	150 psi	150 psi
<b><i>INTERNAL HEATER</i></b>	N/A	N/A	1850 watt / 200°F
<b><i>SOLUTION TANK</i></b> (Clean water)	17 gallons (64.5 litres)	17 gallons (64.5 litres)	17 gallons (64.5 litres)
<b><i>RECOVERY TANK</i></b>	14.5 gallons (55.2litres)	14.5 gallons (55.2 litres)	14.5 gallons (55.2 litres)
<b><i>LENGHT</i></b>	25.5 inches (65 cm)	25.5 inches (65 cm)	25.5 inches (65 cm)
<b><i>WIDTH</i></b>	17.5 inches (45 cm)	17.5 inches (45 cm)	17.5 inches (45 cm)
<b><i>HEIGHT</i></b>	37 inches (94 cm)	37 inches (94 cm)	37 inches (94 cm)
<b><i>WEIGHT</i></b>	102 lbs (46 kgs)	107 lbs (48.5 kgs)	112 lbs (50.5 kgs)

## MAINTENANCE

1. After each job, disconnect the vacuum hose and run the vacuums for 3 to 5 minutes to eliminate moisture build up in the components. This prolongs vacuum life and reduces the servicing the vacuums will require. If excess water enters the vacuums due to failure of the float ball shut-off system, run the vacuums for at least 15 minutes, and spray a small amount of penetrating oil (i.e. WD-40) directly into the vacuum inlet inside the recovery tank. This will help displace any remaining moisture and prevent corrosion of the vacuum components.
2. At the end of each day run clear water through the pump. Wipe out the solution tank using a clean cloth. Check the acorn screen filter for damage, and replace it if it becomes clogged, corroded or crushed. Never store tools or hoses inside the tanks of the machine, as damage to the components may occur.
3. Rinse out the recovery tank with clean water and clean the float cage screen assembly. This will eliminate odor problems inside the tank, as well as preventing damage to the vacuum system caused by faulty float operation.
4. Check that the recovery tank float ball is free of debris and operating properly. The float cage may be unscrewed from the mounting pipe for complete cleaning. Be sure to reassemble the float assembly properly.
5. To keep your E1715 extractor looking new, wipe the polyethylene housing with vinyl cleaner or protector as needed.

Always unplug power cord/s before opening access panel.

**WARNING:** Do not allow the machine to freeze. System damage from freezing can take place in as little as 5 minutes in sub-zero conditions. This will cause lines with water in them to crack and break. Heaters and pumps with water in them subject to freezing will also crack and break. Allowing the machine to freeze with water in the system and/or using improper chemicals will void the warranty.

## SAFETY INFORMATION

1. Prior to inspection or repair of this machine, disconnect all electrical cords rendering the machine powerless. Failure to do so could result in serious or fatal injury.
2. Inspect unit daily for worn or damaged components. E.g. frayed cord, loose plug, or a plug with missing ground pin, ect.
3. This unit should only be operated when in an upright position on a level surface.
4. Do not operate unit unless it is properly grounded in a 3 pin grounded outlet. Never bend or remove ground pin from plug.
5. Ensure filters and screens are free from lint of dirt.
6. Do not run unit if vacuum motors or pump are wet. Allow sufficient time for motors to dry before plugging unit in.
7. Do not use solvent based cleaning products in this extractor.
8. Keep air inlets and exhaust ports free from obstructions. Blocked air inlets or exhaust ports can cause the unit to over heat.
9. Do not use solution or recovery tanks for storing hoses, cords or accessories.
10. When using electrical equipment around water it is important to wear rubber soled shoes and keep machine properly grounded at all times. Failure to do so could result in a fatal electric shock.

## OPERATING INSTRUCTIONS

1. Plug in the machine. Always check to ensure the plug has the ground prong attached to prevent injury due to electric shock. Never remove the ground prong from the plug.
2. We recommend the use of a liquid defoamer, to prevent the machine from prematurely shutting off due to excess foam in the recovery tank. Turn on vacuum and pour approximately ¼ cup of Esteam Liquid Defoamer into the end of the vacuum hose.

NOTE: If the unit is equipped with a heater, two power cords are supplied. The machine will need to be plugged into two different circuits to handle the combined amperes. Your solution will be heated to approximately 200<sup>0</sup>F.

### TO USE YOUR E1715 OPTIONAL HEATER:

- A) Hook the wand solution hose to the quick connect of your machine.
- B) Plug the heater power cord into a wall outlet that is on a separate circuit from the other cord.
- C) Turn the heater switch on.
- D) When the red light goes out, solution is heated and ready to use.

**WARNING:** If your heater does not work DO NOT attempt to repair it yourself, call your distributor for repair procedures. Using solvents in heaters can be hazardous and will void your warranty. Allowing heaters to freeze will crack the heater cartridge and will also void your warranty.

**DANGER:** No solvents of any type may be used in this system at any time. The use of solvents is extremely hazardous resulting in possible fire and/or explosion.

## OPERATING INSTRUCTIONS (CONTINUED)

3. Connect the vacuum and solution hoses to the carpet cleaning wand.
4. Proceed to clean the carpets.
5. When the recovery tank becomes full, vacuum will automatically stop extracting. When the vacuum stops extracting it will make a distinctive high pitched noise as all air flow will be cut off. At this time switch the unit off. To empty the recovery tank use the black 45° elbow provided to direct waste water into a 20L bucket or toilet.

**NOTE:** Ensure that the automatic high water shut off screen inside the recovery tank is free from any obstructions. Be sure to close drain valve before resuming cleaning.

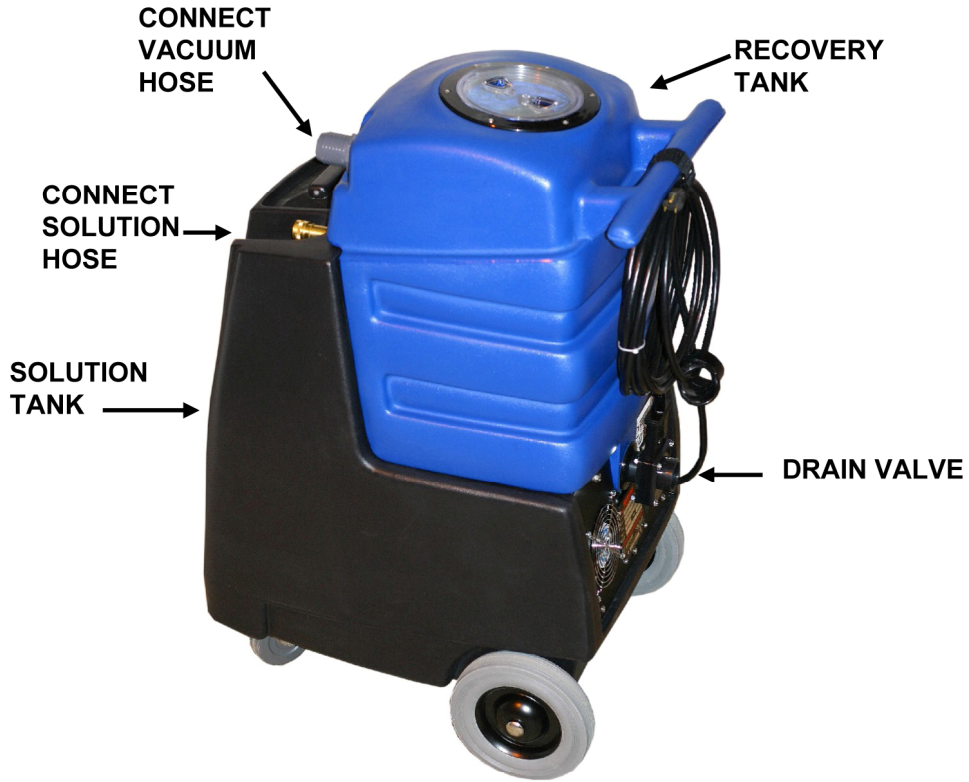
6. To empty the solution tank remove vacuum hose from wand. Turn on vacuum and extract solution from solution tank into recovery tank, then drain recovery tank.

**NOTE:** Do not completely submerge the end of the vacuum hose into the solution. Allow some air to enter the end of the vacuum hose with the liquid.

7. When the job is completed, empty and rinse out the solution and recovery tanks. Allow vacuum to run 3 to 5 minutes. This will eliminate all moisture from vacuum assuring long vacuum lift.

**WARNING:** When using electrical equipment around water it is important to wear rubber soled shoes and keep machine properly grounded at all times. Failure to do so could result in a fatal electric shock.

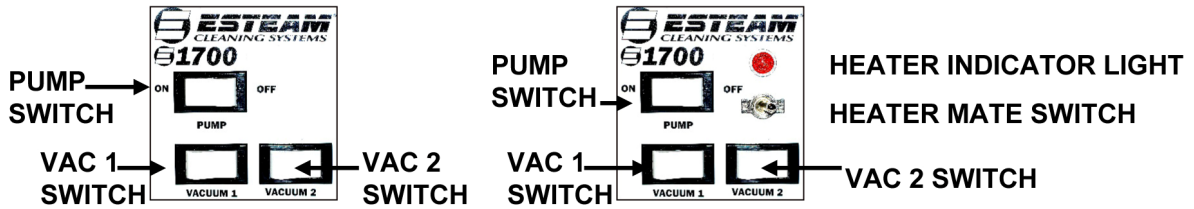
# E1715 MODELS



MODEL E1715 &

MODEL E1715 2-3 STAGE VAC

MODEL E1715 H.M





## TROUBLESHOOTING

**WARNING:** Prior to inspection or repair of this machine, disconnect all electrical cords rendering the machine powerless. Failure to do so could result in serious or fatal injury.

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
1. Entire unit will not operate	1. Unit not plugged in	1. Connect unit to 3 prong outlet
	2. Blown fuse or breaker for plug in outlet	2. Check fuse panel for blown fuse
	3. Loose wiring	3. See dealer
2. Pump will not run	1. Switch not turned on	1. Turn on switch
	2. Kink in solution hose	2. Remove kink
	3. Plugged jet or quick connect	3. Remove blockage
	4. Broken switch	4. See dealer
	5. Loose wiring	5. See dealer
	6. Pump defective	6. See dealer
3. Vacuums will not run	1. Switch not turned on	1. Turn on switch
	2. Broken switch	2. See dealer
	3. Loose wiring	3. See dealer
	4. Blocked rotor	4. See dealer

## TROUBLE SHOOTING (CONTINUED)

PROBLEM	CAUSE	SOLUTION
4. Pump runs but does not pump solution	1. Out of solution	1. Fill with solution
	2. Pump inlet screen plugged	2. Clean inlet screen
	3. Pump air locked	3. Press trigger to open valve on cleaning wand to relieve air
	4. Internal or external solution line damaged and leaking	4. See dealer
5. Pump runs but has loss of pressure	1. Partial kink in solution hose	1. Remove kink
	2. Jet orifice opening on cleaning wand is too large	2. Total jet opening for 150 PSI should be .03
	3. Internal pump components wearing out	3. See dealer

**NOTE:** Operation of pump using wand or hand tool with an orifice opening of less than .03 will cause pump to cavitate and could result in premature wear of pump components.

## TROUBLESHOOTING (CONTINUED)

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
6. Vacuums operate but have poor or no suction	1. Recovery tank full	1. Drain recovery tank
	2. Vacuum hose plugged	2. Remove blockage
	3. Wand plugged	3. Remove blockage
	4. Exhaust port blocked	4. Remove blockage
	5. High level shut off float stuck in off position	5. Turn vacuum off and tap top of float screen cage
	6. Front drain valve left open after draining recovery tank	6. Close recovery tank drain valve on front of machine
7. Vacuums prematurely stops extracting	1. Excess foam in recovery tank	1. Add defoamer to recovery tank
	2. Lint or dirt on high level shut off float screen	2. Clean high level shut off float screen
	3. Defective float ball	3. Replace float screen cage
8. Machine spits water out of exhaust port	1. High level shut off float not working properly	1. Check high level shut off float cage and ball for proper operation
	2. Foam build up in recovery tank	2. Add defoamer to recovery tank

## TROUBLESHOOTING (CONTINUED)

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
9. Machine blowing excessive amounts of water out of exhaust ports.	1. Damaged (leaking) recovery tank fittings	1. Immediately shut unit down. Bring unit to a dealer for service
10. Water accumulating in bottom of electrical component area	1. Inside solution line leaking	1. Immediately shut unit down. Bring unit to a dealer for service
	2. Pump leaking	2. Immediately shut unit down. Bring unit to a dealer for service
	3. Solution or recovery tank leaking from above	3. Immediately shut unit down. Bring unit to a dealer for service.

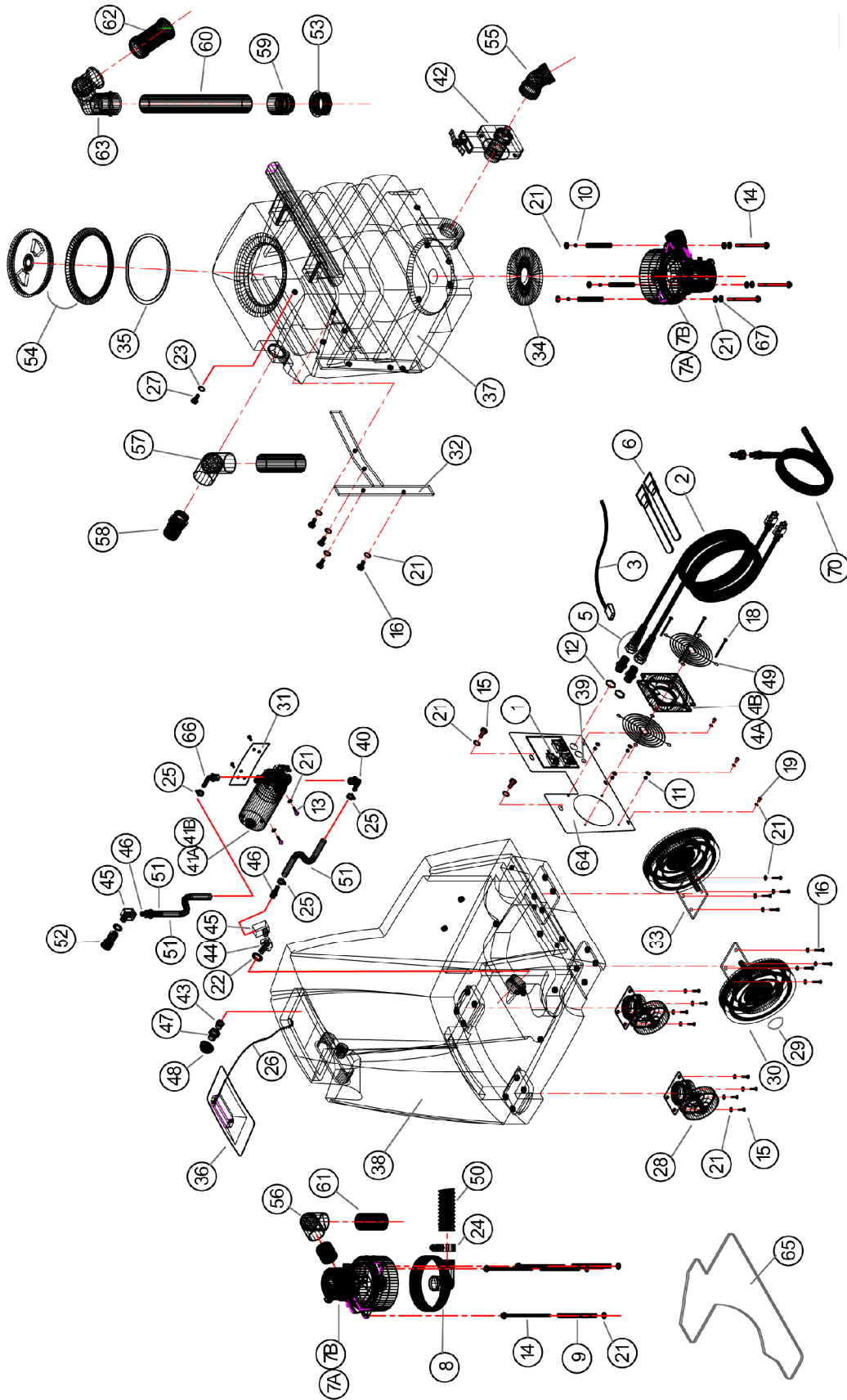


## E1715 (110v & 220v)

REF	PART NO.	DESCRIPTION	NOTES:
1	305-230	Switch, Rocker 20 Amp	
2	315-015	Cord, 25' Black 14/3 SJTW-A	
3	315-040	Cord, Fan Muffin	
4A	333-010	Fan, Muffin 6" (110v)	E1715
4B	333-015	Fan, Muffin 6" (220v)	E1715-20
5	335-015	Strain Relief, 12 Gauge	
6	350-005	Strap Velcro	
7A	355-100	Vacuum, 2 Stg (110v)	E1715
7B	355-105	Vacuum, 2 Stg (220v)	E1715-20
8	355-205	Welded Adapter, 2 STG 90	
9	355-225	Vac Spacer 3/8 x 2 1/2	
10	400-010	Hex Nut 1/4 x 20 Zinc	
11	400-130	Locknut, 10 x 24 Nylon SS	
12	400-148	Locknut, 4 x 40 Nylon SS	Not Shown
13	400-165	Locknut, 1/2"	
14	405-010	Bolt, 1/4 x 1 SS	
15	405-050	Bolt, 1/4 x 3 1/2 Stove Zinc	
16	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
17	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
18	410-125	SMS, 8 x 5/8 Pan Rob. S.S.	Not shown
19	410-175	MS, 10-24 x 2 1/2 Rob Zinc	
20	410-215	MS, 10-32 x 3/8 FT Phil SS	
21	410-225	SMS, 10 X 1/2 Pan Rob. Zinc	Not shown
22	415-020	LW, 1/4 Zinc	
23	415-105	FW, 6 SS	Not shown
24	415-125	FW, 1/4 SS	
25	415-156	FW, 1/2 SS	
26	415-305	FNDW, 1/4 SS	
27	420-015	Rivet, AL #48	Not shown
28	420-055	Rivet, AL/AL #46	Not shown
29	425-010	Clamp, #20 Hose 13/16 x 1 3/4	
30	425-115	Clamp, Hose Silicone	
31	430-010	Chain, 1/4 Brass	
32	435-040	Handle, Cross M	
33	455-005	Caster, 4" Swivel	
34	455-052	Wheel Cap Dome	
35	455-057	Wheel, 8" Grey/Black Hub	
36	465-050	BRKT, E1700 Pump	
37	465-080	Brace, D/B Tank	
38	470-016	Axel, D/B Set V2	
39	475-035	Gasket Vac 5 3/4	
40	475-125	Gasket 6" Access Cover Clear	
41	495-210	Lid, Solution Tank	
42	495-220	Rec Tank	

43	495-225	Sol Tank	
44	498-055	Plug, 1/2 Nylon	
45	498-065	Plug, 7/8 Button	
46	510-090	Shurflo Elbow, 90	
47A	510-525	Pump, 150 PSI, 112v	E1715
47B	510-526	Pump, 150 PSI, 220v	E1715-20
48	545-100	Dump Valve, 1 1/2"	
49	555-184	Elbow 45, Street 1/4	
50	555-208	Elbow 90, 1/4 Street Extruded	
51	555-254	Ferrule 3/8 Hose	
52	555-326	Hose Barb 90, 3/8 Barb x 3/8 MPT	
53	555-364	Hose Barb, 3/8 Barb x 1/4 MPT	
54	555-512	Reducing ADPT, 3/8 FPT x 1/4 MPT	
55	560-030	Screen, Acorn	
56	560-330	Guard, Finger 6" Fan	
57	570-010	Vac Hose 1 1/2" Wire Reinforced	
58	572-041	L.P. Hose 3/8"	
59	580-010	Q.C. 1/4" Fem (Closed)	
60	585-025	Spin Fitting 1 1/2	
61	585-210	Clear Cover, 6" C/W Ring	
62	588-020	ABS Elbow 45, 1 1/2 SLP x SLP	
63	590-010	PVC Elbow 1 1/4 90, S x S	
64	590-020	PVC ELB 1 1/2" 90, S x FIPT	
65	590-405	PVC Hose Barb 1 1/2" x MPT	
66	590-415	PVC Adpt 1 1/2", S x MPT	
67	595-005	ABS Pipe, 1 1/2"	
68	595-110	PVC Pipe, 1 1/4"	
69	597-010	Float Screen Cage	
70	597-061	Adpt (RM) 30 Degree	
71	845-045	Control Panel	
72	845-047	Plate Bottom	
73	555-024	Bushing 3/8 M x 1/4 F	
74	263-105	Prime line 4'	

# 1700 150PSI DUAL 3 STAGE VAC



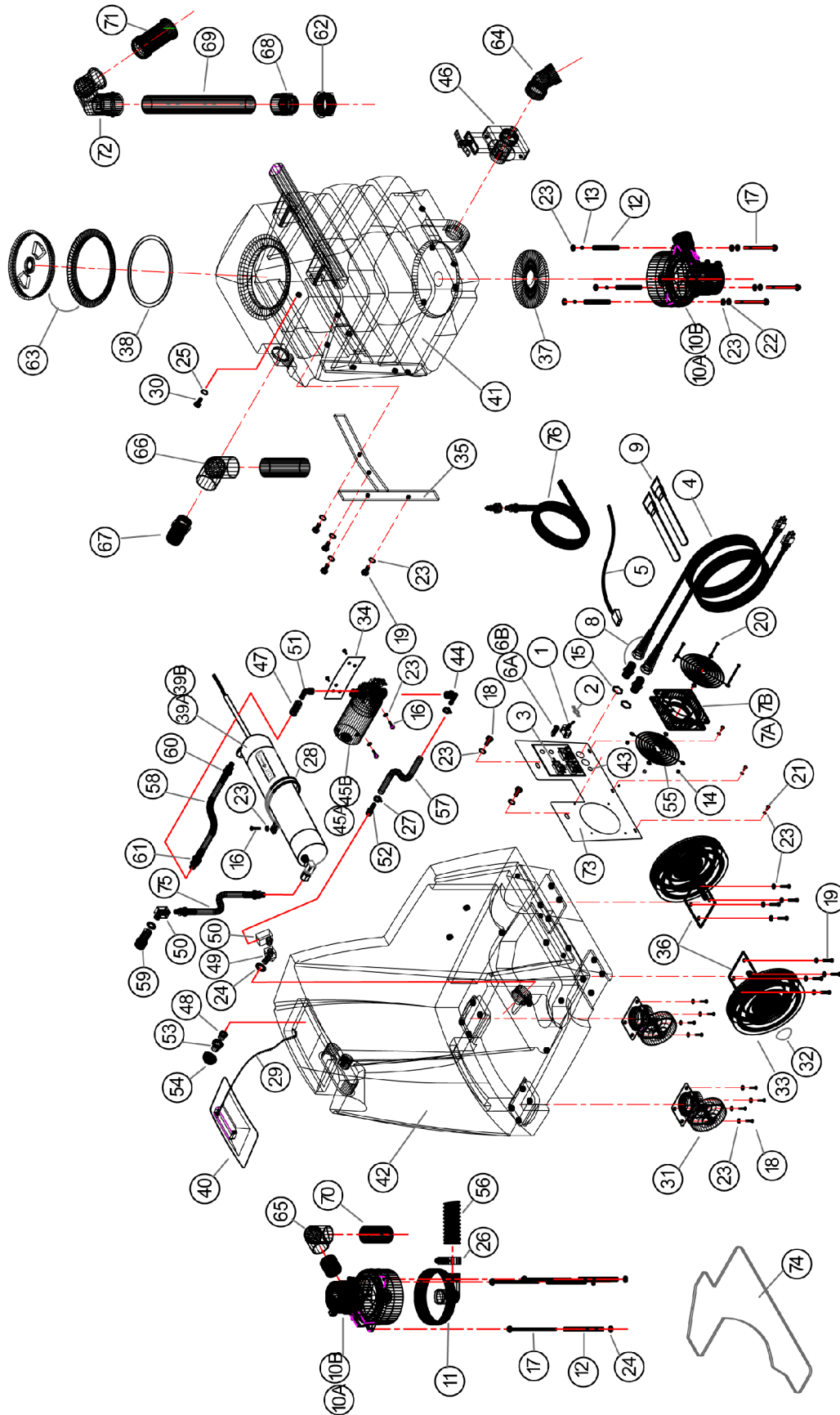


## E1715 DUAL 3 STAGE VAC (110v & 220v)

REF	PART NO.	DESCRIPTION	NOTES:
1	305-230	Switch, Rocker 20 Amp	
2	315-015	Cord, 25' Black 14/3 SJTW-A	
3	315-040	Cord, Fan Muffin	
4A	333-010	Fan, Muffin 6" (110v)	E1715
4B	333-015	Fan, Muffin 6" (220v)	E1715-20
5	335-015	Strain Relief, 12 Gauge	
6	350-005	Strap Velcro	
7A	355-110	Vacuum, 3 Stg (110v)	E1715
7B	355-135	Vacuum, 3 Stg (220v)	E1715-20
8	355-205	Welded Adapter, 2 STG 90	
9	355-219	Vac Spacer 5/16 x 3	
10	400-010	Hex Nut 1/4 x 20 Zinc	
11	400-130	Locknut, 10 x 24 Nylon SS	
12	400-165	Locknut, 1/2"	
13	405-010	Bolt, 1/4 x 1 SS	
14	405-060	Bolt, 1/4 x 4 Stove Zinc	
15	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
16	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
17	410-125	SMS, 8 x 5/8 Pan Rob. S.S.	Not shown
18	410-175	MS, 10-24 x 2 1/2 Rob Zinc	
19	410-215	MS, 10-32 x 3/8 FT Phil SS	
20	410-225	SMS, 10 X 1/2 Pan Rob. Zinc	Not shown
21	415-125	FW, 1/4 SS	
22	415-156	FW, 1/2 SS	
23	415-305	FNDW, 1/4 SS	
24	425-010	Clamp, #20 Hose 13/16 x 1 3/4	
25	425-115	Clamp, Hose Silicone	
26	430-010	Chain, 1/4 Brass	
27	435-040	Handle, Cross M	
28	455-005	Caster, 4" Swivel	
29	455-052	Wheel Cap Dome	
30	455-057	Wheel, 8" Grey/Black Hub	
31	465-050	BRKT, E1700 Pump	
32	465-080	Brace, D/B Tank	
33	470-016	Axel, D/B Set V2	
34	475-035	Gasket Vac 5 3/4	
35	475-125	Gasket 6" Access Cover Clear	
36	495-210	Lid, Solution Tank	
37	495-220	Rec Tank	
38	495-225	Sol Tank	
39	498-055	Plug, 1/2 Nylon	
40	510-090	Shurflo Elbow, 90	
41A	510-525	Pump, 150 PSI, 112v	E1715
41B	510-526	Pump, 150 PSI, 220v	E1715-20

42	545-100	Dump Valve, 1 1/2"	
43	555-024	Bushing 3/8 M x 1/4 F	
44	555-184	Elbow 45, Street 1/4	
45	555-208	Elbow 90, 1/4 Street Extruded	
46	555-364	Hose Barb, 3/8 Barb x 1/4 MPT	
47	555-512	Reducing ADPT, 3/8 FPT x 1/4 MPT	
48	560-030	Screen, Acorn	
49	560-330	Guard, Finger 6" Fan	
50	570-010	Vac Hose 1 1/2" Wire Reinforced	
51	572-041	L.P. Hose 3/8"	
52	580-010	Q.C. 1/4" Fem (Closed)	
53	585-025	Spin Fitting 1 1/2	
54	585-210	Clear Cover, 6" C/W Ring	
55	588-020	ABS Elbow 45, 1 1/2 SLP x SLP	
56	590-010	PVC Elbow 1 1/4 90, S x S	
57	590-020	PVC ELB 1 1/2" 90, S x FIPT	
58	590-405	PVC Hose Barb 1 1/2" x MPT	
59	590-415	PVC Adpt 1 1/2", S x MPT	
60	595-005	ABS Pipe, 1 1/2"	
61	595-110	PVC Pipe, 1 1/4"	
62	597-010	Float Screen Cage	
63	597-061	Adpt (RM) 30 Degree	
64	845-045	Control Panel	
65	845-047	Plate Bottom	
66	555-326	Hose Barb 90, 3/8 Barb x 3/8 MPT	
67	415-020	LW, 1/4 Zinc	
68	420-015	Rivet, AL #48	Not shown
69	420-055	Rivet, AL/AL #46	Not shown
70	263-105	Prime Line 4'	

# E1700 150PSI HEATER MATE



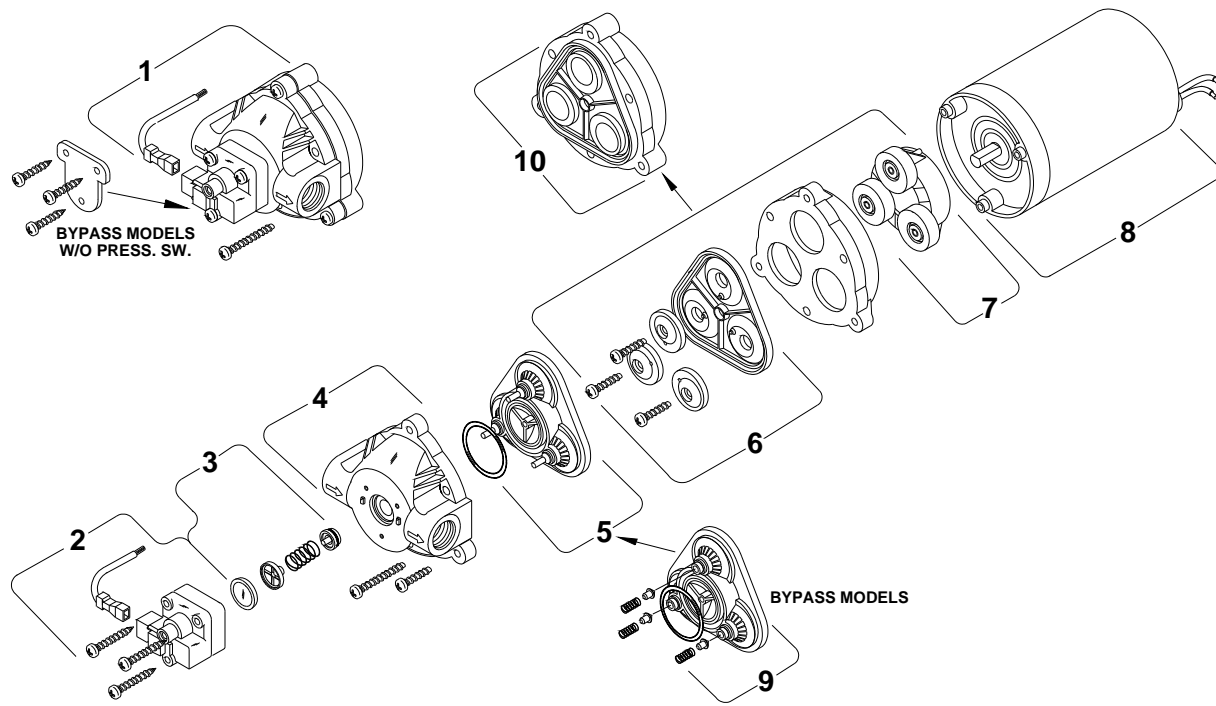
## E1715 H.M (110v & 220v)

REF	PART NO.	DESCRIPTION	NOTES:
1	305-210	Toggle Switch	
2	305-225	Switch Plate, ON-OFF	
3	305-230	Switch, Rocker 20 Amp	
4	315-015	Cord, 25' Black 14/3 SJTW-A	
5	315-040	Cord, Fan Muffin	
6A	320-110	Lamp, Panel (110v)	E1715-10
6B	320-900	Lamp, Panel (220v)	E1715-20-10
7A	333-010	Fan, Muffin 6" (110v)	E1715-10
7B	333-015	Fan, Muffin 6" (220v)	E1715-20-10
8	335-015	Strain Relief, 12 Gauge	
9	350-005	Strap Velcro	
10A	355-100	Vacuum, 2 Stg (110v)	E1715-10
10B	355-105	Vacuum, 2 Stg (220v)	E1715-20-10
11	355-205	Welded Adapter, 2 STG 90	
12	355-225	Vac Spacer 3/8 x 2 1/2	
13	400-010	Hex Nut 1/4 x 20 Zinc	
14	400-130	Locknut, 10 x 24 Nylon SS	
15	400-165	Locknut, 1/2"	
16	405-010	Bolt, 1/4 x 1 SS	
17	405-056	Bolt, 1/4 x 4 Stove Zinc	
18	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
19	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
20	410-175	MS, 10-24 x 2 1/2 Rob Zinc	
21	410-215	MS, 10-32 x 3/8 FT Phil SS	
22	415-020	LW, 1/4 Zinc	
23	415-125	FW, 1/4 SS	
24	415-156	FW, 1/2 SS	
25	415-305	FNDW, 1/4 SS	
26	425-010	Clamp, #20 Hose 13/16 x 1 3/4	
27	425-115	Clamp, Hose Silicone	
28	425-130	Clamp, Tube 3"	
29	430-010	Chain, 1/4 Brass	
30	435-040	Handle, Cross M	
31	455-005	Caster, 4" Swivel	
32	455-052	Wheel Cap Dome	
33	455-057	Wheel, 8" Grey/Black Hub	
34	465-050	BRKT, E1700 Pump	
35	465-080	Brace, D/B Tank	
36	470-016	Axel, D/B Set V2	
37	475-035	Gasket Vac 5 3/4	
38	475-125	Gasket 6" Access Cover Clear	
39A	490-005	Foamed Casing, Round 1850W (110v)	E1715-10
39B	490-006	Foamed Casing, Round 1850W (220v)	E1715-20-10
40	495-210	Lid, Solution Tank	

41	495-220	Rec Tank	
42	495-225	Sol Tank	
43	498-055	Plug, 1/2 Nylon	
44	510-090	Shurflo Elbow, 90	
45A	510-525	Pump, 150 PSI, 112v	E1715-10
45B	510-526	Pump, 150 PSI, 220v	E1715-20-10
46	545-100	Dump Valve, 1 1/2"	
47	550-035	Check Valve 1/4	
48	555-024	Bushing 3/8 M x 1/4 F	
49	555-184	Elbow 45, Street 1/4	
50	555-208	Elbow 90, 1/4 Street Extruded	
51	555-210	Elbow 90, 3/8 MPT x 1/4 MPT	
52	555-364	Hose Barb, 3/8 Barb x 1/4 MPT	
53	555-512	Reducing ADPT, 3/8 FPT x 1/4 MPT	
54	560-030	Screen, Acorn	
55	560-330	Guard, Finger 6" Fan	
56	570-010	Vac Hose 1 1/2" Wire Reinforced	
57	572-041	L.P. Hose 3/8	
58	572-125	Pulse Hose, 3/8	
59	580-010	Q.C. 1/4" Fem (Closed)	
60	581-060	Crimp Ftng, 3/8 Pulse Hose 1/4 MPT	
61	581-065	Crimp Ftng, 3/8 Pulse Hose 1/4 MPT SVL	
62	585-025	Spin Fitting 1 1/2	
63	585-210	Clear Cover, 6" C/W Ring	
64	588-020	ABS Elbow 45, 1 1/2 SLP x SLP	
65	590-010	PVC Elbow 1 1/4 90, S x S	
66	590-020	PVC ELB 1 1/2" 90, S x FIPT	
67	590-405	PVC Hose Barb 1 1/2" x MPT	
68	590-415	PVC Adpt 1 1/2", S x MPT	
69	595-005	ABS Pipe, 1 1/2"	
70	595-110	PVC Pipe, 1 1/4"	
71	597-010	Float Screen Cage	
72	597-061	Adpt (RM) 30 Degree	
73	845-045	Control Panel	
74	845-047	Plate Bottom	
75	263-013	HP Hose 28"	
76	263-105	Prime Line 4'	

# SHURflo

## REPAIR KITS FOR MODEL 150 PSI



1) Complete Pump Head	N/A
2) Switch Assembly	510-161
3) Check Valve Assembly	510-055
4) Upper Housing	510-075
5) Valve Assembly (Standard)	NA
6) Diaphragm	N/A
7) Drive Assembly	N/A
8) Motor ( 110V )	510-555 ( 220V N/A )
9) Valve Assembly(by pass)	510-315
10) Solid Diaphragm Drive Assembly	510-082

## 8000 PUMP TROUBLE SHOOTING GUIDE

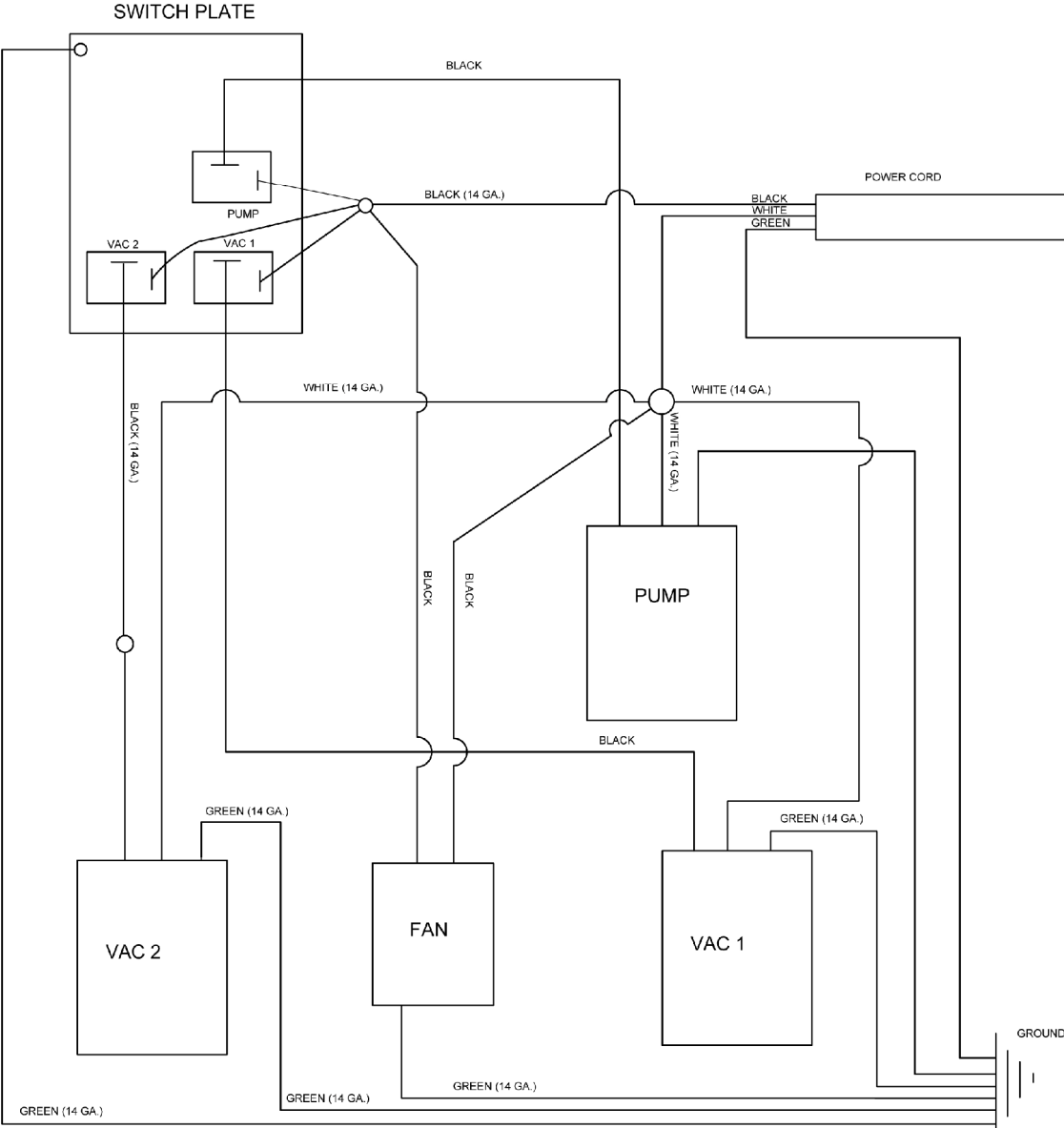
TROUBLE	PROBABLE CAUSE	TO CORRECT
Pump starts but no prime	<ol style="list-style-type: none"> <li>1. Not enough volt</li> <li>2. No liquid</li> <li>3. Leak in inlet line</li> <li>4. Air lock</li> <li>5. Bad valves</li> <li>6. Mounted too high</li> <li>7. Check valve stuck</li> <li>8. Debris in pump</li> <li>9. Clogged filter</li> <li>10. Line connection backward</li> <li>11. Missing VLV.HSG O ring</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide correct volt</li> <li>2. Fill liquid</li> <li>3. Correct leak</li> <li>4. Bleed air</li> <li>5. Replace valves</li> <li>6. Lower mounting</li> <li>7. Clean/replace, ck valve</li> <li>8. Clean/replace damaged</li> <li>9. Clean/replace filter</li> <li>10. Connect line to proper port</li> <li>11. Place O-ring</li> </ol>
External leak from pump head drain	<ol style="list-style-type: none"> <li>1. Ruptured diaphragm</li> <li>2. Piston SC loose</li> <li>3. Pinched diaphragm</li> <li>4. Cross thread piston scr.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace diaphragm</li> <li>2. Tighten piston screw</li> <li>3. Replace diaphragm</li> <li>4. Properly assemble</li> </ol>
External leak from switch	<ol style="list-style-type: none"> <li>1. Ruptured SW diaphragm</li> <li>2. Pinched SW diaphragm</li> <li>3. Loose switch screw</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace SW diaphragm</li> <li>2. Replace SW diaphragm</li> <li>3. Secure switch screws</li> </ol>
Vaucum leak	<ol style="list-style-type: none"> <li>1. Pinched diaphragm</li> <li>2. Cracked upper housing</li> <li>3. Loose inline fitting</li> <li>4. Cracked valve housing</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace diaphragm</li> <li>2. Replace upper housing</li> <li>3. Tighten fitting</li> <li>4. Replace valve housing</li> </ol>
Rough pump	<ol style="list-style-type: none"> <li>1. Bad motor</li> <li>2. Bad drive</li> <li>3. Screws loose</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace</li> <li>2. Replace</li> <li>3. Tighten screws</li> </ol>
Low performance	<ol style="list-style-type: none"> <li>1. Clogged filter</li> <li>2. Bad motor</li> <li>3. Improper voltage</li> <li>4. Bad valves</li> <li>5. Improper plumbing</li> <li>6. Loose fasteners</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean/replace</li> <li>2. Replace</li> <li>3. Provide proper voltage</li> <li>4. Replace</li> <li>5. Correct plumbing</li> <li>6. Secure all fasteners</li> </ol>

## 8000 PUMP TROUBLE SHOOTING GUIDE

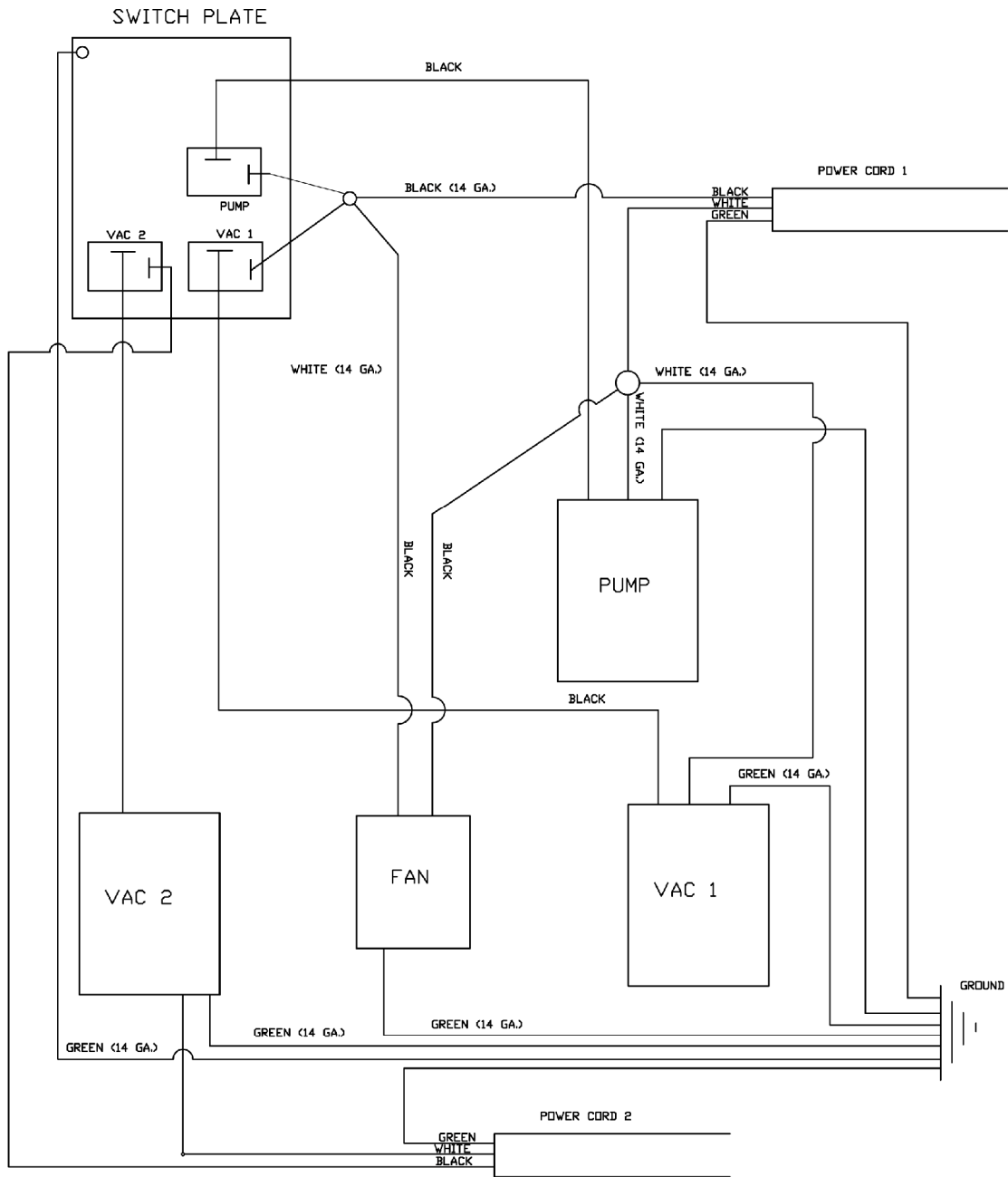
<b>TROUBLE</b>	<b>PROBABLE CAUSE</b>	<b>TO CORRECT</b>
Pump will not start	<ol style="list-style-type: none"><li>1. Bad motor</li><li>2. Bad rectifier</li><li>3. Bad wire connection</li><li>4. Bad micro switch</li><li>5. Bad brushes</li><li>6. Frozen drive</li><li>7. Blown fuse</li><li>8. No power to pump</li></ol>	<ol style="list-style-type: none"><li>1. Replace</li><li>2. Replace motor</li><li>3. Correct connection</li><li>4. Replace</li><li>5. Replace motor</li><li>6. Replace drive</li><li>7. Replace</li><li>8. Connect power</li></ol>
No shut off	<ol style="list-style-type: none"><li>1. No liquid</li><li>2. Air lock</li><li>3. Shut set to high (by-pass SW combo)</li><li>4. Bad micro switch</li></ol>	<ol style="list-style-type: none"><li>1. Fill liquid</li><li>2. Purge line check install</li><li>3. Set to correct shutoff</li><li>4. Replace</li></ol>



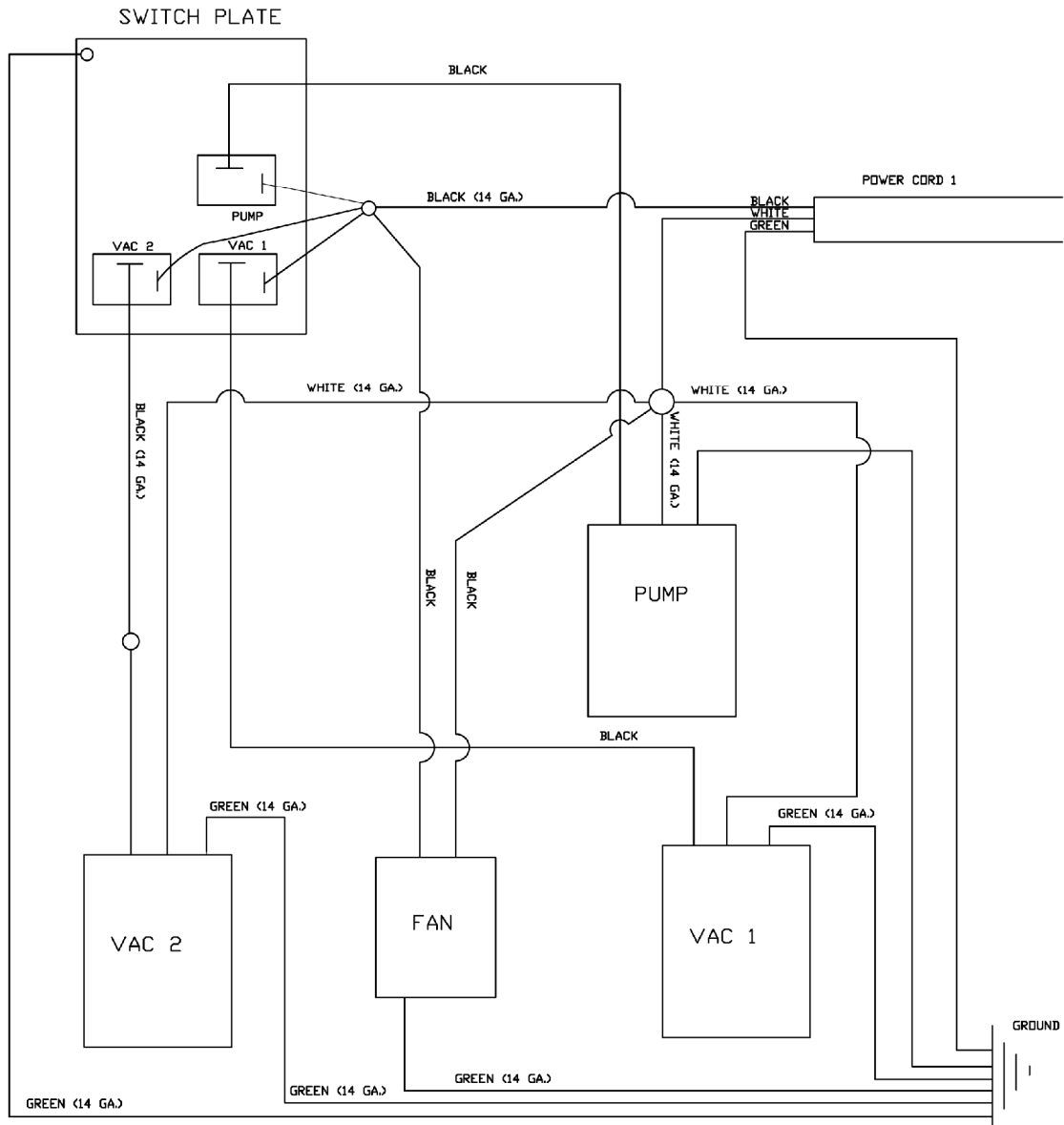
# E1715 WIRING



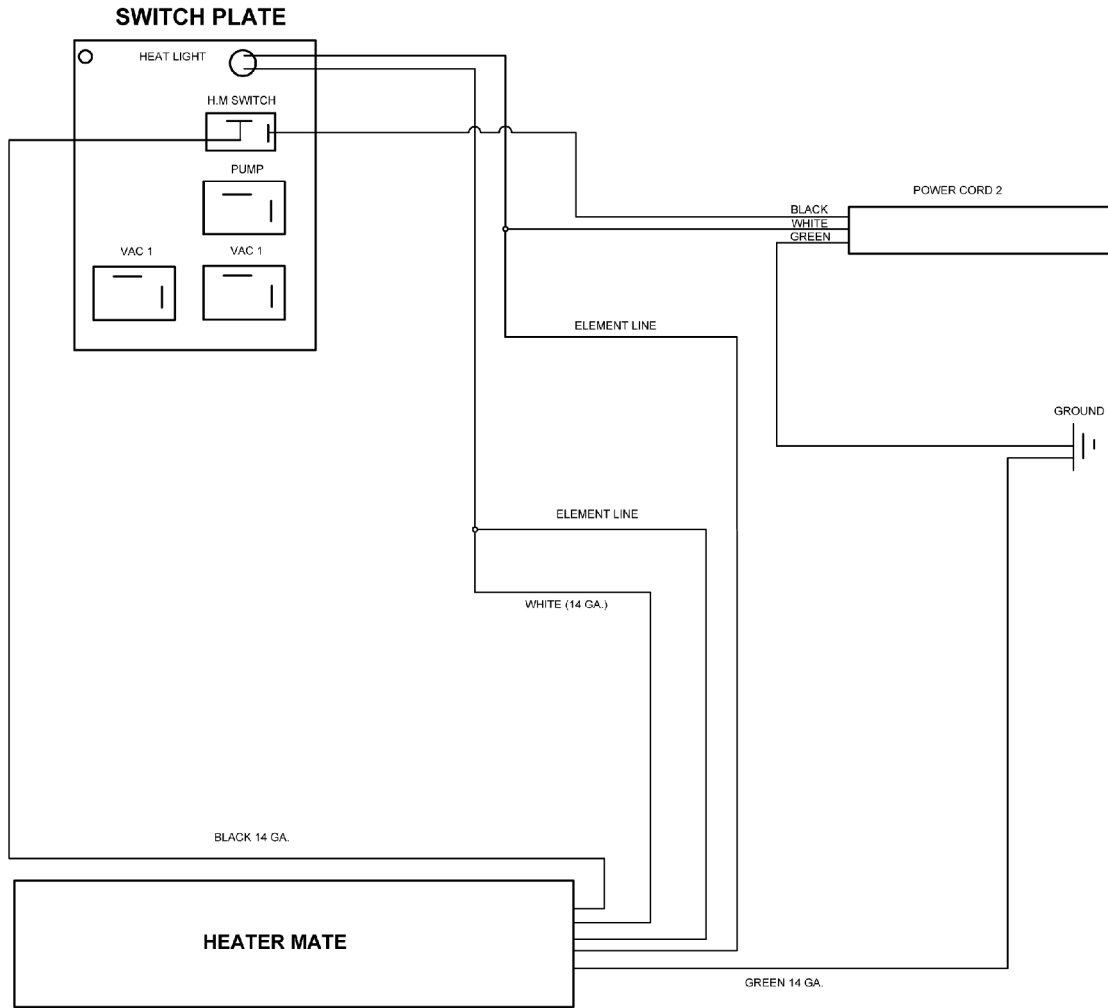
# E1715 DUAL STAGE VAC WIRING



# E1715 HEATER MATE WIRING P. 1



# E1715 HEATER MATE WIRING P. 2





## WARRANTY REGISTRATION / DELIVERY ACCEPTANCE

This form must be completed and returned to Esteam Cleaning Systems to activate your warranty.

Esteam would like to take this opportunity to point out a few operating and safety recommendations for your consideration.

\* All units cords have a ground plug pin for your safety, never remove or operate any equipment if the ground pin on the plug has been removed.

\* Defoamer is to be used in all machines. Improper use of chemicals will void warranty. Drycleaning solvents cannot be used in any Esteam extractors.

\* Do not over fill recovery tanks as this will damage the vacuum motors. Vacuum motors showing any signs of moisture contamination will not be covered under warranty.

Model # \_\_\_\_\_ Serial # \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Province/State: \_\_\_\_\_

Postal Code/Zip: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
Month / Day / Year

Purchased From: \_\_\_\_\_

By signing this form I \_\_\_\_\_, accept the terms and conditions of the warranty.  
(print)

I have been fully instructed in the safe operation and use of this equipment.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Mail Warranty Registration / Delivery Acceptance to:

Esteam Manufacturing Ltd.  
3750-19th Street NE  
Calgary, Alberta, Canada  
T2E 6V2

Or Fax to:  
(403) 291 - 0546



## **E1700 SERIES EXTRACTOR WARRANTY**

### **LIMITED LIFETIME HOUSING WARRANTY**

We, **ESTEAM MANUFACTURING LTD.**, (hereinafter referred to as Esteam), hereby warranty the polyethylene machine housing for life to the original owner against cracking, leaking or deterioration. Additional terms and conditions of the limited lifetime warranty on the housing are as follows. E1700 Series will receive a (5) year 100% replacement warranty followed by a 50% replacement value for life.

### **CONDITIONS OF WARRANTY**

This warranty covers all other parts for a period of 12 months, 90 days on labor, subject to the terms and conditions listed below.

Lifetime housing warranty is offered to the original owner only. Any transfer in ownership will void the warranty.

This warranty shall not extend to any product showing effects of misuse, disassembly, alteration, lack of proper maintenance, corrosive chemicals, improper voltage, accident damage, unauthorized repairs, fire, flood, freezing, normal wear, or any other cause beyond Esteam's control.

**WARNING ON CHEMICALS:** Improper use of chemicals voids warranty and Esteam's liability. Defoamer is to be used in all machines. No powdered emulsifier can be used in any machine, use only concentrated liquid steam solution. Dry cleaning solvents cannot be used in any machine. If used, fire or pump damage could result.

**PUMP WARRANTY:** Includes 100 & 150 PSI Shurflo (Diaphragm), 200 PSI Pumptec (Plunger) pumps. Pump warranty requires flushing with clean water after each day's use.

**200 PSI PUMPTEC:** If a fuse greater than 3 amps is used to protect pump motor, or if pressure regulator is tampered with to achieve a higher operating pressure than 200 PSI, the warranty will be voided.

**VACUUM MOTOR:** To protect vacuum motors, defoamer is to be used in all Esteam extractors. Vacuum motors showing moisture contamination on interior components will void warranty.

Brass, rubber and synthetic rubber products, (i.e. Quick connects, "O" rings, diaphragms, gaskets, seals, grommets) are considered expendable in normal use and therefore are not included in the warranty.

Switches, Pressure gauges, Vacuum hoses and Solution hoses are covered under warranty for 90 days.

Esteam is not responsible for any work performed on, equipment furnished thereto or repairs effected upon any of its products by other than Esteam or authorized personnel.

This warranty obligation extends only to the repair or replacement of parts found, upon Esteam examination, to be defective. Unless any part or assembled unit replaced hereunder is returned, freight prepaid, together with a letter describing the problem, to the factory or authorized Esteam dealer within 30 days of replacement, the warranty is void and of no effect. Parts of assemblies, either repaired or replaced, at the discretion of Esteam, will be returned freight prepaid by Esteam, via regular ground service.

We request that you write or call for an authorization to return any warranty items. No replacement part will be shipped without the serial numbers of the machine the part was taken from along with the date of purchase. No credit will be given until the defective parts are received by Esteam.

This warranty also excludes any and all freight expenses, rental equipment used while warranty repairs are being performed and business losses of any nature from equipment failure.

The foregoing constitutes Esteam's entire warranty and no other warranty, liability, contingency or responsibility, direct, indirect, consequential or in any other way connected with the sale or operation of Esteam machines or chemical product is expressed or implied.

**3750-19th Street N.E., Calgary, Alberta Canada T2E 6V2  
Tel. (403) 291-7050 Fax: (403) 250-1418**

**05/03/2004**