

ESTEAM CLEANING SYSTEMS

NINJA 500 MODELS

OWNER'S MANUAL

Congratulations on your selection of a new Ninja 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.



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INTRODUCTION

Be it a small residential job or a large commercial contract, Esteam Cleaning Systems industrial carpet cleaning extractors are right for your needs. The Ninja 500 delivers the ultimate in power, capacity, durability, and performance. The Ninja 500 is a light weight portable electronic truckmount, and is one of the most powerful soil extractors on the market.

Only the highest quality components go into our equipment, to deliver you strength and reliability in a long life high performance machine. All Esteam Cleaning Systems equipment housings are made of high impact, unbreakable polyethylene.

The Ninja 500 incorporates a unique single 3 stage vacuum producing 150 inches of water lift or 185 inches of water lift with optional dual 3 stage vacuum. To compliment the vacuum lift the Ninja 500 comes standard with a 500 PSI PumpTec pump. No cleaning job is to large for the Ninja 500.

SPECIFICATIONS NINJA 500 (110v&220v)

	<i>NJC500 NJC500-20</i>	<i>NJC500-05 NJC500-20-05</i>	<i>NJC500-10 NJC500-20-10</i>
<i>ELECTRICAL</i> Amps Volts	One cord 14 amps 115 volts or 220 volts	Two cords 14 amps per cord 115 volts or 220 volts	Two cords 14 amps per cord 115 volts or 220 volts
<i>VACUUM MOTOR</i> Cfm's Vacuum lift	Single 3 stage (LRG-PLASTIC) 94 135"	2-3 stage High Performance 101 185"	Single 3 stage (LRG-PLASTIC) 94 135"
<i>PUMP</i> Pump Motor	500 psi Plunger 1/4 HP A/C	500 psi Plunger 1/4 HP A/C	500 psi Plunger 1/4 HP A/C
<i>INTERNAL HEATER</i>	N/A	N/A	1850 watt / 200°F
<i>SOLUTION TANK</i> (Clean water)	10.5 gallons (40 litres)	10.5 gallons (40 litres)	10.5 gallons (40 litres)
<i>RECOVERY TANK</i>	10.5 gallons (40 litres)	10.5 gallons (40 litres)	10.5 gallons (40 litres)
<i>LENGHT</i>	26 inches (66 cm)	26 inches (66 cm)	26 inches (66 cm)
<i>WIDTH</i>	17 inches (43 cm)	17 inches (43 cm)	17 inches (43 cm)
<i>HEIGHT</i>	34 inches (86 cm)	34 inches (86 cm)	34 inches (86 cm)
<i>WEIGHT</i>	110 lbs (49.8 kgs)	115 lbs (52 kgs)	115 lbs (52 kgs)

MAINTENANCE

DAILY:

- Clean high water level float screen inside the recovery tank.
- Ensure high level float ball is working properly.
- Rinse out recovery tank after use.
- Clean dirt and obstructions from the (recovery tank) drain valve rubber gaskets to prevent premature wear.
- Rinse out pump with clean water at conclusion of work day.
- Clean poly housing with mild soap and water.
- Check machine fuse.

MONTHLY:

- Clean air inlet and check exhaust port.
- Check to make sure cooling fan is operating properly.
- Check 1 ½ dump valve seal.

YEARLY:

- We recommend that your unit be inspected by a qualified service technician once a year.

PREVENTATIVE MAINTENANCE:

- Never store this unit in a place where there is a possibility of the temperature dropping below 0°C (32°F).

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, etc.
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 outlets. Never bend or remove ground pin from plugs.
5. Ensure filters and screens are free from lint or dirt.
6. Do not run unit if vacuum motor or pump is wet. Allow sufficient time for motor 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 overheat.
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. Insert electrical cords into 3 pin grounded outlets. Two cord machines maybe equipped with an **Optional** Circuit Indicator located above the Switch Plate. The electrical cords must be plugged into separate circuits. When this is achieved the green light will illuminate showing the machine is ready for operation.
2. We recommend the use of a Esteam 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.
3. 500 PSI Plunger pump priming instructions:
 - Fill fresh water tank
 - Turn on vacuum
 - Always release the pressure by depressing the prime valve prior to turning on the pump, to release head pressure and prevent blowing fuse or over amping the pump motor
 - Turn on pump
 - Cover vacuum barb on recovery tank
 - Pull prime valve trigger for about 30 seconds
 - Shut off pump and vacuum
 - Connect hoses for cleaning and machine is ready to use.
4. To adjust pump pressure: Turn pressure regulator (located at the lower front of machine) clockwise to increase pressure; counter-clockwise to decrease pressure.

TO USE YOUR NINJA HEATER:

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

OPERATING INSTRUCTIONS (CONTINUED)

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.

5. Connect vacuum and solution hoses to the carpet cleaning wand.
6. Proceed to clean carpets.
7. When the recovery tank becomes full, vacuum will automatically stop extracting. When vacuum stops extracting it will make a distinctive high pitched noise as all the air flow will be cut off. At this time switch unit off. Drain the recovery tank by pulling up on drain valve on front of machine.

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

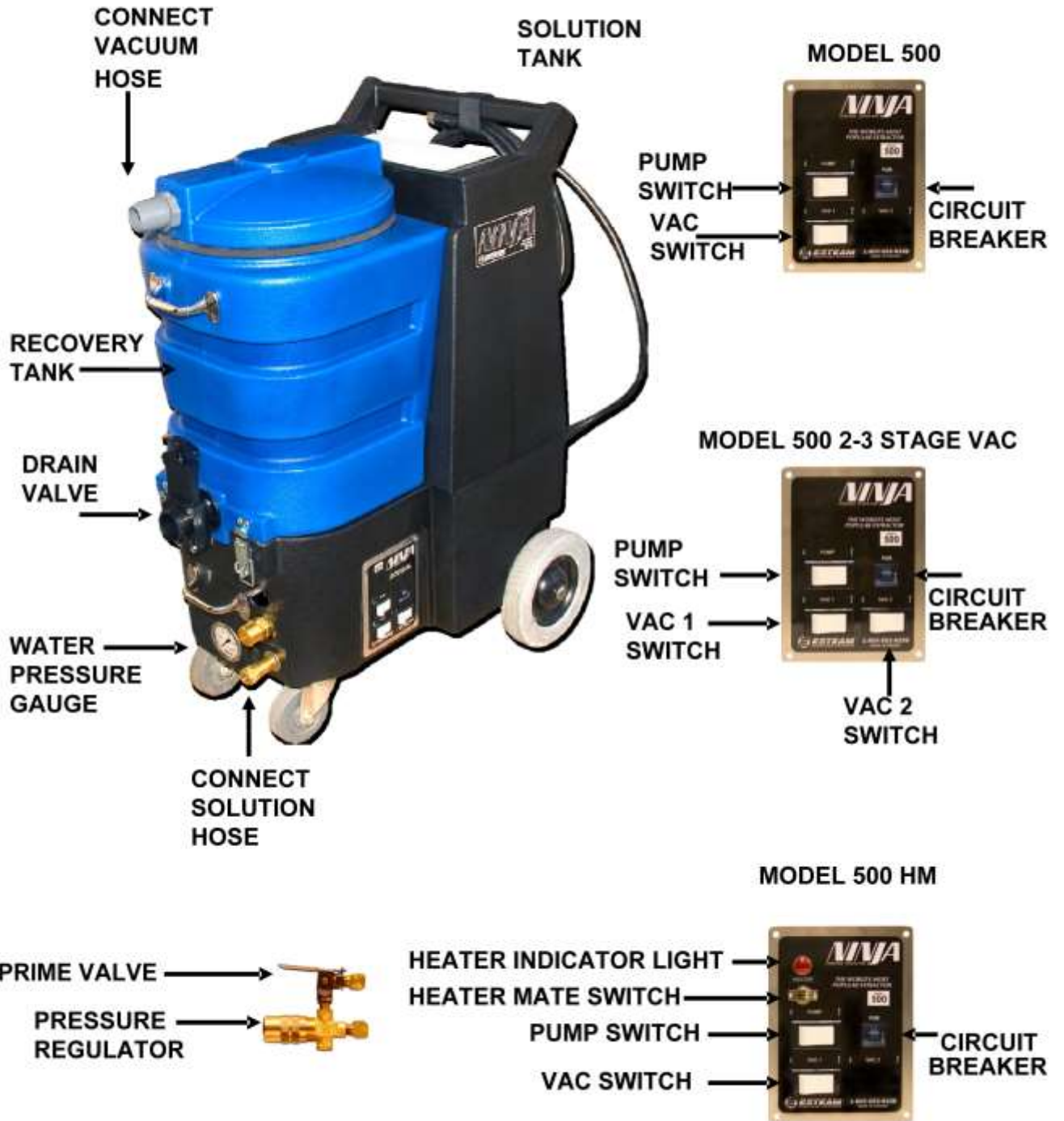
8. To empty solution tank remove vacuum hose from wand. Turn on vacuum and extract solution from solution tank into recovery tank, then drain recovery tank.

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

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

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 electric shock.

NINJA 500 MODELS



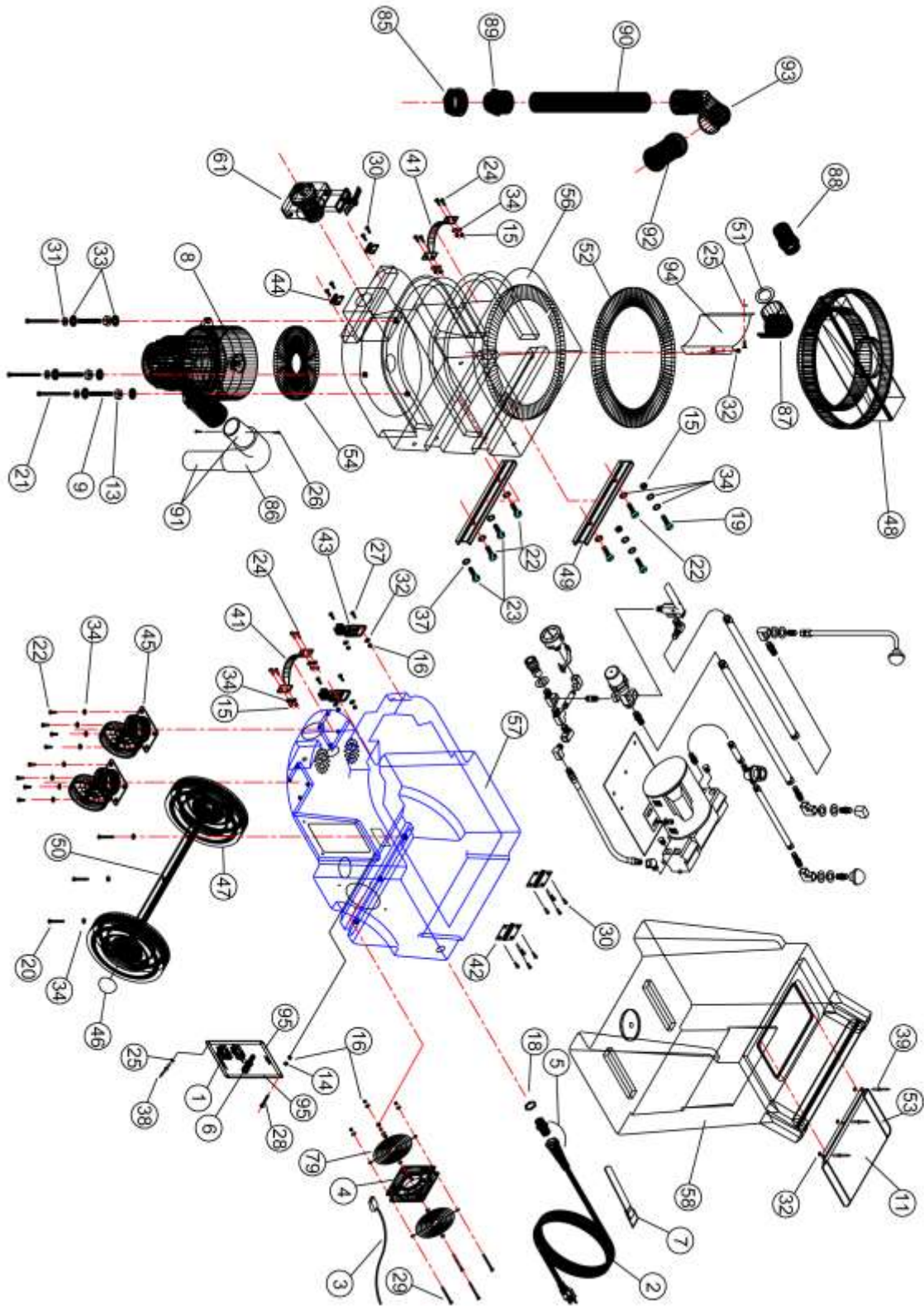
TROUBLE SHOOTING

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.

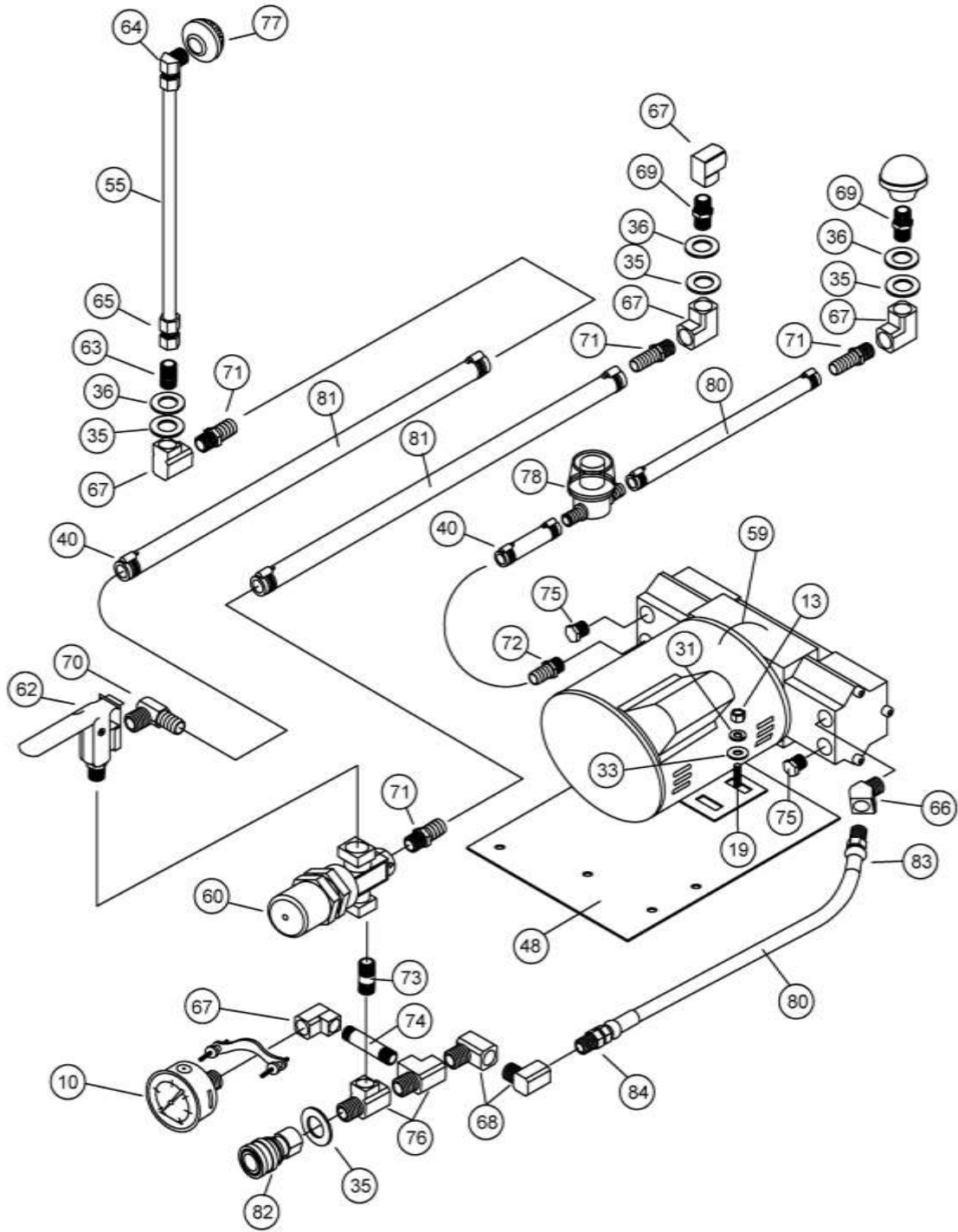
PROBLEM	CAUSE	SOLUTION
1. Entire unit will not operate	1. Unit not plugged in	1. Connect unit to 3 pin grounded outlets
	2. Loose wiring	2. See dealer
2. 500PSI Plunger Pump will not run	1. Switch not turned on	1. Turn on switch
	2. Broken switch	2. See dealer
	3. Loose wiring	3. See dealer
	4. Pump motor defective	4. See dealer
3. Vacuum 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
4. 500PSI Plunger Pump runs but does not pump solution	1. Out of solution	1. Fill solution tank
	2. Pump inlet screen plugged	2. Clean inlet screen
	3. Pump was not properly primed	3. Prime pump using priming quick connect
	4. Kink in solution hose	4. Remove kink
	5. Plugged jet or quick connect	5. Remove blockage
	6. Internal (inside machine) or external solution line damaged and leaking	6. See dealer
5. 500PSI Plunger Pump runs but has loss pressure	1. Pressure regulator valve out of adjustment	1. Adjust pressure regulator located at front of the machine
	2. Partial kink in solution hose	2. Remove kink
	3. Partial blockage in solution hose	3. Remove blockage
	4. Jet orifice opening on cleaning wand is too large	4. Total jet opening for a 500PSI pump should be .02

PROBLEM	CAUSE	SOLUTION
6. Vacuum operates but has poor or no suction	1. Recovery tank full	1. Drain recovery tank
	2 Vacuum hose plugged	2. Locate and remove blockage
	3. Wand plugged	3. Locate and remove blockage
	4. Exhaust port blocked	4. Locate and remove blockage
	5. High level 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. Vacuum prematurely stops extracting	1. Excess foam in recovery tank	1. Add defoamer to recovery tank
	2. Lint or dirt on automatic shut off float screen	2. Clean auto shut off float screen
	3. Defective float ball	3. Replace float screen cage
8. Machine spits water out of exhaust port	1. High level float not working properly	1. Check auto shut off float cage and ball for proper operation
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 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 to a dealer for service
11. Heater won't work	1. Heater cord not plugged in	1. Connect cord to 3 Pin (separate) outlet
	2. Faulty Thermostat or Thermo cut-out	2. See dealer
12. Water not hot enough	1. Check Jet size on wand or upholstery tool	1. Do not exceed .03 orifice size for maximum heat transfer
	2. Cold water used in solution tank	2. Use hot tap water for maximum heat transfer

NINJA 500 PSI PAGE 1



NINJA 500 PSI PAGE 2

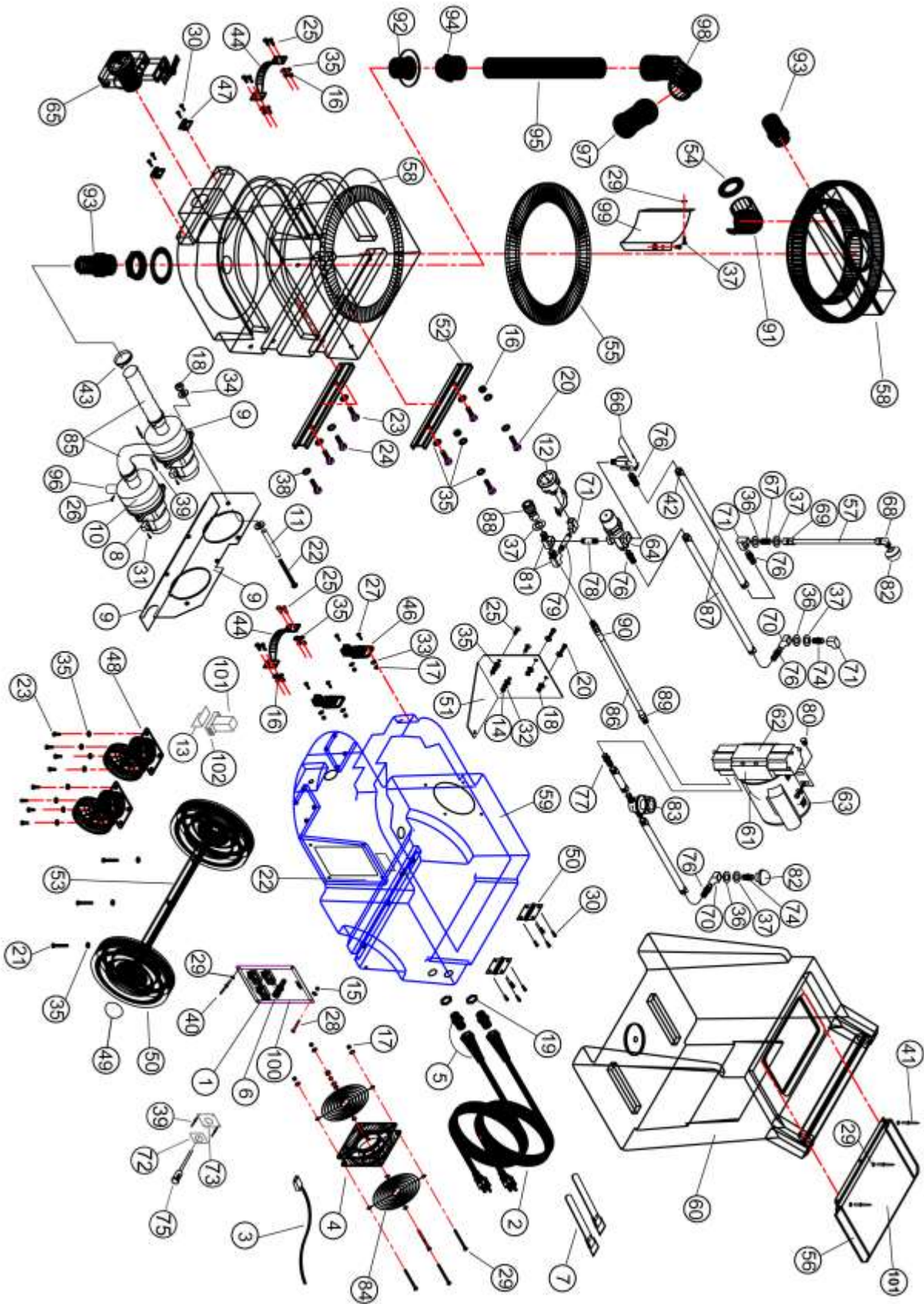


NINJA 500 PSI

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	NJC500-05
4B	333-015	Fan, Muffin 6"- 220V	NJC500-20-05
5	335-015	Strain Relief, 14 Gauge	
6	340-155	Circuit Breaker, 5 Amp	
7	350-005	Strap Velcro	
8	355-120	Vacuum, 3 STG (LRG-PLASTIC)	
9	355-225	Vac spacer, 3/8 OD x 2-1/4 ID	
10	360-015	1000 Psi Pressure Gauge	
11	845-040	Solution Tank Cover	
12	400-005	Hex Nut, 1/4 x 20 SS	Not shown
13	400-010	Hex Nut, 1/4 x 20 Zinc	
14	400-055	Lock nut, 10-24 Nylon Zinc	
15	400-115	Locknut, 1/4 x 20 Nylon SS	
16	400-130	Locknut, 10 x 24 Nylon SS	
17	400-135	Lock nut, 1/4 x 20 Nylon zinc	
18	400-165	Locknut, 1/2"	
19	405-010	Bolt, 1/4 x 1 SS	
20	405-020	Bolt, 1/4 x 1-1/4 SS	
21	405-050	Bolt, 1/4 x 3-1/2 Stove Zinc	
22	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
23	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
24	410-005	MS, 1/4 x 1 Phil SS Flat/H	
25	410-058	SMS, 4 x 1/4 Pan Phil SS	
26	410-125	SMS, 8 x 5/8 Pan RB SS	
27	410-160	MS, 10-24 x 3/4 Pan PH SS	
28	410-165	MS, 10-24 x 1 Pan Slot SS	
29	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
30	410-205	MS, 10-32 x 1/2 Panphil SS	
31	415-020	LW, 1/4 Zinc	
32	415-115	FW, 10 SS	
33	410-120	FW, 1/4 Zinc	
34	415-125	FW, 1/4 SS	
35	415-155	FW, 1/2 SS (Stand/Max OD)	
36	415-156	FW, 1/2 SS	
37	415-305	FNDW, 1/4 SS	
38	420-105	Rivet, Al/St #66	
39	420-151	Rivet, Fullysealed #68	
40	425-005	Clamp, #8	
41	435-015	Handle, Brass/Chrome	
42	440-006	S.S. Hinge 2" x 2"	
43	445-015	Latch, Machine	
44	445-020	Latch, Striker	
45	455-005	Caster, 4" Swivel	
46	455-052	Wheel Cap Dome	
47	455-057	Wheel 8" grey Black Hub	
48	465-035	Bracket, 500 PSI Motor	

49	465-065	Brace, Ninja Tank	
50	470-051	Axel, Ninja HD	
51	475-010	Gasket, Rubber - 1 1/2" Dump Valve	
52	475-030	Gasket, Lid 3/8"	
53	475-040	Gasket, 1/8 x 1"	
54	475-225	Gasket , Vac 7"	
55	480-205	SS Tube 3/8 (1 FT)	
56	495-021C	Recovery Tank & Lid Ninja	
57	495-035	Base, Ninja	
58	495-040	Sol Tank Ninja	
59A	512-542	Pump 500 PSI & M110 Motor	NJC500
59B	512-545	Pump 500 PSI	
59C	512-551	Motor Model M110 (110V)	NJC500
59D	512-552	Motor Model M110 (220V)	NJC500-20
60	530-025	Regulator, MV500	
61	545-100	Dump Valve, 1 1/2"	
62	551-029	Prime Valve	
63	555-072	Close nipple, 1/4"	
64	555-095	Comp. Fitting 90 3/8 x 1/4 MPT	
65	555-110	Comp. Fitting, 3/8 Comp x 1/4 FPT	
66	555-186	Elbow 45, 3/8 Street Extruded	
67	555-206	Elbow 90, 1/4 FPT Extruded	
68	555-208	Elbow 90, 1/4 Street Extruded	
69	555-272	Hex Nipple, 1/4" (Long)	
70	555-325	Hose Barb 90, 1/2 Barb x 1/4 MPT	
71	555-370	Hose Barb, 1/2 Barb x 1/4 MPT	
72	555-372	Hose Barb, 1/2 Barb x 3/8 MPT	
73	555-422	Long Nipple 1/4 x 1 1/2"	
74	555-424	Long Nipple, 1/4 x 2 1/2"	
75	555-454	Plug, 3/8 MPT Hex Head	
76	555-636	Tee, 1/4" Street Extruded	
77	560-030	Screen, Acorn	
78	560-116	Strainer, Inline Barbed 1/2	
79	560-330	Guard, Finger, 6" Muffin Fan	
80	572-125	Pulse Hose, 3/8"	
81	572-155	Polyspring Hose, 1/2"	
82	580-010	Q.C. 1/4" Fem (Closed)	
83	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
84	581-065	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT SVL	
85	585-025	Spin Fitting, 1-1/2	
86	590-010	PVC Elbow, 1-1/4" 90, S x S	
87	590-020	PVC ELB 1 1/2" 90, S x FIPT	
88	590-405	PVC Hose Barb 1 1/2" x MPT	
89	590-415	PVC Adpt 1 1/2", S x MPT	
90	595-005	ABS Pipe, 1 1/2"	
91	595-110	PVC Pipe, 1 1/4"	
92	597-010	Float Screen Cage	
93	597-061	Adpt (RM) 30 Degree	
94	845-010	Baffle, S/S	
95	845-030	Switch Plate	

NINJA 500 PSI 2-3 STAGE VAC



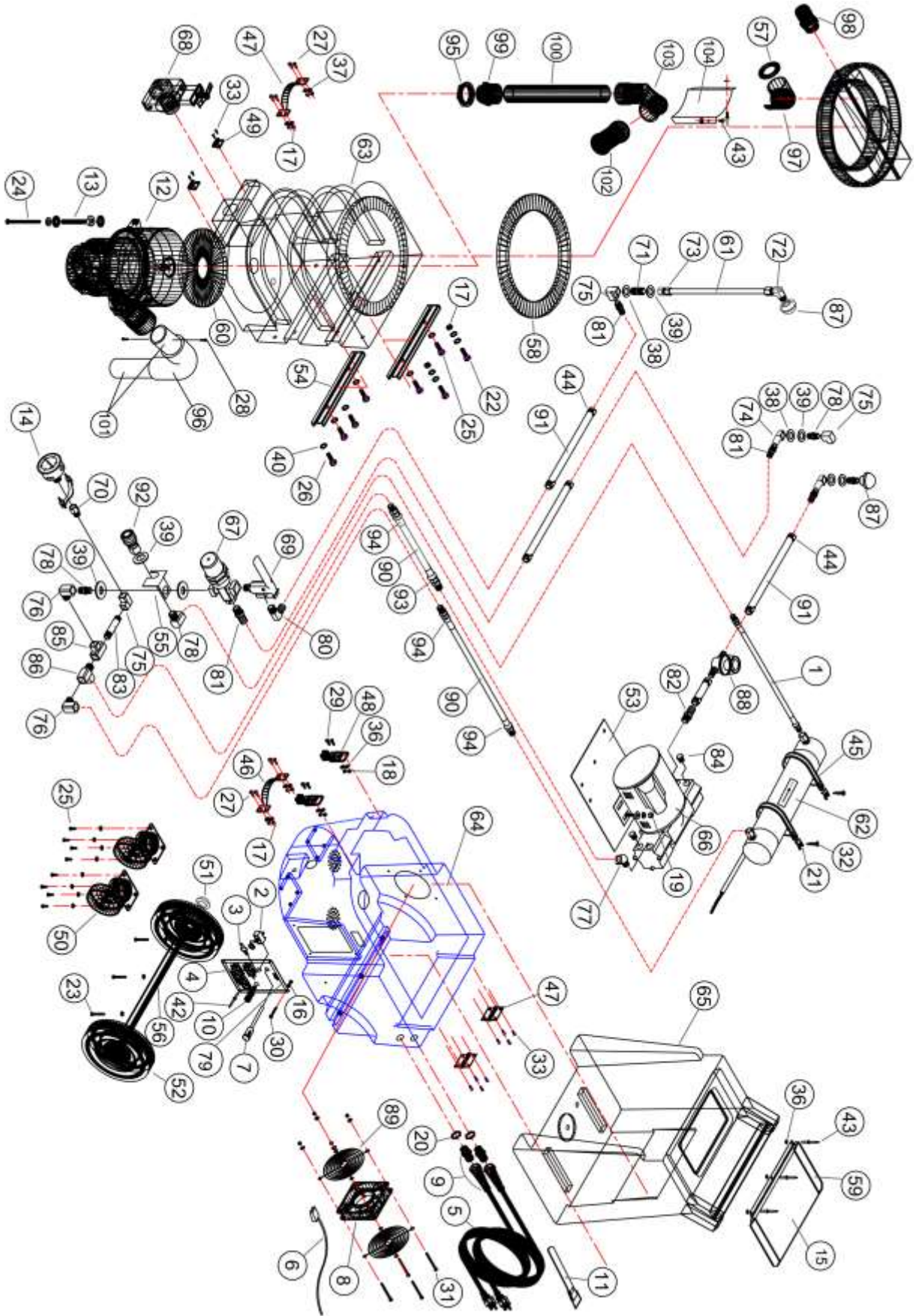
NINJA 500 PSI 2-3 STAGE VAC

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	NJC500-05
4B	333-015	Fan, Muffin 6"- 220V	NJC500-20-05
5	335-015	Strain Relief, 14 Gauge	
6	340-155	Circuit Breaker, 5 Amp	
7	350-005	Strap Velcro	
8A	355-411	Vac. 2-3 Stage 110v (c/w 355-405)	
8B	355-510	Vac. 2-3 Stage 220v (c/w Flat Cap)	
9	355-210	Bracket, Vac 2-3 Stage	
10	355-405	Vacuum Cap, Straight	
11	355-230	Vac bolt Spacer, 1-1/8"	
12	360-015	1000 Psi Pressure Gauge	
13	597-061	Adpt (RM) 30 Degree	
14	400-005	Hex Nut, 1/4 x 20 SS	
15	400-055	Lock nut, 10-24 Nylon Zinc	
16	400-115	Locknut, 1/4 x 20 Nylon SS	
17	400-130	Locknut, 10 x 24 Nylon SS	
18	400-135	Lock nut, 1/4 x 20 Nylon zinc	
19	400-165	Locknut, 1/2"	
20	405-010	Bolt, 1/4 x 1 SS	
21	405-020	Bolt, 1/4 x 1-1/4 SS	
22	405-045	Bolt, 1/4 x 3 Stove Zinc	
23	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
24	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
25	410-005	MS, 1/4 x 1 Phil SS Flat/H	
26	410-125	SMS, 8 x 5/8 Pan RB SS	
27	410-160	MS, 10-24 x 3/4 Pan PH SS	
28	410-165	MS, 10-24 x 1 Pan Slot SS	
29	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
30	410-205	MS, 10-32 x 1/2 Panphil SS	
31	410-225	SMS, 10 x 1/2 Pan RB Zinc	
32	415-020	LW, 1/4 Zinc	
33	415-115	FW, 10 SS	
34	410-120	FW, 1/4 Zinc	
35	415-125	FW, 1/4 SS	
36	415-155	FW, 1/2 SS (Stand/Max OD)	
37	415-156	FW, 1/2 SS	
38	415-305	FNDW, 1/4 SS	
39	420-055	Rivet, Al/Al #46	
40	420-105	Rivet, Al/St #66	
41	420-151	Rivet, Fullysealed #68	
42	425-005	Clamp, #8	
43	425-010	Clamp, #20	
44	435-015	Handle, Brass/Chrome	
45	440-006	S.S. Hinge 2" x 2"	

NINJA 500 PSI 2-3 STAGE VAC

46	445-015	Latch, Machine	
47	445-020	Latch, Striker	
48	455-005	Caster, 4" Swivel	
49	455-052	Wheel Cap Dome	
50	455-057	Wheel, 8" Grey/Black Hub	
51	465-035	Bracket, 500 PSI motor	
52	465-065	Brace, Ninja Tank	
53	470-051	Axel, Ninja HD	
54	475-010	Gasket, Rubber - 1 1/2" Dump Valve	
55	475-030	Gasket, Lid 3/8"	
56	475-040	Gasket, 1/8 x 1"	
57	480-205	SS Tube 3/8 (1 FT)	
58	495-021C	Recovery Tank & Lid Ninja	
59	495-035	Base, Ninja	
60	495-040	Sol Tank Ninja	
61	512-542	Pump, 500 PSI & M110 Motor (110v)	NJC500-05
62	512-545	Pump, 500 PSI	
63A	512-551	Motor Model M110(110v)	NJC500-05
63B	512-552	Motor Model M110(220v)	NJC500-20-05
64	530-025	Regulator, MV500	
65	545-100	Dump Valve, 1 1/2"	
66	551-029	Prime Valve	
67	555-072	Close Nipple 1/4"	
68	555-095	Comp. Fitting 90 3/8 x 1/4 MPT	
69	555-110	Comp. Fitting, 3/8 Comp x 1/4 MPT	
70	555-182	Elbow 45, 1/4 FPT Extruded	
71	555-206	Elbow 90, 1/4 FPT Extruded	
72	845-040	Solution Tank Cover	
73	845-030	Switch Plate	
74	555-272	Hex Nipple, 1/4" (Long)	
75	845-010	Baffle, S/S	
76	555-370	Hose Barb, 1/2 Barb x 1/4 MPT	
77	555-372	Hose Barb, 1/2 Barb x 3/8 MPT	
78	555-424	Long Nipple, 1/4 x 2 1/2"	
79	555-454	Plug, 3/8 MPT Hex Head	
80	555-636	Tee, 1/4" Street Extruded	
81	560-030	Screen, Acorn	
82	560-116	Strainer, Inline Barbed 1/2"	
83	560-330	Guard, Finger, 6" Muffin Fan	
84	570-010	Vac Hose, 1 1/2 Wire Reinforced	
85	572-125	Pulse Hose, 3/8"	
86	572-155	Poly spring Hose, 1/2"	
87	580-010	Q.C. 1/4" Fem (Closed)	
88	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
89	581-065	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT SVL	
90	590-020	PVC ELB 1 1/2" 90, S x FIPT	
91	590-205	PVC, Wall Fitting, 1 1/2	
92	590-405	PVC Hose Barb 1 1/2" x MPT	
93	590-415	PVC Adpt 1 1/2", S x MPT	
94	595-005	ABS Pipe, 1 1/2"	
95	595-110	PVC Pipe, 1 1/4"	
96	597-010	Float Screen Cage	

NINJA 500 PSI HEATER MATE



NINJA 500 PSI H.M (P. 1)

REF	PART NO.	DESCRIPTION	NOTES:
1	263-013	H.P Hose 28"	
2	305-210	Switch, Toggle 110v/220v	
3	305-225	Switch Plate ON/OFF	
4	305-230	Switch, Rocker 20 Amp	
5	315-015	Cord, 25' Black 14/3 SJTW-A	
6	315-040	Cord, Fan - Muffin	
7A	320-110	Lamp, Panel 110v	NJC500-10
7B	320-900	Lamp, Panel 220v	NJC500-20-10
8A	333-010	Fan, Muffin 6"- 115V	NJC500-10
8B	333-015	Fan, Muffin 6"- 220V	NJC500-20-10
9	335-015	Strain Relief, 14 Gauge	
10	340-155	Circuit Breaker, 5 Amp	
11	350-005	Strap Velcro	
12	355-120	Vacuum 3 Stage 110v (LRG. Plastic)	
13	355-225	Vac. Spacer 3/8OD x 2-1/2"	
14	360-015	1000 Psi Pressure Gauge	
15	845-040	Solution Tank Cover	
16	400-055	Locknut, 10-24 Nylon Zinc	
17	400-115	Locknut, 1/4 x 20 Nylon SS	
18	400-130	Locknut, 10 x 24 Nylon SS	
19	400-135	Locknut, 1/4 x 20 Nylon Zinc	
20	400-165	Locknut, 1/2"	
21	400-240	Tinnerman Nut	
22	405-010	Bolt, 1/4 x 1 SS	
23	405-020	Bolt, 1/4 x 1-1/4 SS	
24	405-050	Bolt, 1/4 x 3-1/2 Stove zinc	
25	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
26	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
27	410-005	MS, 1/4 x 1 Phil SS Flat/H	
28	410-125	SMS, 8 x 5/8 Pan Rob, SS	
29	410-160	MS, 10-24 x 3/4 Pan PH SS	
30	410-165	MS, 10-24 x 1 Pan Slot SS	
31	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
32	410-190	SMS 10 x 1 FLT Soc Zinc	
33	410-205	MS, 10-32 x 1/2 Pan phil. SS	
34	410-225	SMS, 10 x 1/2 Pan RB Zinc	
35	415-020	LW, 1/4 Zinc	
36	415-115	FW, 10 SS	
37	415-125	FW, 1/4 SS	
38	415-155	FW, 1/2 SS (Stand/Max OD)	
39	415-156	FW, 1/2 SS	
40	415-305	FNDW, 1/4 SS	
41	420-055	Rivet, Al/Al # 46	
42	420-105	Rivet, AL/ST #66	
43	420-151	Rivet, fully sealed # 68 AL/AL	

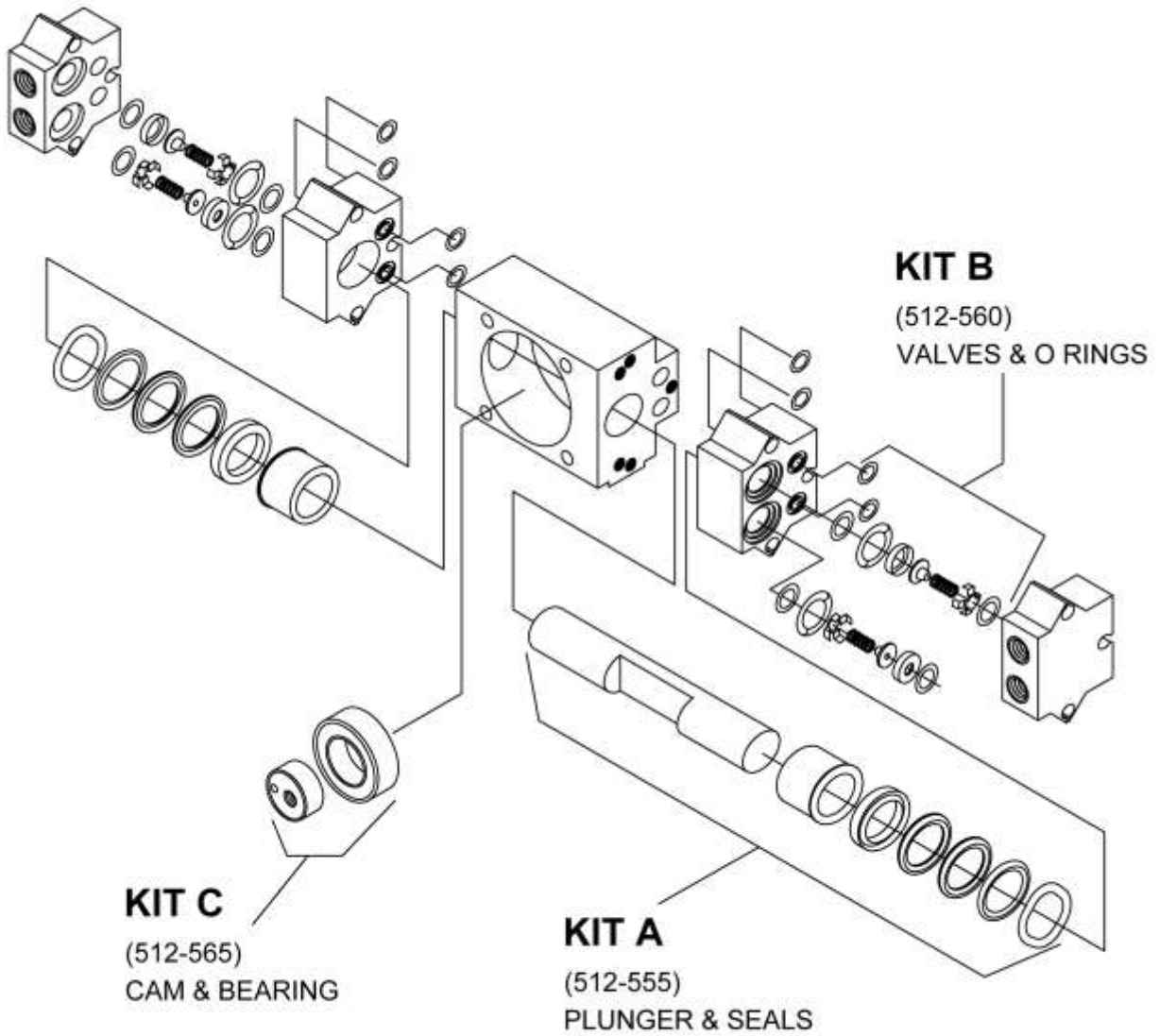
NINJA 500 PSI H.M (P. 2)

44	425-005	Clamp, # 6 Hose 1/2 x 1	
45	425-130	Clamp Tube 3"	
46	435-015	Handle, Brass/Chrome	
47	440-006	S.S. Hinge 2" x 2"	
48	445-015	Latch, Machine	
49	445-020	Latch, Striker	
50	455-005	Caster, 4" Swivel	
51	455-052	Wheel Cap Dome	
52	455-057	Wheel, 8" Grey/Black Hub	
53	465-035	Bracket , 500 Motor	
54	465-065	Brace, Ninja Tank	
55	465-630	BRKT, Unloader MNTG	
56	470-051	Axel, Ninja HD	
57	475-010	Gasket, Rubber - 1 1/2" Dump Valve	
58	475-030	Gasket, Lid 3/8"	
59	475-040	Gasket, 1/8 x 1"	
60	475-225	Gasket, Vac 7"	
61	480-205	SS Tube 3/8 (1 FT)	
62A	490-005	Foamed Casing, Round 1850w HM (110V)	NJC500-10
62B	490-006	Foamed Casing, Round 1850w HM (220V)	NJC500-20-10
63	495-021C	Recovery Tank & Lid Ninja	
64	495-035	Base, Ninja	
65	495-040	Sol Tank Ninja	
66A	512-542	Pump, 500 PSI & M110 Motor 110v	NJC500-10
66B	512-545	Pump, 500 PSI	
66C	512-551	M10 Motor 110v	NJC500-10
66D	512-552	M10 Motor 220v	NJC500-20-10
67	530-025	Regulator, MV500	
68	545-100	Dump Valve, 1 1/2"	
69	551-029	Prime Valve	
70	555-002	ADPT, 1/4 M x 1/4 F	
71	555-072	Close Nipple, 1/4"	
72	555-095	Comp. Fitting, 90 3/8 x 1/4 MPT	
73	555-110	Comp. fitting, 3/8 Comp x1/4 MPT	
74	555-182	Elbow 45, 1/4 FEM. Extruded	
75	555-206	Elbow 90, 1/4" FPT. Extruded	
76	555-208	Elbow 90, 1/4 Street Extruded	
77	555-186	Elbow 45, 3/8 Street Extruded	
78	555-272	Hex Nipple, 1/4" (Long)	
79	845-030	Switch Plate	
80	555-325	Hose Barb 90, 1/2 Barb x 1/4 MPT	
81	555-370	Hose Barb, 1/2 Barb x 1/4 MPT	
82	555-372	Hose Barb, 1/2 Barb x 3/8 MPT	
83	555-424	Long Nipple, 1/4 x 2-1/2"	
84	555-454	Plug, 3/8 MPT Hex Head	

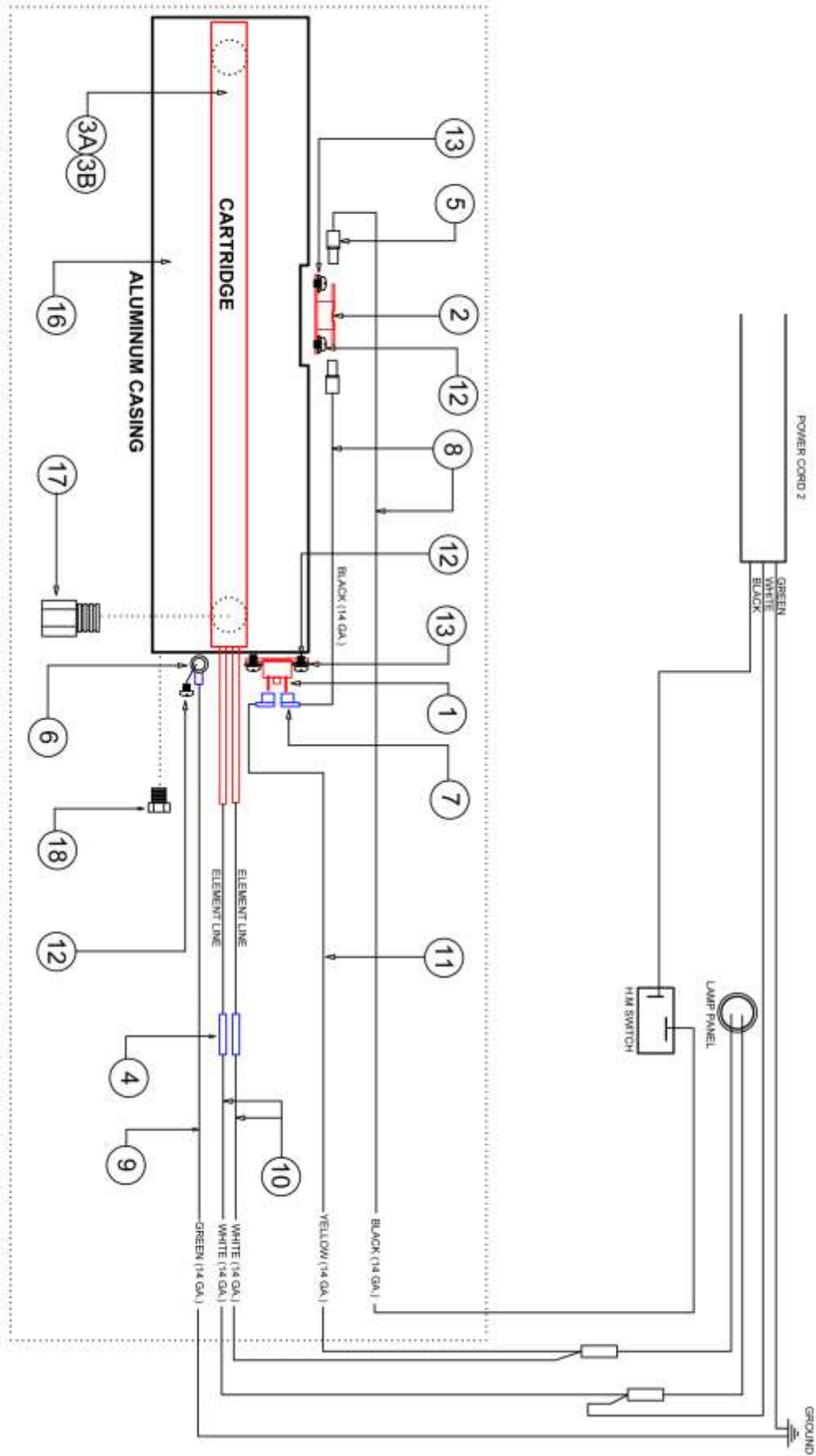
NINJA 500 PSI H.M (P. 3)

85	555-634	Tee, 1/4 FPT.	
86	555-636	Tee, 1/4" Street Extruded	
87	560-030	Screen, Acorn	
88	560-116	Strainer, Inline Barred 1/2"	
89	560-330	Guard, Finger, 6" Muffin Fan	
90	572-125	Pulse Hose, 3/8"	
91	572-155	Polyspring Hose, 1/2"	
92	580-010	Q.C. 1/4" Fem (Closed)	
93	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
94	581-065	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT SVL	
95	585-025	Spin Fitting, 1-1/2"	
96	590-010	PVC Elbow 1-1/4" 90, S x S	
97	590-020	PVC ELB 1 1/2" 90, S x FIPT	
98	590-405	PVC Hose Barb 1 1/2" x MPT	
99	590-415	PVC Adpt 1 1/2", S x MPT	
100	595-005	ABS Pipe, 1 1/2"	
101	595-110	PVC Pipe, 1 1/4"	
102	597-010	Float Screen Cage	
103	597-061	Adpt (RM) 30 Degree	
104	845-010	Baffle, S/S	

PUMP 500 PARTS LIST



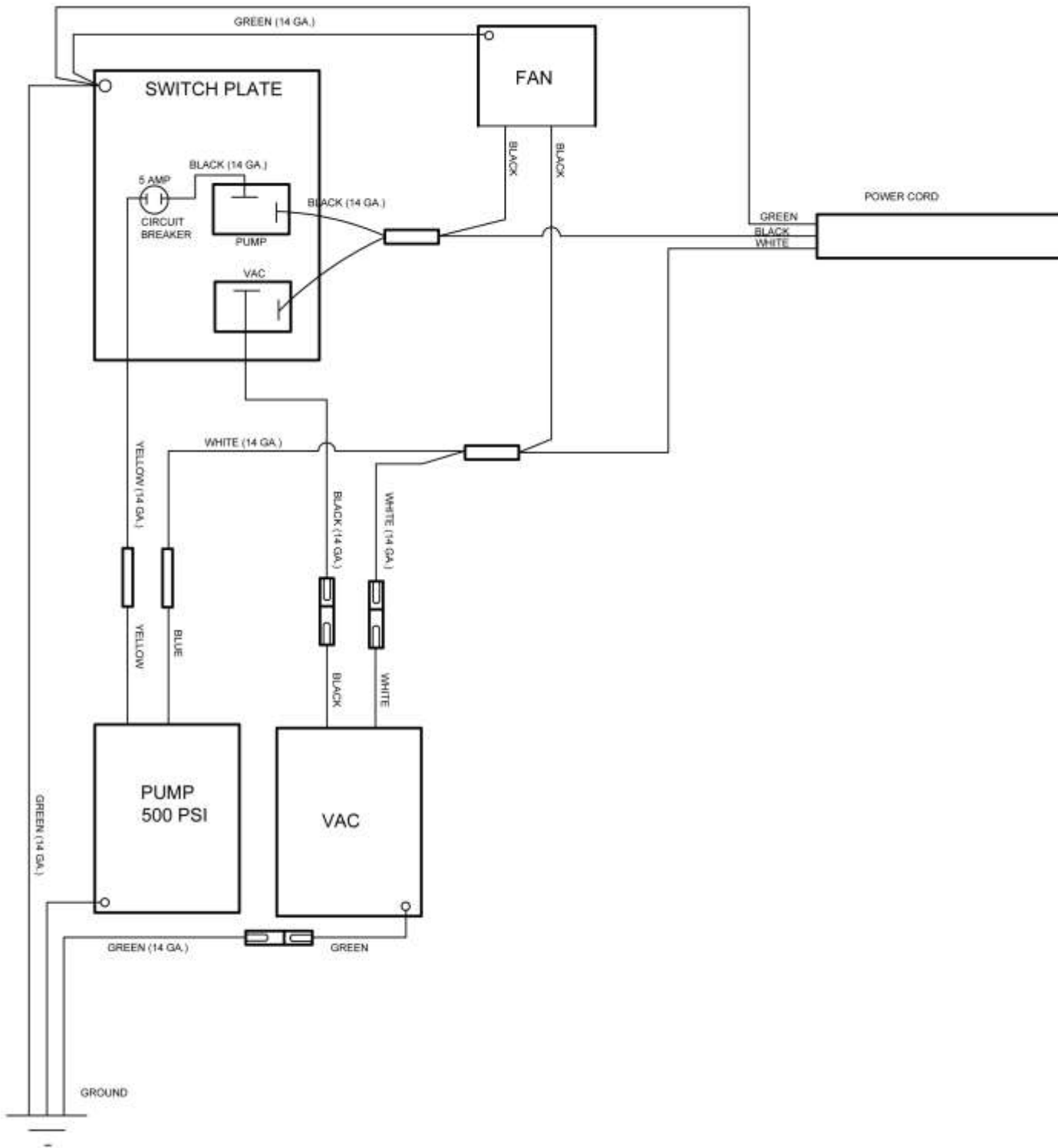
INTERNAL HEATER MATE



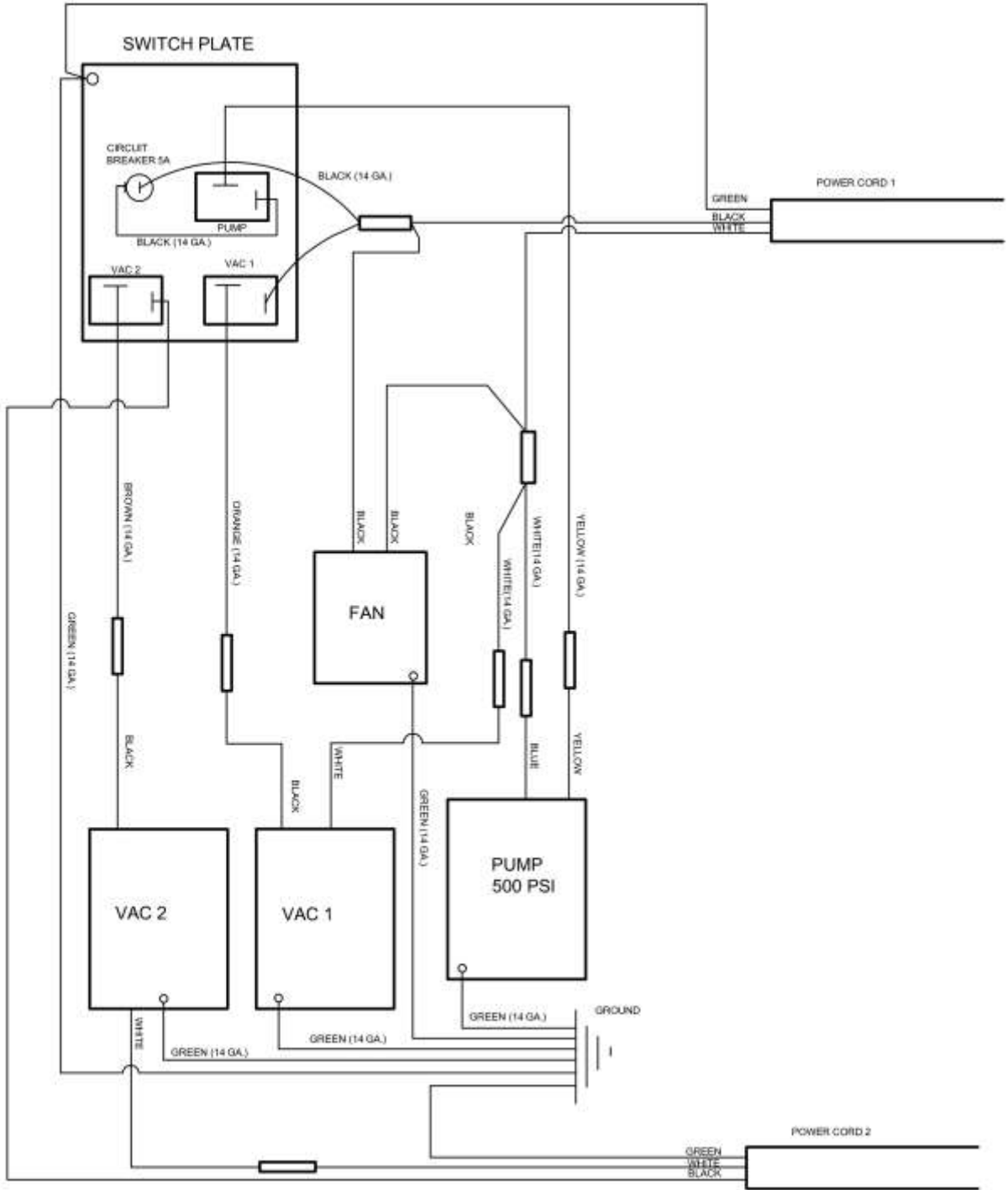
INTERNAL HEATER MATE (490-005/490-006)

REF	PART NO.	DESCRIPTION	NOTES:
1	305-245	Thermo Cut-Out	
2	305-265	Thermostat 200F	
3A	318-005	Heater Element 1850W 110V	Use For 490-005
3B	318-900	Heater Element 1850W 220V	Use For 490-006
4	325-005	Connector, Butt - Blue	
5	325-120	Spade, 3/16 F - Blue	
6	325-230	Terminal Ring, #10 - Blue	
7	325-500	Spade, 1/4 FEM. 90 Crimp	
8	330-225	Wire, 14 GA - Black	
9	330-230	Wire, 14 GA - Green	
10	330-235	Wire, 14 GA - White	
11	330-240	Wire, 14 GA - Yellow	
12	410-070	MS, 6 x 3/16 Pan PHL	
13	415-005	LW, 6 Zinc	
14	475-045	Gasket, 3" RND	Not Shown
15	475-070	Gasket 1/8"	Not shown
16	490-016	Alum (Round) Cassing	
17	555-002	ADPT, 1/4 M x 1/4 F	
18	555-451	Plug, 1/8 Hex	

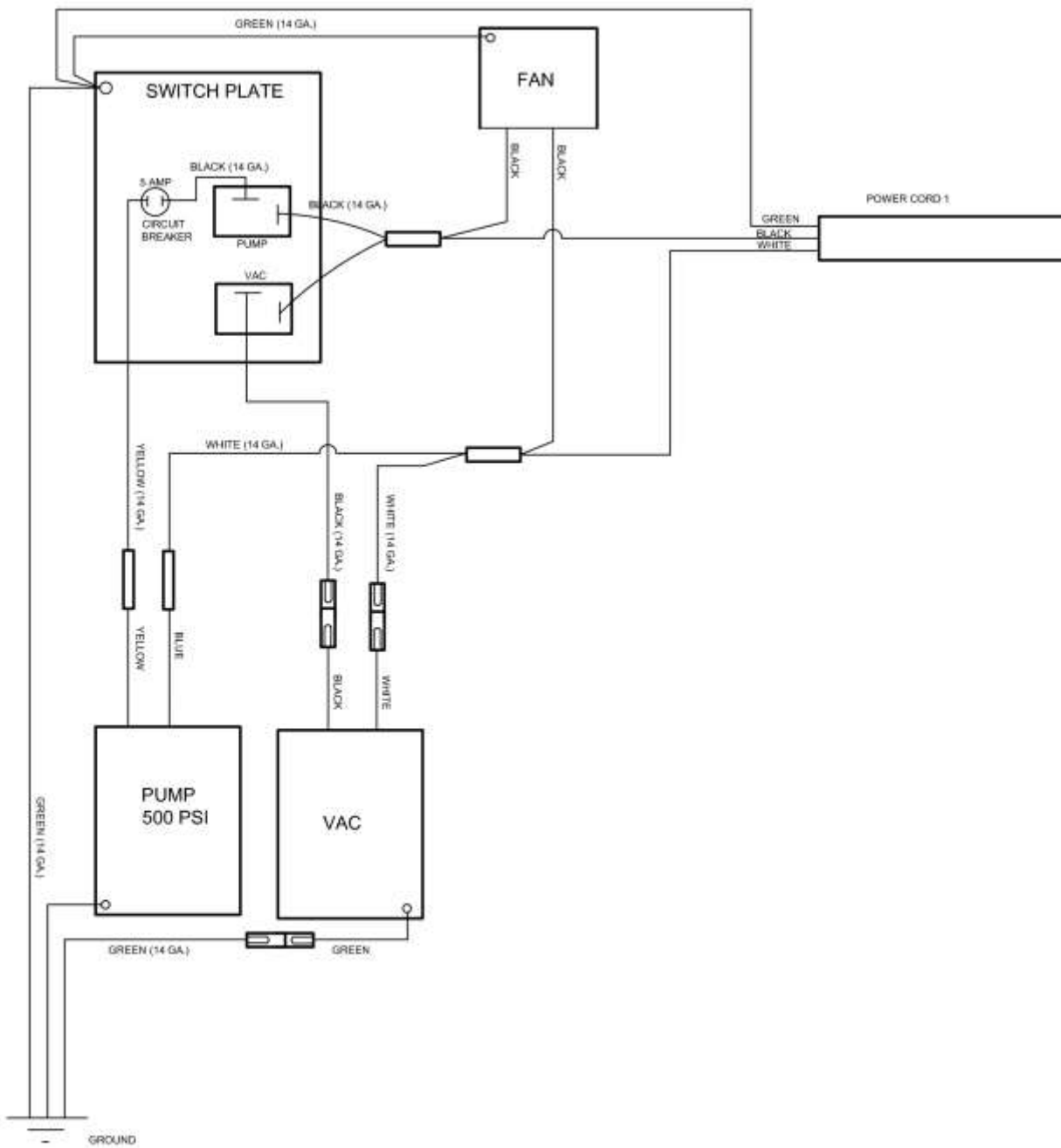
NINJA 500 WIRING



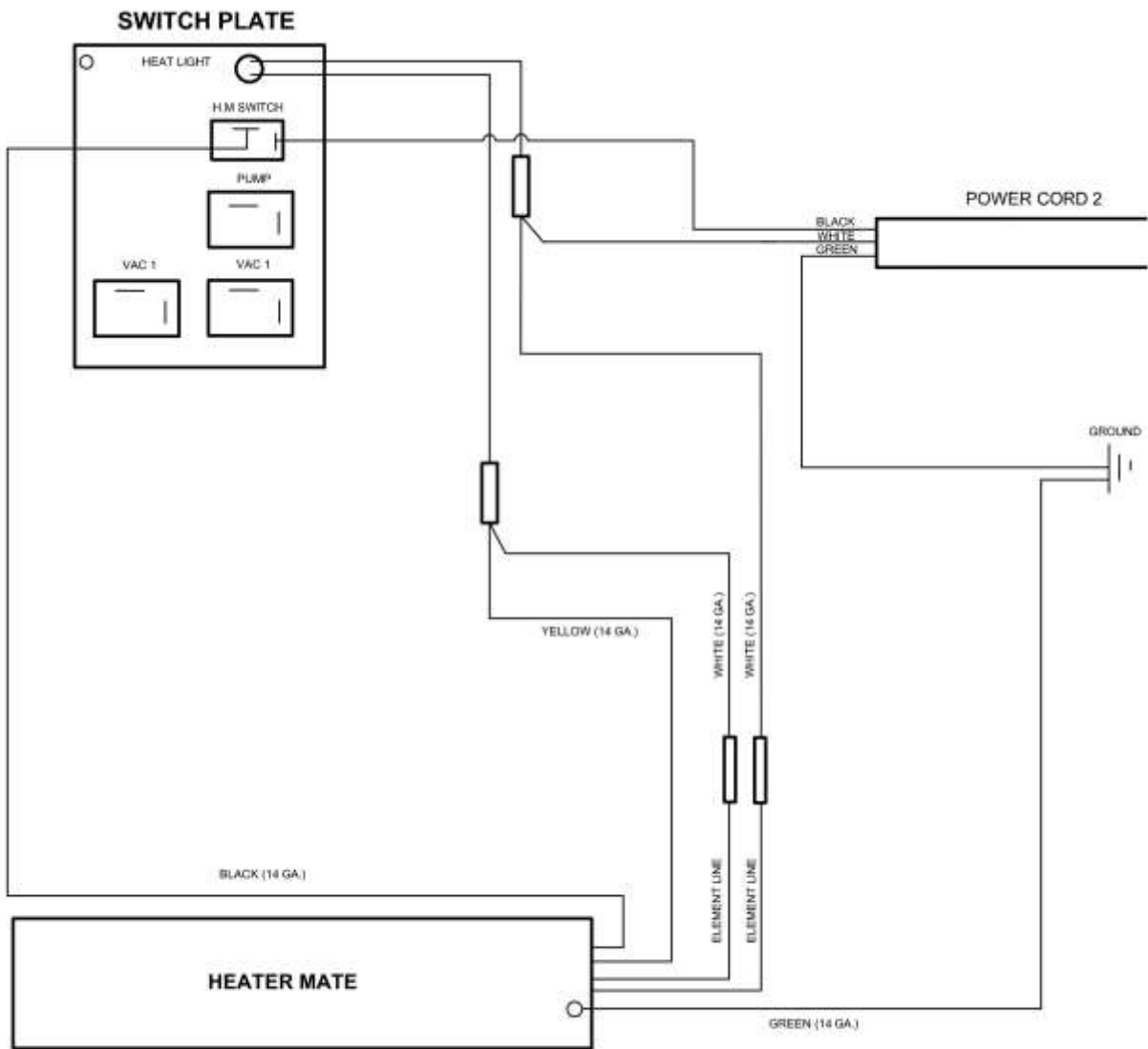
NINJA 500 2-3 STAGE VAC WIRING



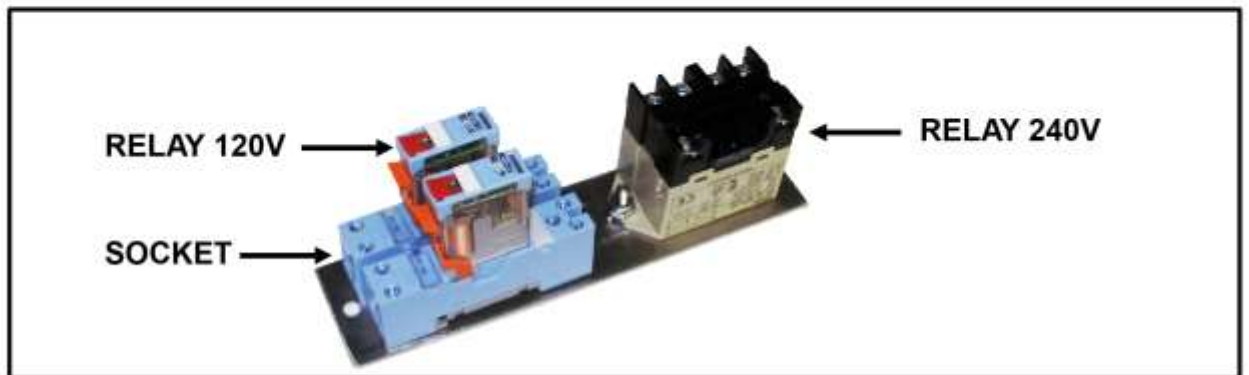
NINJA HEATER MATE WIRING P. 1



NINJA HEATER MATE WIRING P. 2



**NINJA 500 MODEL W/ OPTIONAL
CIRCUIT INDICATOR**

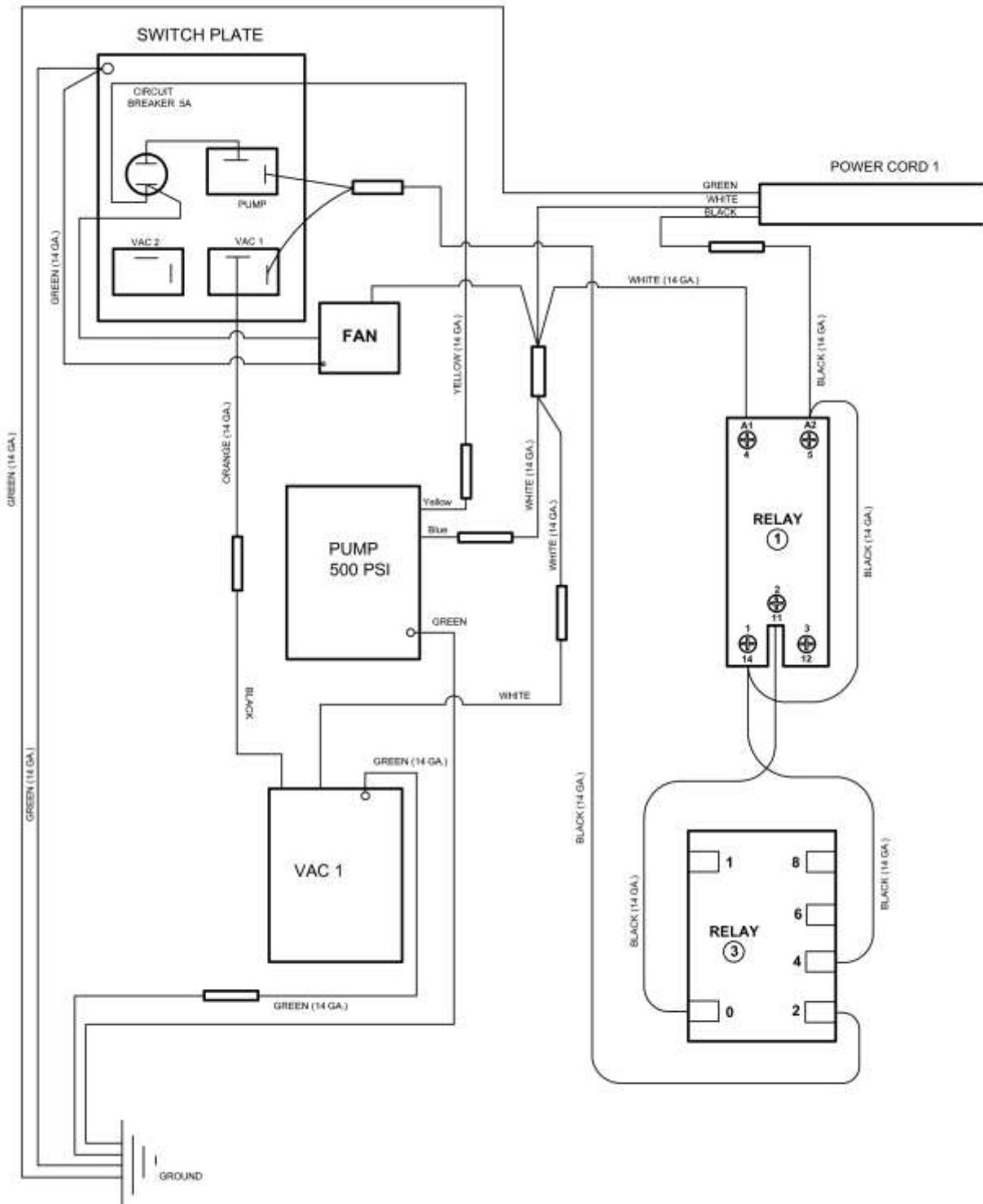


CIRCUIT INDICATOR PARTS LIST

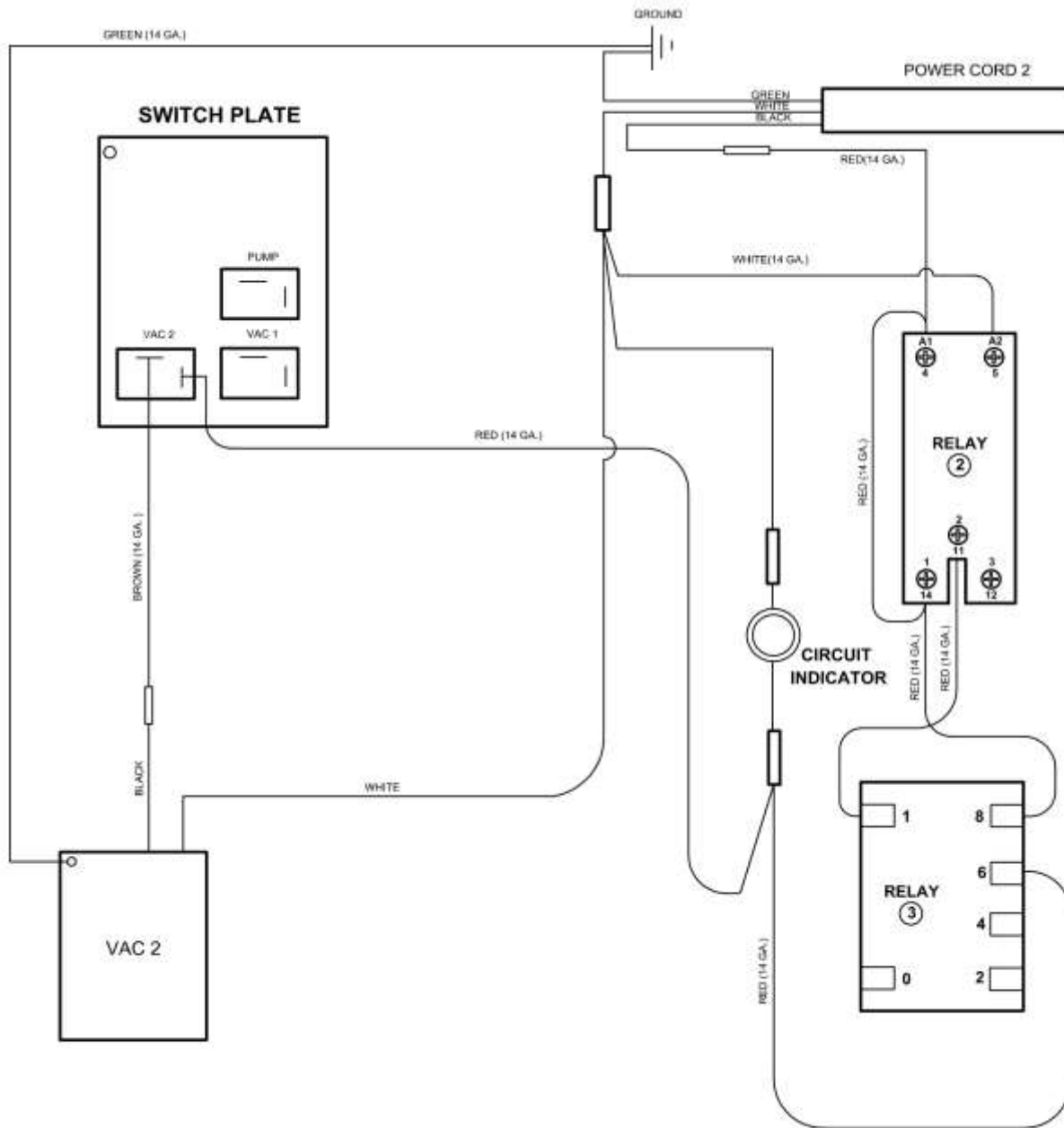
REF	PART NO.	DESCRIPTION	NOTES:
1	845-036	Plate	
2	320-111	Lamp	
3	305-057	Relay 120V	
4	305-058	Socket	
5	305-059	Relay 240V	
6	703-108	Decal	
7	465-045	Relay Bracket	

NINJA 500 2-3 STAGE VAC W/ OPTIONAL CIRCUIT INDICATOR

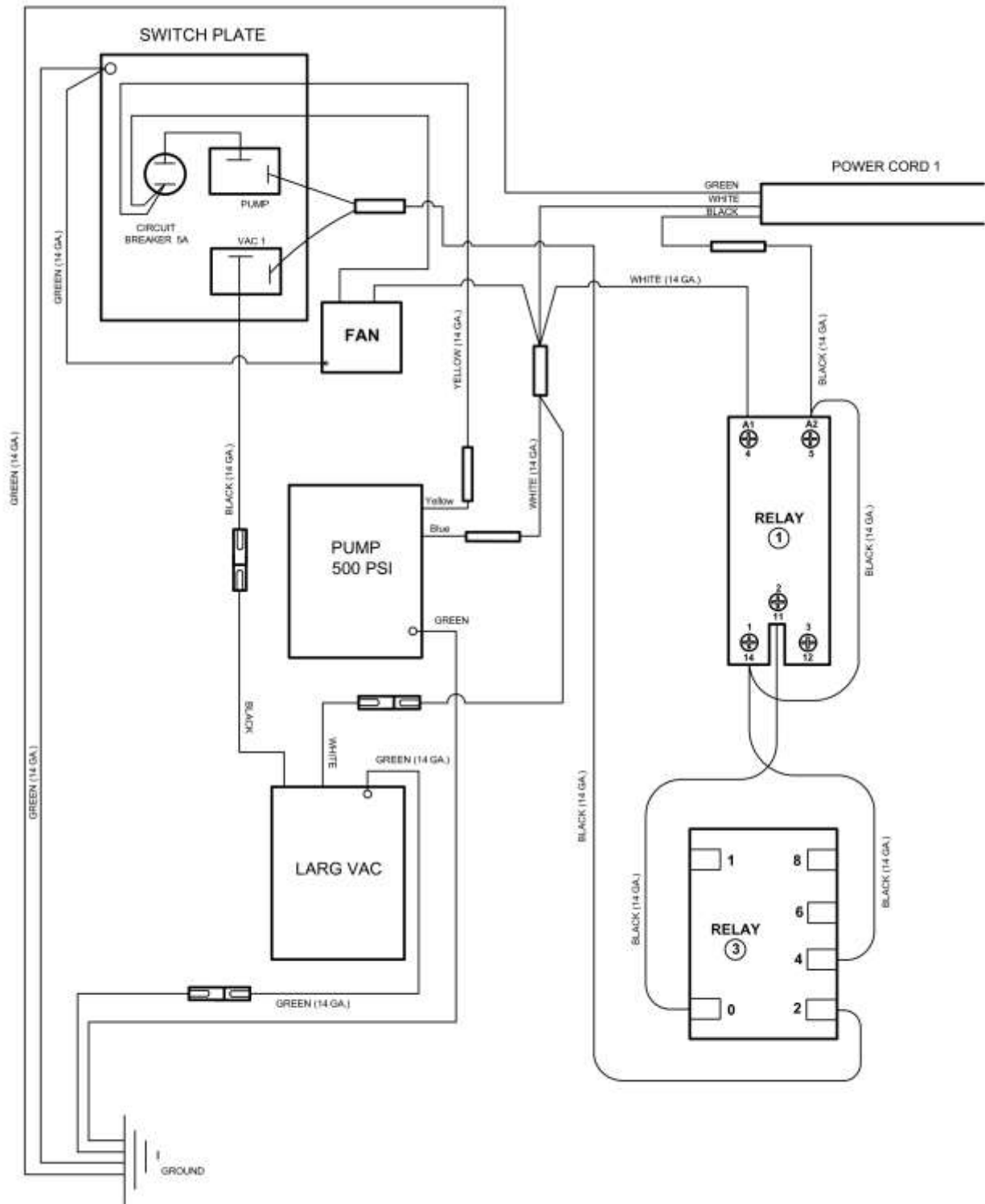
WIRING PAGE 1



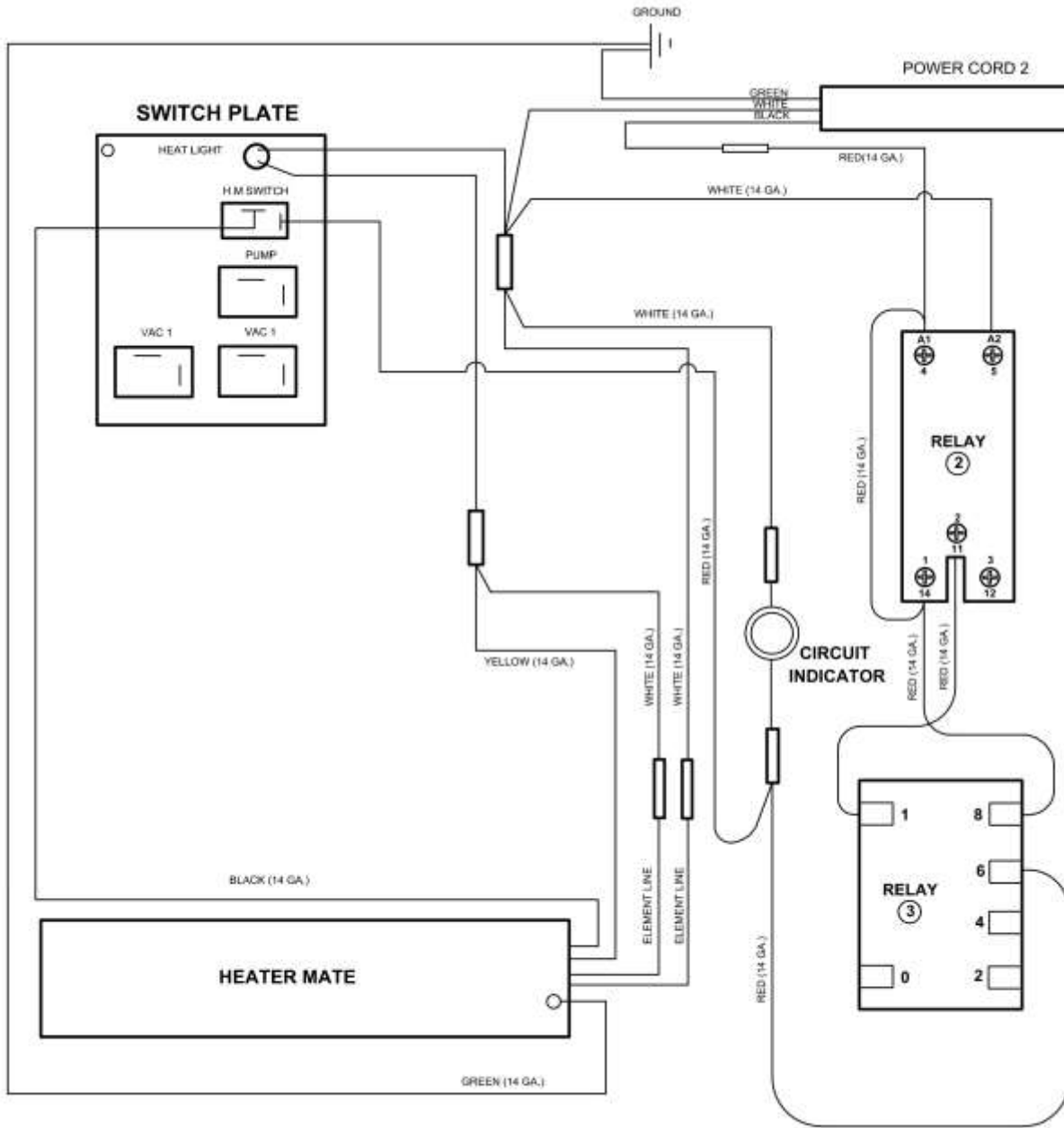
NINJA 500 2-3 STAGE VAC W/ OPTIONAL CIRCUIT INDICATOR
WIRING PAGE 2



NINJA 500 HEATER MATE W/ OPTIONAL CIRCUIT INDICATOR
WIRING PAGE 1



NINJA 500 HEATER MATE W/ OPTIONAL CIRCUIT INDICATOR
WIRING PAGE 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



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ESTEAM® CLEANINGSYSTEMS

NINJA EXTRACTOR WARRANTY

NOTICE: REVIEW THIS WARRANTY CAREFULLY AS THIS DOCUMENT CONTAINS LIMITATIONS AND EXCLUSIONS.

PART I:

Esteam Manufacturing Ltd. (hereinafter referred to as "Esteam") warrants each new Ninja Extractor, subject to the limitations as defined in the specific details of its warranty coverage defined below.

LIMITED LIFETIME HOUSING WARRANTY COVERAGE:

Esteam warrants the Ninja Polyethylene Machine Housing Unit to be free from defects in material and workmanship (including cracking, leaking or deterioration) for the life of the unit, expressly subject to the limitations stated herein.

In the event a defect occurs in a Ninja Housing Unit within five years of receipt by the original customer, Esteam will, if satisfied on its examination that the failure is due to defective material or workmanship, repair or replace the Ninja Housing Unit, at no cost to the original customer, other than as maybe provided for in this warranty.

In the event a defect occurs in a Ninja Housing Unit subsequent to five years (and thereafter for life) of receipt by the original customer; Esteam will, if satisfied on its examination, that the failure is due to defective material or workmanship, provide to the original customer only, a new Housing Unit, at 50% of the then published retail pricing basis, used by Esteam.

90 DAY LIMITED WARRANTY COVERAGE:

Esteam warrants all switches, vacuum hoses and solution hoses to be free from defects in material and workmanship, for any defect occurring within 90 days of receipt by the original customer of the Ninja Extractor; and further subject to the limitations stated below. 90 day on labor, subject to Esteam's approval; hourly labor credit is set by Esteam.

12 MONTH WARRANTY COVERAGE:

Subject to the Limited Lifetime Warranty and the 90 Day Limited Warranty; Esteam warrants all remaining items on the Ninja Extractor to be free from defect in material or workmanship (excluding any labour charges) for a period of 12 months from date of receipt of the unit by the original customer; and further subject to the limitations stated below.

PART II - REPLACEMENT PARTS (UNDER WARRANTY)

Replacement warranty parts will be genuine Esteam parts, or parts of similar kind and quality.

All replacement warranty parts are warranted to be free from defects in materials or workmanship from the date of the original unit purchase for the balance of the original warranty period namely: 90 days, 12 months, or the Lifetime, whichever is applicable; all in accordance with the terms of Part I, of this warranty.

PART III - LIMITATIONS ON WARRANTY COVERAGE

WHAT IS NOT COVERED:

Notwithstanding any other term or covenant of Esteam contained herein, the following provisions shall apply:

- (i) No warranty is provided for any Esteam product which has failed as a result of freezing, fire, misuse, alteration, improper amps or voltage, accidental damage, improper maintenance, unauthorized repairs, alterations, abuse, neglect or operation of a Esteam product not expressly recommended or contemplated by Esteam; and
- (ii) No warranty is provided for mechanical or electrical breakdown caused by scale, hard water buildup, improper use of chemicals or resins, damage due to environmental conditions, and acts of God, or other events beyond the control of Esteam; and
- (iii) No warranty is provided for mechanical or electrical breakdown or failure of an Esteam product resulting from ordinary wear and tear, or the consequences thereof; including but not limited to the gradual reduction of the operating performance of the product. The determination of what is or is not ordinary wear and tear is at the sole discretion of Esteam; and
- (iv) No warranty is provided for damage caused by the failure of non-warranted parts and/or accessories, even if warranted parts are damaged as a result of the failure of a non-warranted part; and
- (v) No warranty is provided for damage resulting from failure by the customer to maintain scheduled maintenance requirements. The Esteam system has many parts which must either be replaced or checked for wear on a regular basis; including but not limited to replacement filters and lubricants. This system requires regular maintenance, service and attention by the customer; and
- (vi) No warranty is provided as to any extra expenses incurred by the customer, including but not limited to economic, incidental, consequential loss or damage (e.g. all labour charges, rental equipment, down time, lodging, commercial or business loss of any nature or kind due to product failure); whether direct or indirect, exemplary or punitive damage or loss, and whether in contract, tort or otherwise; and
- (vii) No warranty is provided as to failure of any cosmetic item or finish, labeling, silk screening, decals, paint, trim or other similar decorative items.

- (viii) Brass, rubber and synthetic rubber parts (e.g. "O" rings, diaphragms, gaskets, seals, grommets) are considered expendable in normal use, and are therefore not included in any warranty by Esteam.

PART IV - EXCLUSION OF LIABILITY

Esteam makes no warranties or representations, either expressed or implied, oral or written, in fact, or by operation of law, or otherwise, except as expressly stated herein as to the 90 day Limited, 12 month and Lifetime Extended warranties. Esteam, its officers, directors, agents, dealers and its affiliates (and their respective officers, directors, agents and dealers) shall not be liable to the customer nor to any party for any liability, including without limitation, strict liability, liability for loss, injury or damage due directly or indirectly to the use or operation of the Esteam product; consequential, exemplary and/or punitive damage or loss, whether in contract, tort, or otherwise.

PART V - RETURN GUIDELINES

Defective items must be replaced through a local Esteam Distributor. Replacement parts will be sent via prepaid regular ground service to the distributor. The defective part must be returned F.O.B. factory within 30 days including a letter providing the machine's serial number, date of purchase, material return authorization number, and customer name. If applicable, credit will be issued after the item has been evaluated by Esteam. Failure to comply with return policy will void the warranty on that item.

PART VI - CREDIT POLICY

All customers purchasing parts through an Esteam distributor must arrange credit directly with that distributor.

PART VII - OUTSIDE SOURCE WARRANTY REPAIRS

At the sole discretion of Esteam, it may be necessary to perform warranty/repairs at an outside source. An estimate must be submitted to and approved by Esteam prior to work being performed. Failure to do so will result in denial of your warranty claim.

PART VIII - TRANSFERABILITY

This warranty is not transferable to any subsequent owner.

PART IX - NOTICE - CUSTOMER OBLIGATIONS

- (i) Your responsibility as a customer includes but is not limited to cleaning, lubricating, seasonal maintenance (e.g. winterizing), replacement of worn parts and all regular scheduled or unscheduled maintenance.

- (ii) Any claim for warranty must be presented to Esteam or its authorized dealer, prior to the expiration of the time limitations specified and not thereafter, otherwise any warranty is void.
- (iii) Notwithstanding the generality of the foregoing customer obligations, Esteam does hereby bring to the attention of the customer, these specific maintenance operating requirements of the Ninja Extractor to validate its warranty:

- (a) Chemical Warning:

Any improper use of chemicals shall void any Esteam warranty and thusly exclude any liability by Esteam. No dry cleaning chemical may be used in a Ninja Extractor; - as any such use may result in fire or pump/motor damage. A defoamer solution must be used by customer to limit foaming in the recovery tank.

- (b) Vacuum Motors:

Require use of a defoamer. A vacuum motor showing moisture contamination on interior components shall void any warranty by Esteam.

- (c) Pumps:

All pumps require daily flushing with clean water after use.

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.

Ninja Extractor Warranty
Esteam Manufacturing Ltd. 3750-19th Street NE
Calgary, AB T2E 6V2 1-800-653-8338