

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.



VERSION 02 DEC,05,2005

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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 unipue dual 2 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	2-2 stage 94 150"	2-3 stage High Performance 101 185"	2-2 stage 94 150"
<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 are 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.
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 $\frac{1}{4}$ 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
 - 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.

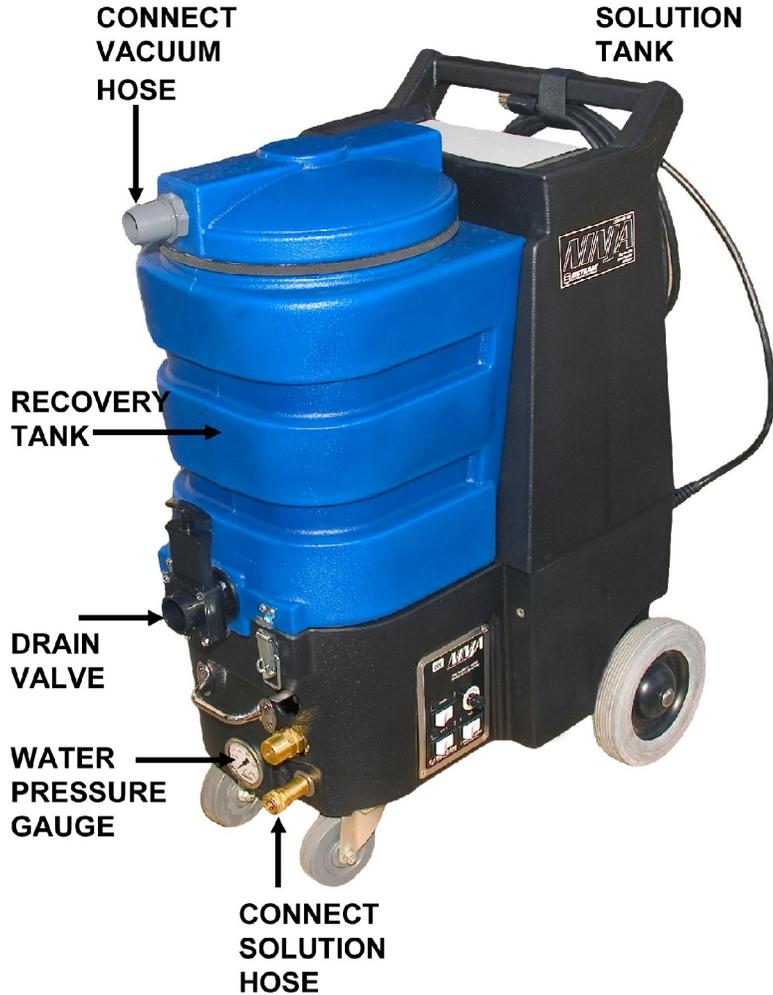
8. To empty solution tank remove vacuum hose from wand. Turn on vacuum and extract solution from solution tank into recovery tank, then drain recovery tank.

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

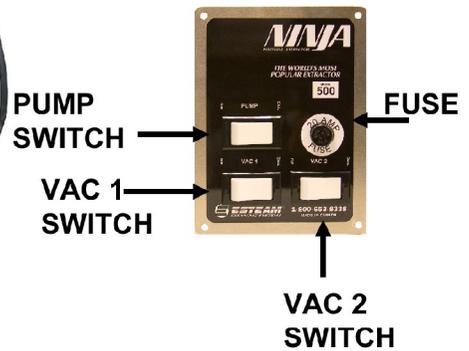
9. When the job is completed empty and rinse out the solution and recovery tanks. Allow vacuum to run for 3 to 5 minutes. This will eliminate all moisture from vacuum assuring long vacuum life.

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.

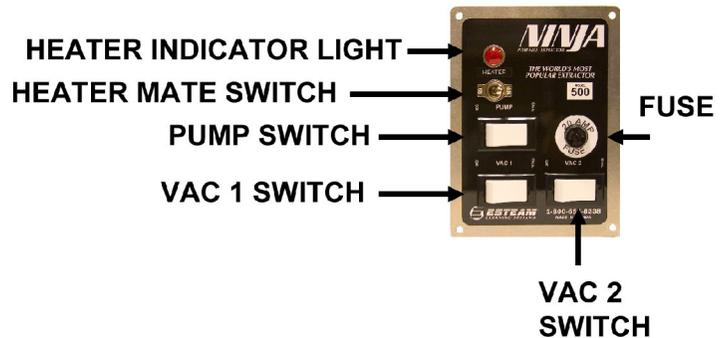
NINJA 500 MODELS



MODEL 500 2-2 STAGE VAC
2-3 STAGE VAC



MODEL 500 HM



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. Blown fuse on machine	2. Check machine fuses and replace if necessary
	3. Blown fuse or breaker for plug in outlet	3. Check fuse panel for blown fuse
	4. Loose wiring	4. See dealer
2. 500 PSI 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. Blown fuse	2. Replace fuse
	3. Broken switch	3. See dealer
	4. Loose wiring	4. See dealer
	5. Blocked rotor	5. See dealer
4. 500 PSI Plunger pump runs but does not pump solution	1. Out of solution	1. Fill solution tank with solution
	2. Pump inlet screen plugged	2. Clean inlet screen
	3. Pump was not properly primed	3. Prime pump using priming hose
	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

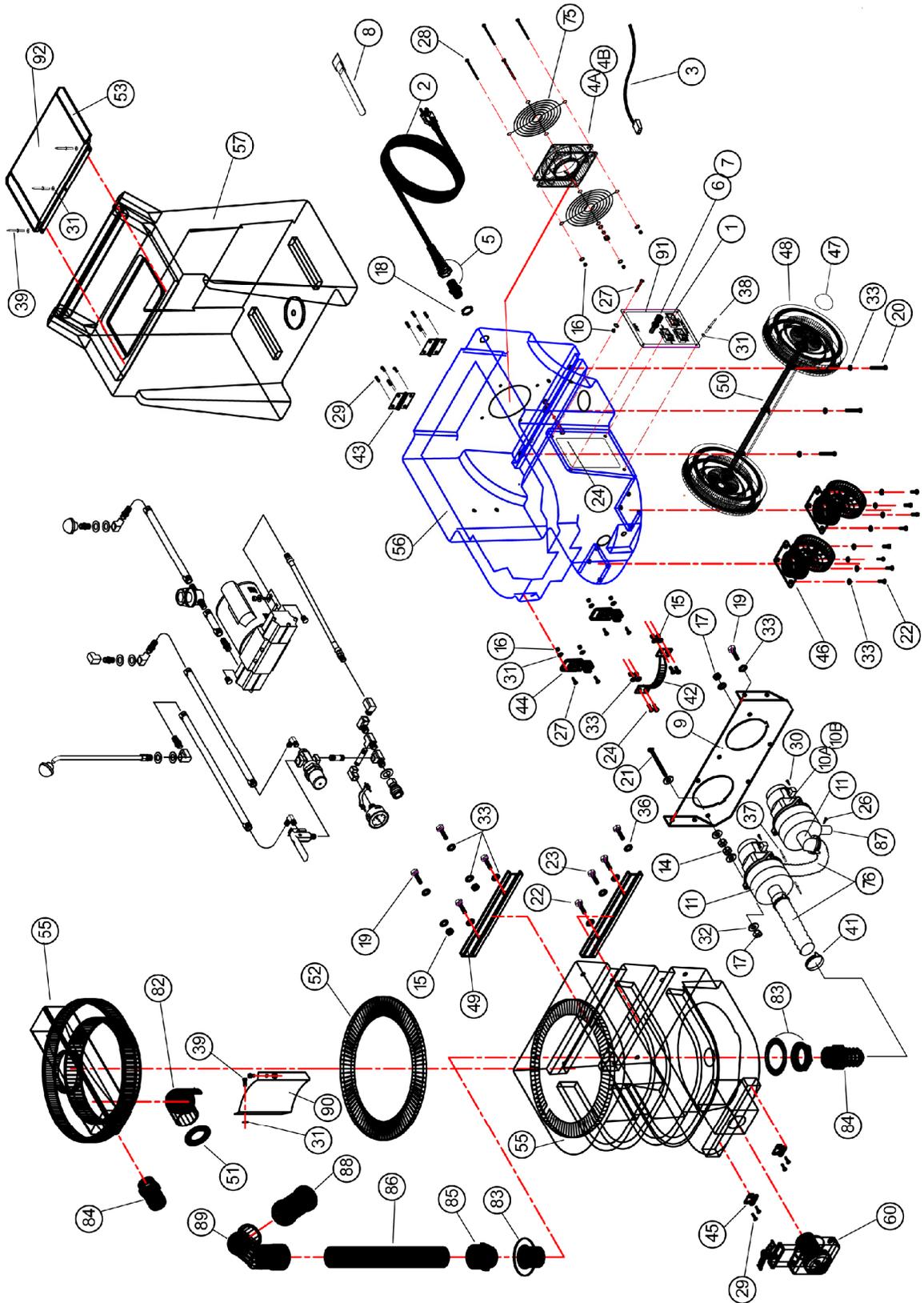
TROUBLE SHOOTING (CONTINUED)

PROBLEM	CAUSE	SOLUTION
5. 500 PSI Plunger pump runs but has loss of pressure	1. Pressure regulator valve out of adjustment	1. Adjust pressure using regulator located at the 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 500 PSI pump should be .03
	5. Pressure regulator valve components wearing out	5. See dealer
	6. Internal pump components wearing out	6. See dealer
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

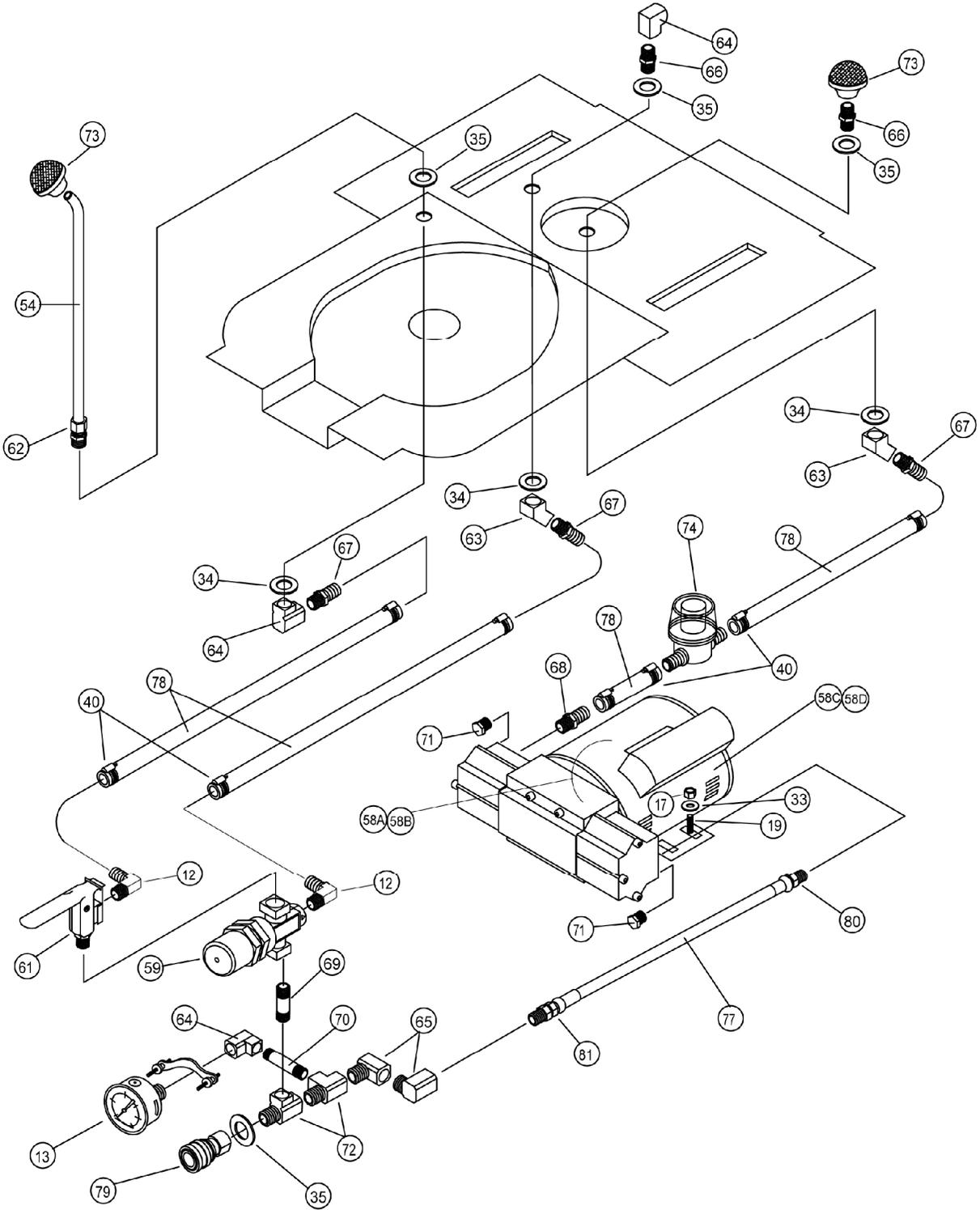
TROUBLE SHOOTING (CONTINUED)

PROBLEM	CAUSE	SOLUTION
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.	Connect cord to 3 Pin (Separate) outlet
	2. Faulty Thermostat or Thermo cut-out	See dealer
12. Water not hot enough	1. Check Jet size on wand or upholstery tool. Do not exceed .03 orifice size for maximum heat transfer	
	2. Do not use cold water in solution tank. Must use hot tap water for maximum heat transfer	

NINJA 500 PSI 2-2 STAGE VAC (P. 1)



NINJA 500 PSI 2-2 STAGE VAC (P. 2)

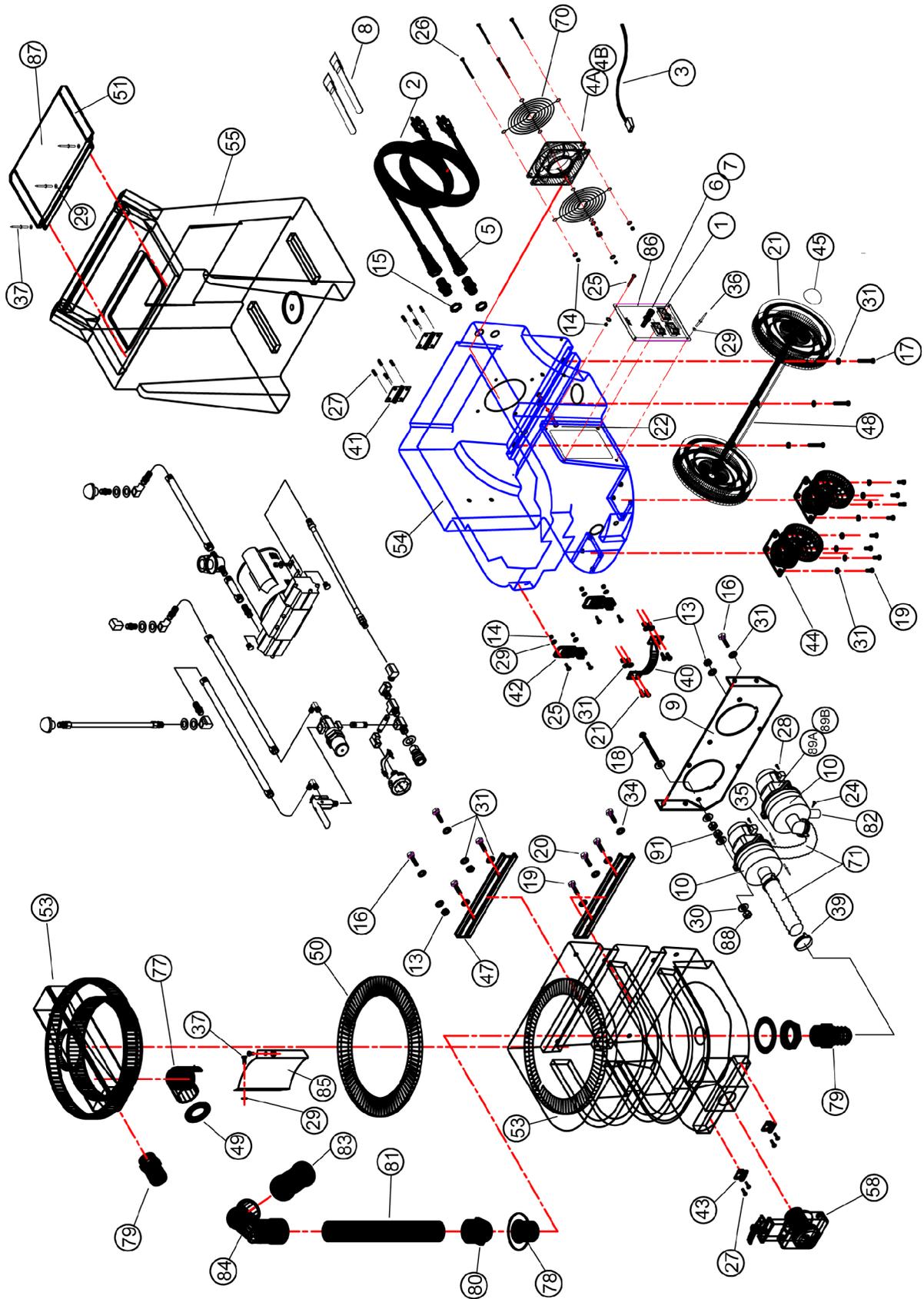


NINJA 500 PSI PUMPTEC 2-2 STAGE VAC

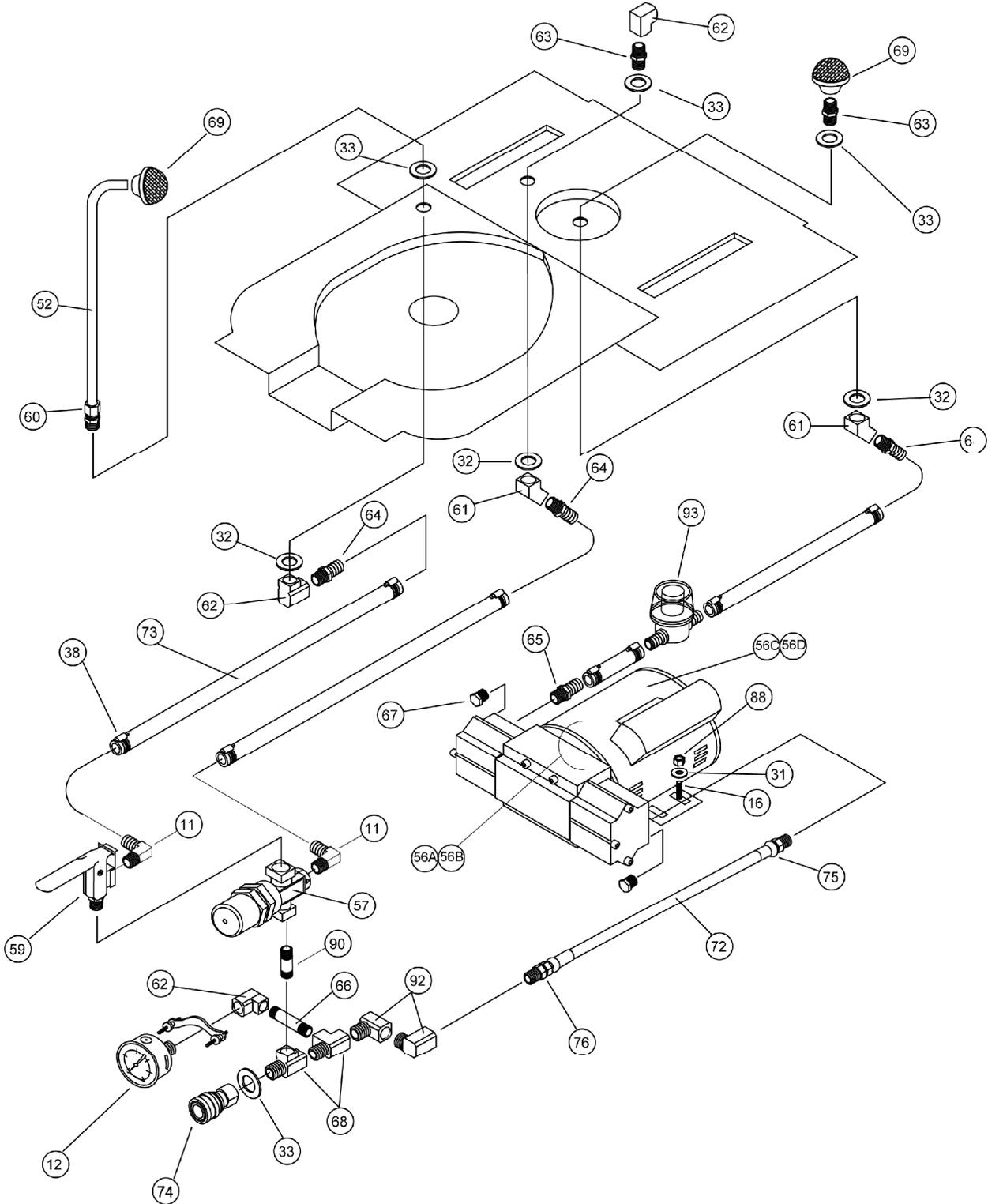
REF	PART NO.	DESCRIPTION	NOTES:
1	305-230	Switch, Rocker 20 Amp	
2	315-020	Cord, 25' Black 12/3 SJTW-A	
3	315-040	Cord, Fan - Muffin	
4A	333-010	Fan, Muffin 6"- 115V	NJC500
4B	333-015	Fan, Muffin 6"- 220V	NJC500-20
5	335-005	Strain Relief, 12 Gauge	
6	340-025	Fuse, 20 Amp 250V Slow	
7	345-005	Fuse Holder Panel	
8	350-005	Strap Velcro	
9	355-005	Bracket, Vac 2-3 Stage	
10A	355-101	Vacuum 2 Stage – 115V (C/W: 355-202)	NJC500
10B	355-105	Vacuum 2 Stage – 220V	NJC500-20
11	355-202	Vac Cap, Straight	
12	555-325	Hose Barb 90, 1/2 Barb x 1/4 MPT	
13	360-015	1000 Psi Pressure Gauge	
14	400-010	Hex Nut 1/4 x 20 Zinc	
15	400-115	Locknut, 1/4 x 20 Nylon SS	
16	400-130	Locknut 10 x 24	
17	400-135	Locknut, 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	405-045	Bolt, 1/4 x 3 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 S.S.	Not shown
26	410-125	SMS, 8 x 5/8 Pan RB SS	
27	410-160	MS, 10-24 x 3/4 Pan PH SS	
28	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
29	410-205	MS, 10-32 x 1/2 Panphil SS	
30	410-225	SMS, 10 x 1/2 Pan RB Zinc	
31	415-115	FW, 10 SS	
32	410-120	FW, 1/4 Zinc	
33	415-125	FW, 1/4 SS	
34	415-155	FW, 1/2 SS (Stand/Max OD)	
35	415-156	FW, 1/2 SS	
36	415-305	FNDW, 1/4 SS	
37	420-055	Rivet, Al/Al #46	
38	420-105	Rivet, Al/St #66	
39	420-151	Rivet, Fullysealed #68	
40	425-005	Clamp, #8	
41	425-010	Clamp, #20	
42	435-015	Handle, Brass/Chrome	
43	440-006	S.S. Hinge 2" x 2"	
44	445-015	Latch, Machine	

45	445-020	Latch, Striker	
46	455-005	Caster, 4" Swivel	
47	455-052	Wheel Cap Dome	
48	455-057	Wheel, 8" Grey/Black Hub	
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	485-002	Copper 1/2"	
55	495-021C	Rec Tank & Lid Ninja	
56	495-035	Base, Ninja	
57	495-040	Sol Tank Ninja	
58A	512-540	Pump, 500 PSI & M10 Motor (110v)	NJC500
58B	512-570	Pump, 500 PSI & M10 Motor (220v)	NJC500-20
58C	512-550	M10 Motor (110v)	NJC500
58D	N/A	M10 Motor (220v)	NJC500-20
59	530-025	Regulator, MV500	
60	545-100	Dump Valve, 1 1/2"	
61	551-029	Prime Valve	
62	555-120	Comp. Fitting, 1/2 Comp x 1/4 MPT	
63	555-182	Elbow 45, 1/4 FPT Extruded	
64	555-206	Elbow 90, 1/4 FPT Extruded	
65	555-208	Elbow 90, 1/4 Street Extruded	
66	555-272	Hex Nipple, 1/4" (Long)	
67	555-370	Hose Barb, 1/2 Barb x 1/4 MPT	
68	555-372	Hose Barb, 1/2 Barb x 3/8 MPT	
69	555-422	Long Nipple 1/4 x 1 1/2"	
70	555-424	Long Nipple, 1/4 x 2 1/2"	
71	555-454	Plug, 3/8 MPT Hex Head	
72	555-636	Tee, 1/4" Street Extruded	
73	560-030	Screen, Acorn	
74	560-116	Strainer, Inline Barbed 1/2	
75	560-330	Guard, Finger, 6" Muffin Fan	
76	570-010	Vac Hose, 1 1/2 Wire Reinforced	
77	572-125	Pulse Hose, 3/8"	
78	572-155	Polyspring Hose, 1/2"	
79	580-010	Q.C. 1/4" Fem (Closed)	
80	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
81	581-060	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT	
82	590-020	PVC ELB 1 1/2" 90, S x FIPT	
83	590-205	PVC, Wall Fitting, 1 1/2	
84	590-405	PVC Hose Barb 1 1/2" x MPT	
85	590-415	PVC Adpt 1 1/2", S x MPT	
86	595-005	ABS Pipe, 1 1/2"	
87	595-110	PVC Pipe, 1 1/4"	
88	597-010	Float Screen Cage	
89	597-061	Adpt (RM) 30 Degree	
90	845-010	Baffle, S/S	
91	845-030	Switch Plate	
92	845-040	Solution Tank Cover	

NINJA 500 PSI PUMPTEC 2-3 STAGE VAC P. 1



NINJA 500 PSI PUMPTEC 2-3 STAGE VAC P. 2

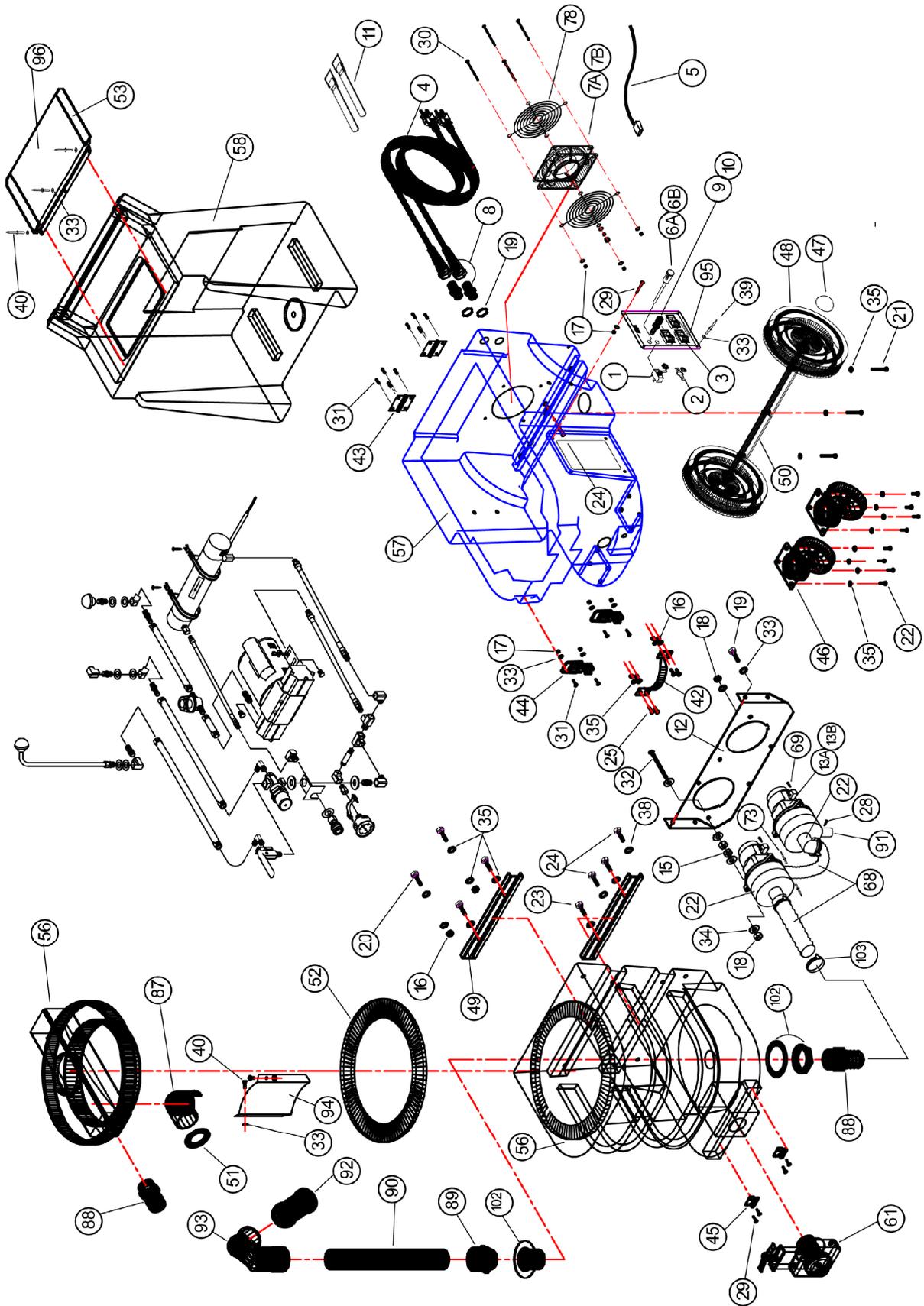


NINJA 500 PSI PUMPTEC 2-3 STAGE VAC

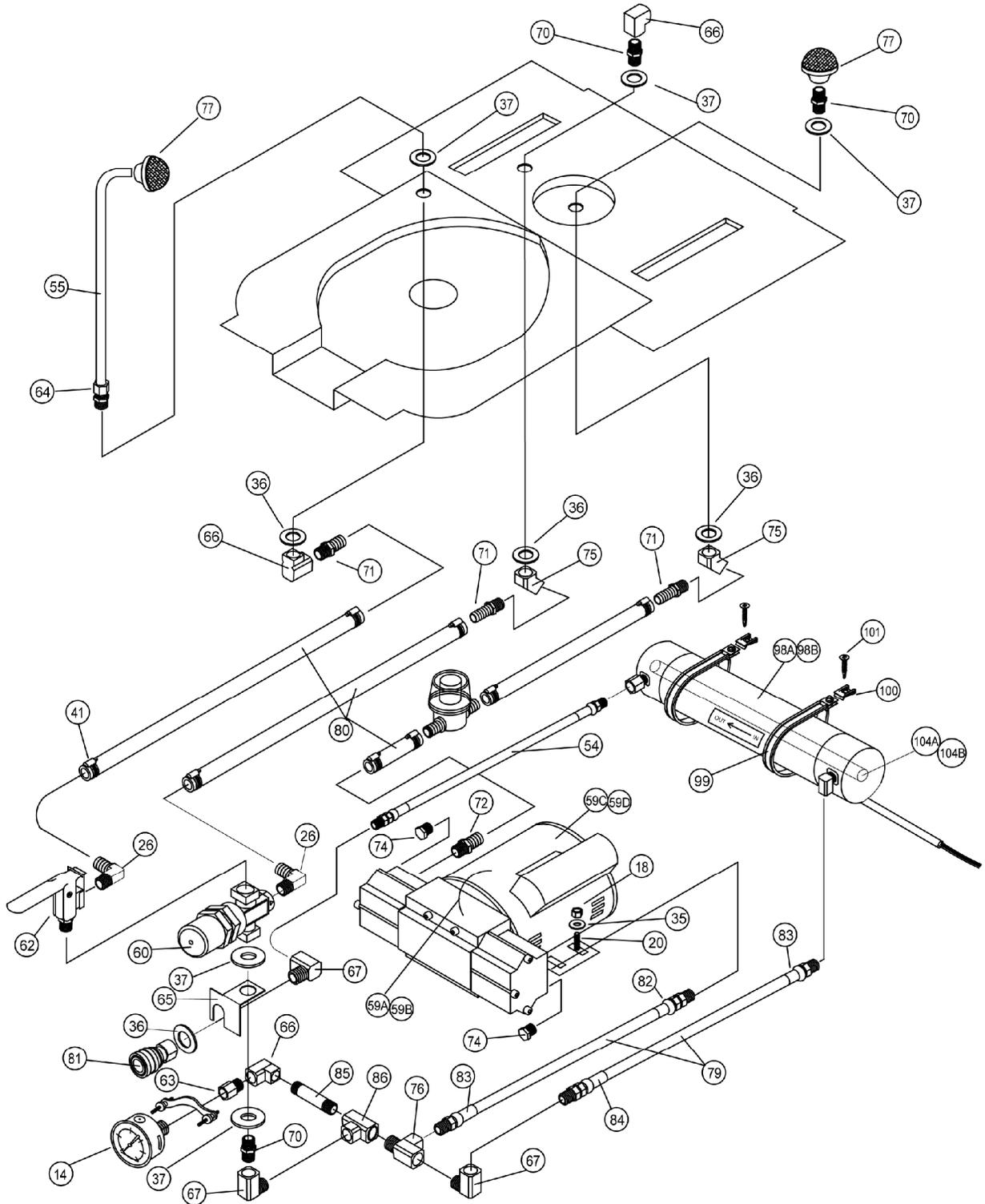
REF	PART NO.	DESCRIPTION	NOTES:
1	305-230	Switch, Rocker 20 Amp	
2	315-020	Cord, 25' Black 12/3 SJTW-A	
3	315-040	Cord, Fan - Muffin	
4A	333-010	Fan, Muffin 6"- 110V	NJC500-05
4B	333-015	Fan, Muffin 6"- 220V	NJC500-20-05
5	335-005	Strain Relief, 12 Gauge	
6	340-025	Fuse, 20 Amp 250V Slow	
7	345-005	Fuse Holder Panel	
8	350-005	Strap Velcro	
9	355-005	Bracket, Vac 2-3 Stage	
10	355-202	Vac Cap, Straight	
11	555-325	Hose Barb 90, 1/2 Barb x 1/4 MPT	
12	360-015	1000 Psi Pressure Gauge	
13	400-115	Locknut, 1/4 x 20 Nylon SS	
14	400-130	Locknut 10 x 24	
15	400-165	Locknut, 1/2"	
16	405-010	Bolt, 1/4 x 1 SS	
17	405-020	Bolt, 1/4 x 1-1/4 SS	
18	405-045	Bolt, 1/4 x 3 Stove Zinc	
19	405-615	CS, 1/4 x 1/2 SS (Hex HD)	
20	405-620	CS, 1/4 x 3/4 SS (Hex HD)	
21	410-005	MS, 1/4 x 1 Phil SS Flat/H	
22	410-020	MS, 1/4 x 1 3/4 FT SS	
23	410-058	SMS, 4 x 1/4 Pan Phil S.S.	Not Shown
24	410-125	SMS, 8 x 5/8 Pan RB SS	
25	410-160	MS, 10-24 x 3/4 Pan PH SS	
26	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
27	410-205	MS, 10-32 x 1/2 Panphil SS	
28	410-225	SMS, 10 x 1/2 Pan RB Zinc	
29	415-115	FW, 10 SS	
30	410-120	FW, 1/4 Zinc	
31	415-125	FW, 1/4 SS	
32	415-155	FW, 1/2 SS (Stand/Max OD)	
33	415-156	FW, 1/2 SS	
34	415-305	FNDW, 1/4 SS	
35	420-055	Rivet, Al/Al #46	
36	420-105	Rivet, Al/St #66	
37	420-151	Rivet, Fullysealed #68	
38	425-005	Clamp, #8	
39	425-010	Clamp, #20	
40	435-015	Handle, Brass/Chrome	
41	440-006	S.S. Hinge 2" x 2"	
42	445-015	Latch, Machine	
43	445-020	Latch, Striker	
44	455-005	Caster, 4" Swivel	
45	455-052	Wheel Cap Dome	

46	455-057	Wheel, 8" Grey/Black Hub	
47	465-065	Brace, Ninja Tank	
48	470-051	Axel, Ninja HD	
49	475-010	Gasket, Rubber - 1 1/2" Dump Valve	
50	475-030	Gasket, Lid 3/8"	
51	475-040	Gasket, 1/8 x 1"	
52	485-002	Copper 1/2"	
53	495-021C	Rec Tank & Lid Ninja	
54	495-035	Base, Ninja	
55	495-040	Sol Tank Ninja	
56A	512-540	Pump, 500 PSI & M10 Motor (110v)	NJC500-05
56B	512-570	Pump, 500 PSI & M10 Motor (220v)	NJC500-20-05
56C	512-550	M10 Motor (110v)	NJC500-05
56D	N/A	M10 Motor (220v)	NJC500-20-05
57	530-025	Regulator, MV500	
58	545-100	Dump Valve, 1 1/2"	
59	551-029	Prime Valve	
60	555-120	Comp. Fitting, 1/2 Comp x 1/4 MPT	
61	555-182	Elbow 45, 1/4 FPT Extruded	
62	555-206	Elbow 90, 1/4 FPT Extruded	
63	555-272	Hex Nipple, 1/4" (Long)	
64	555-370	Hose Barb, 1/2 Barb x 1/4 MPT	
65	555-372	Hose Barb, 1/2 Barb x 3/8 MPT	
66	555-424	Long Nipple, 1/4 x 2 1/2"	
67	555-454	Plug, 3/8 MPT Hex Head	
68	555-636	Tee, 1/4" Street Extruded	
69	560-030	Screen, Acorn	
70	560-330	Guard, Finger, 6" Muffin Fan	
71	570-010	Vac Hose, 1 1/2 Wire Reinforced	
72	572-125	Pulse Hose, 3/8"	
73	572-155	Polyspring Hose, 1/2"	
74	580-010	Q.C. 1/4" Fem (Closed)	
75	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
76	581-060	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT	
77	590-020	PVC ELB 1 1/2" 90, S x FIPT	
78	590-205	PVC, Wall Fitting, 1 1/2	
79	590-405	PVC Hose Barb 1 1/2" x MPT	
80	590-415	PVC Adpt 1 1/2", S x MPT	
81	595-005	ABS Pipe, 1 1/2"	
82	595-110	PVC Pipe, 1 1/4"	
83	597-010	Float Screen Cage	
84	597-061	Adpt (RM) 30 Degree	
85	845-010	Baffle, S/S	
86	845-030	Switch Plate	
87	845-040	Solution Tank Cover	
88	400-135	Locknut, 1/4 x 20 Nylon Zinc	
89A	355-111	Vacuum, 3 Stage Small (C/W: 355-202)	NJC500-05
89B	355-135	Vacuum, 3 Stage Small	NJC500-20-05
90	555-422	Long Nipple 1/4 x 1-1/2"	
91	400-010	Hex Nut 1/4 x 20 Zinc	
92	555-208	Elbow 90, 1/4 Street Extruded	

NINJA 500 PSI PUMPTEC HEATER MATE P. 1



NINJA 500 PSI PUMPTEC HEATER MATE P. 2



NINJA 500 PSI H.M PUMPTEC (P. 1)

REF	PART NO.	DESCRIPTION	NOTES:
1	305-210	Switch, Toggle 110v/220v	
2	305-225	Switch Plate ON/OFF	
3	305-230	Switch, Rocker 20 Amp	
4	315-020	Cord, 25' Black 12/3 SJTW-A	
5	315-040	Cord, Fan - Muffin	
6A	320-110	Lamp, Panel 110v	NJC500-10
6B	320-900	Lamp, Panel 220v	NJC500-20-10
7A	333-010	Fan, Muffin 6"- 115V	NJC500-10
7B	333-015	Fan, Muffin 6"- 220V	NJC500-20-10
8	335-005	Strain Relief, 12 Gauge	
9	340-025	Fuse, 20 Amp 250V Slow	
10	345-005	Fuse Holder Panel	
11	350-005	Strap Velcro	
12	355-005	Vac Bracket	
13A	355-101	Vacuum 2 Stage (C/W: 355-202)	NJC500-10
13B	355-105	Vacuum 2 Stage (220v)	NJC500-20-10
14	360-015	1000 Psi Pressure Gauge	
15	400-010	Hex Nut, 1/4 x 20 Zinc	
16	400-115	Locknut, 1/4 x 20 Nylon SS	
17	400-130	Locknut, 10 x 24 Nylon SS	
18	400-135	Locknut, 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	355-202	Vac Cap (Straight)	
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	555-325	Hose Barb 90, 1/2 Barb x 1/4 MPT	
27	410-058	SMS, 4 x 1/4 Pan Phil S.S.	Not Shown
28	410-125	SMS, 8 x 5/8 Pan Rob, SS	
29	410-160	MS, 10-24 x 3/4 Pan PH SS	
30	410-175	MS, 10-24 x 2 1/2 RH RB Zinc	
31	410-205	MS, 10-32 x 1/2 Panphil SS	
32	405-045	Bolt 1/4 x 3 Zinc	
33	415-115	FW, 10 SS	
34	415-120	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	420-105	Rivet,AL/ST #66	
40	420-151	Rivet, Fullysealed #68	
41	425-005	Clamp, #8 Hose 1/2 x 1	

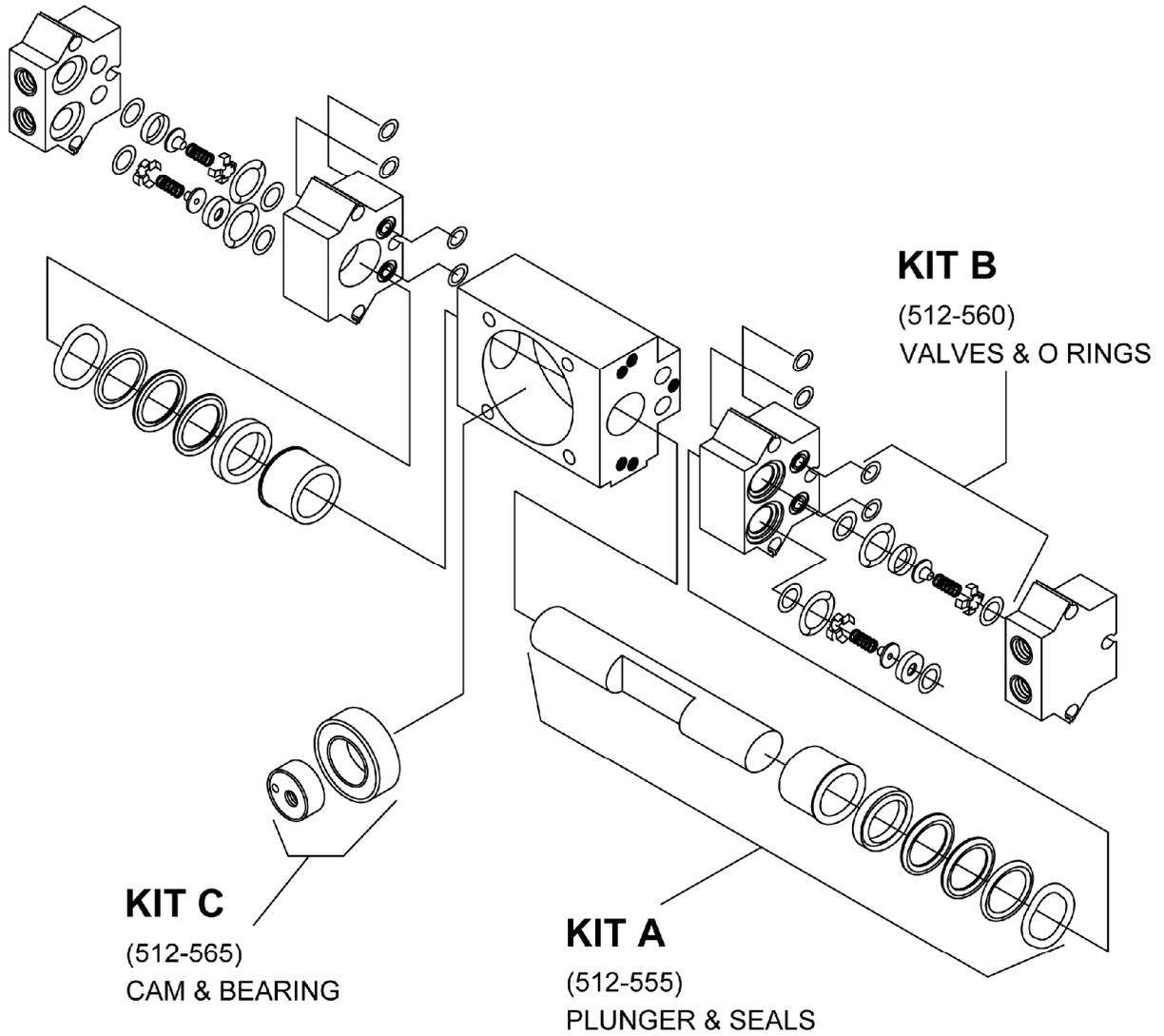
NINJA 500 PSI H.M PUMPTEC (P. 2)

42	435-015	Handle, Brass/Chrome	
43	440-006	S.S. Hinge 2" x 2"	
44	445-015	Latch, Machine	
45	445-020	Latch, Striker	
46	455-005	Caster, 4" Swivel	
47	455-052	Wheel Cap Dome	
48	455-057	Wheel, 8" Grey/Black Hub	
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	263-013	H.P Hose 28"	
55	485-002	Copper 1/2"	
56	495-021C	Rec Tank & Lid Ninja	
57	495-035	Base, Ninja	
58	495-040	Sol Tank Ninja	
59A	512-540	Pump, 500 PSI & M10 Motor 110v	NJC500-10
59B	512-570	Pump, 500 PSI & M10 Motor 220v	NJC500-20-10
59C	512-550	M10 Motor 110v	NJC500-10
59D	N/A	M10 Motor 220v	NJC500-20-10
60	530-025	Regulator, MV500	
61	545-100	Dump Valve, 1 1/2"	
62	551-029	Prime Valve	
63	555-002	ADPT, 1/4 M x 1/4 F	
64	555-120	Comp. Fitting, 1/2 Comp x 1/4 MPT	
65	465-630	BRKT, unloader	
66	555-206	Elbow 90, 1/4" FPT. Extruded	
67	555-208	Elbow 90, 1/4 Street Extruded	
68	570-010	Vac Hose Wire reinforced 1 1/2	
69	410-225	SMS 10 x 1/2 Pan RB Zinc	
70	555-272	Hex Nipple, 1/4" (Long)	
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	420-055	Rivet, Al/Al # 46	
74	555-454	Plug, 3/8 MPT Hex Head	
75	555-182	Elbow 45, 1/4 FM Extruded	
76	555-636	Tee, 1/4" Street Extruded	
77	560-030	Screen, Acorn	
78	560-330	Guard, Finger, 6" Muffin Fan	
79	572-125	Pulse Hose, 3/8"	
80	572-155	Polyspring Hose, 1/2"	
81	580-010	Q.C. 1/4" Fem (Closed)	

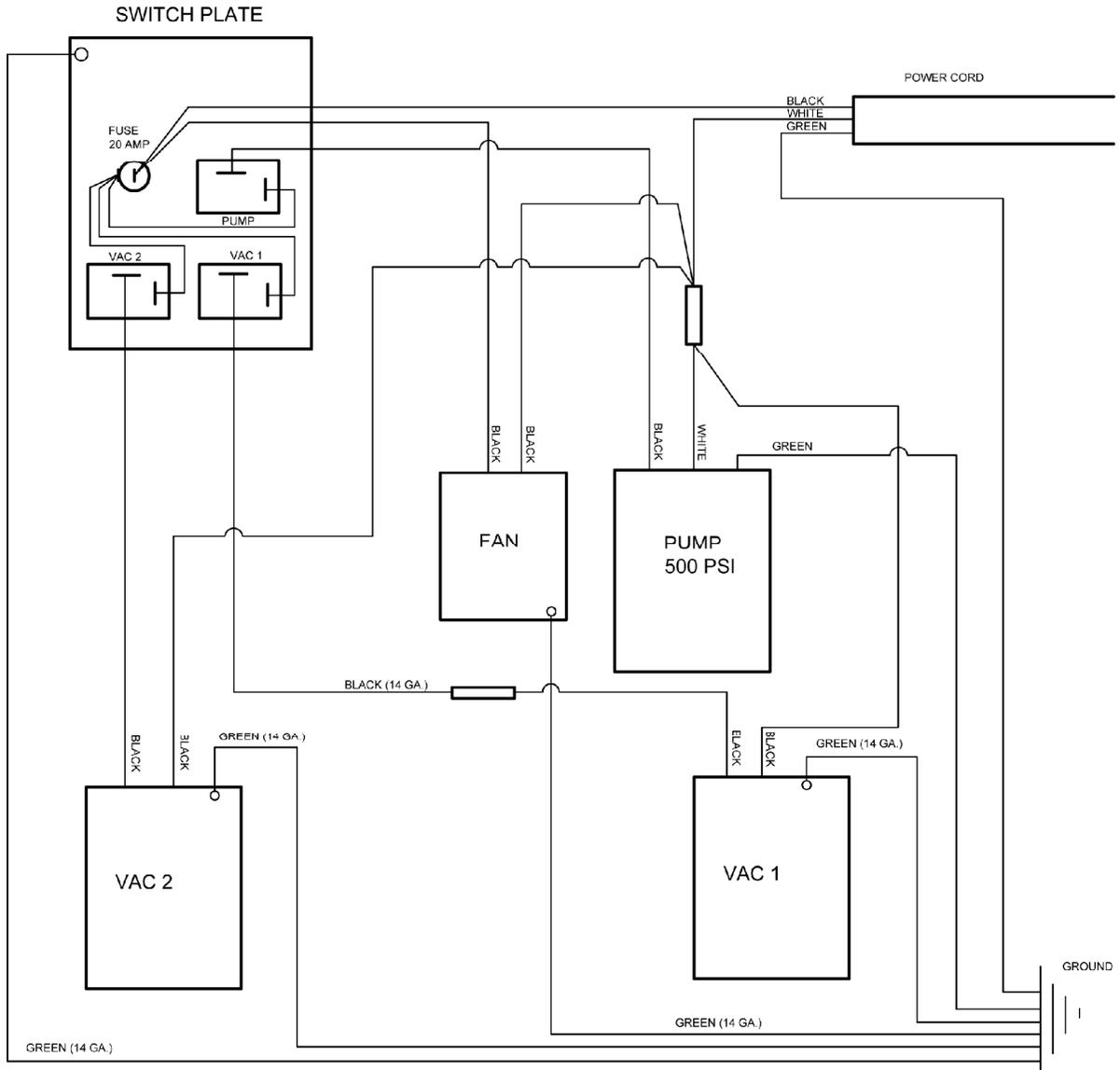
NINJA 500 PSI H.M PUMPTEC (P. 3)

82	581-055	Crimp Ftng, 3/8" Pulse Hose 3/8 MPT SVL	
83	581-060	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT	
84	581-065	Crimp Ftng, 3/8" Pulse Hose 1/4 MPT SVL	
85	555-424	Long Nipple 1/4 x 2 1/2	
86	555-634	Tee 1/4 FPT	
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	
96	845-040	Solution Tank Cover	
97	845-316	Plate, Decal 4 x 3 1/2	Not Shown
98A	490-005	Foamed Casing, Round 1850W-HM 110v	NJC500-10
98B	490-006	Foamed Casing, Round 1850W-HM 220v	NJC500-20-10
99	425-130	Clamp, Tube 3"	
100	400-240	Tinnerman nut	
101	410-190	SMS 10 x 1 FLT Soc Zinc	
102	590-205	PVC Wall Fitting	
103	425-010	Clamp, Hose # 20	
104A	318-005	Catridge 110V HM	NJC500-10
104B	318-900	Catridge 220V HM	NJC500-20-10
105	305-265	Thermostat	Not Shown
106	305-245	Themos Cut-Out	Not Shown

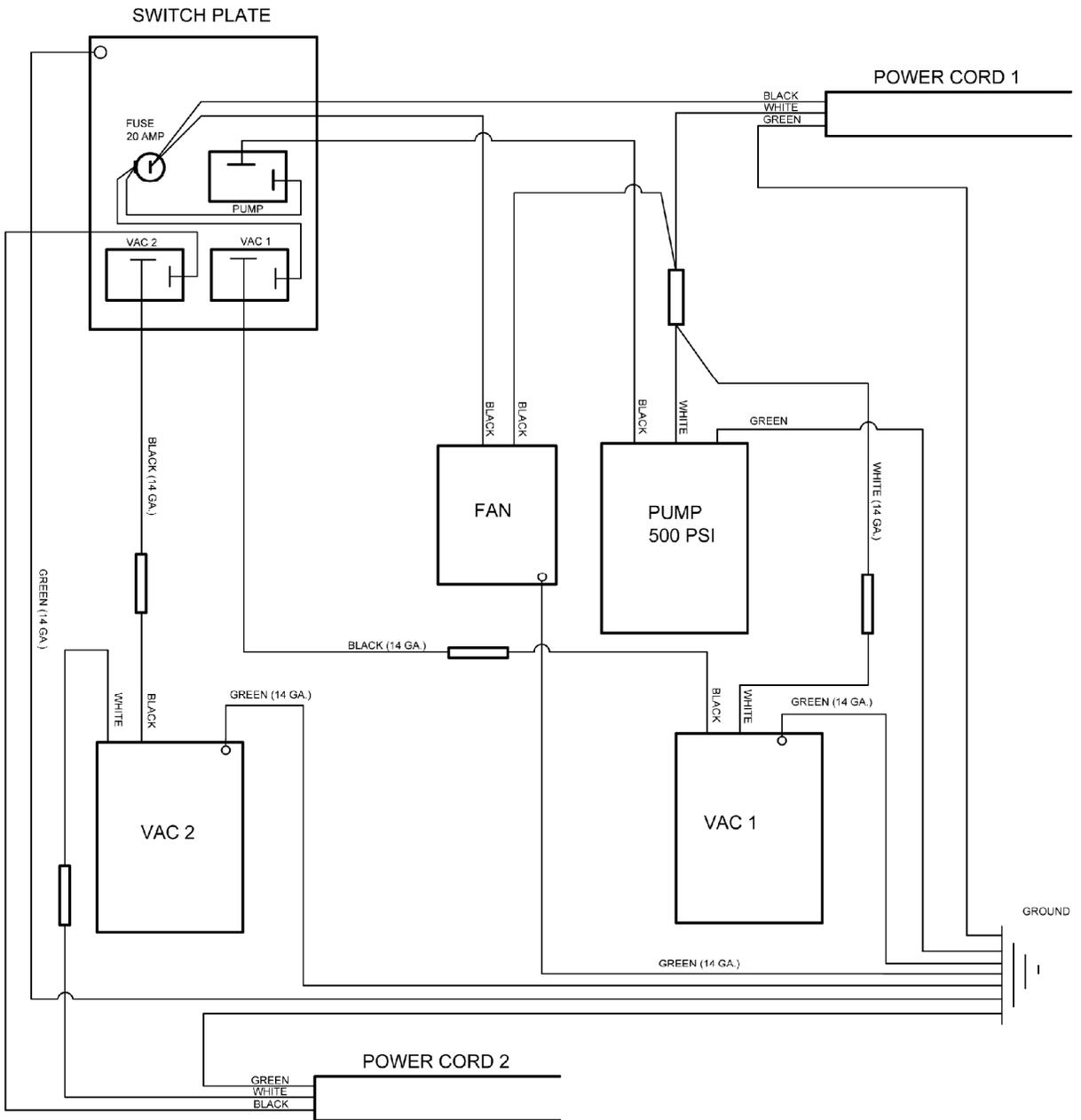
PUMP 500 PARTS LIST



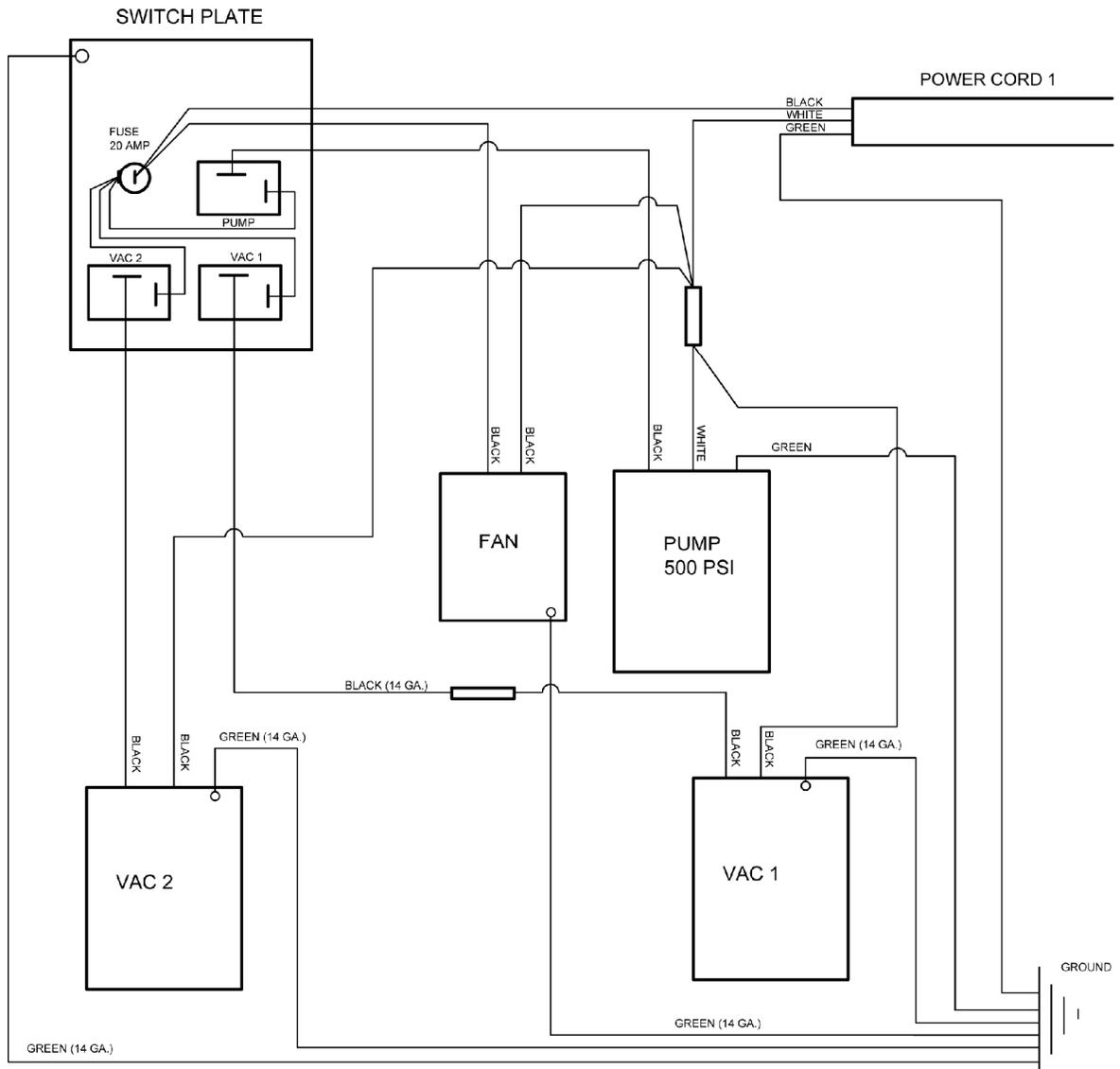
NINJA 500 2-2 STAGE VAC WIRING



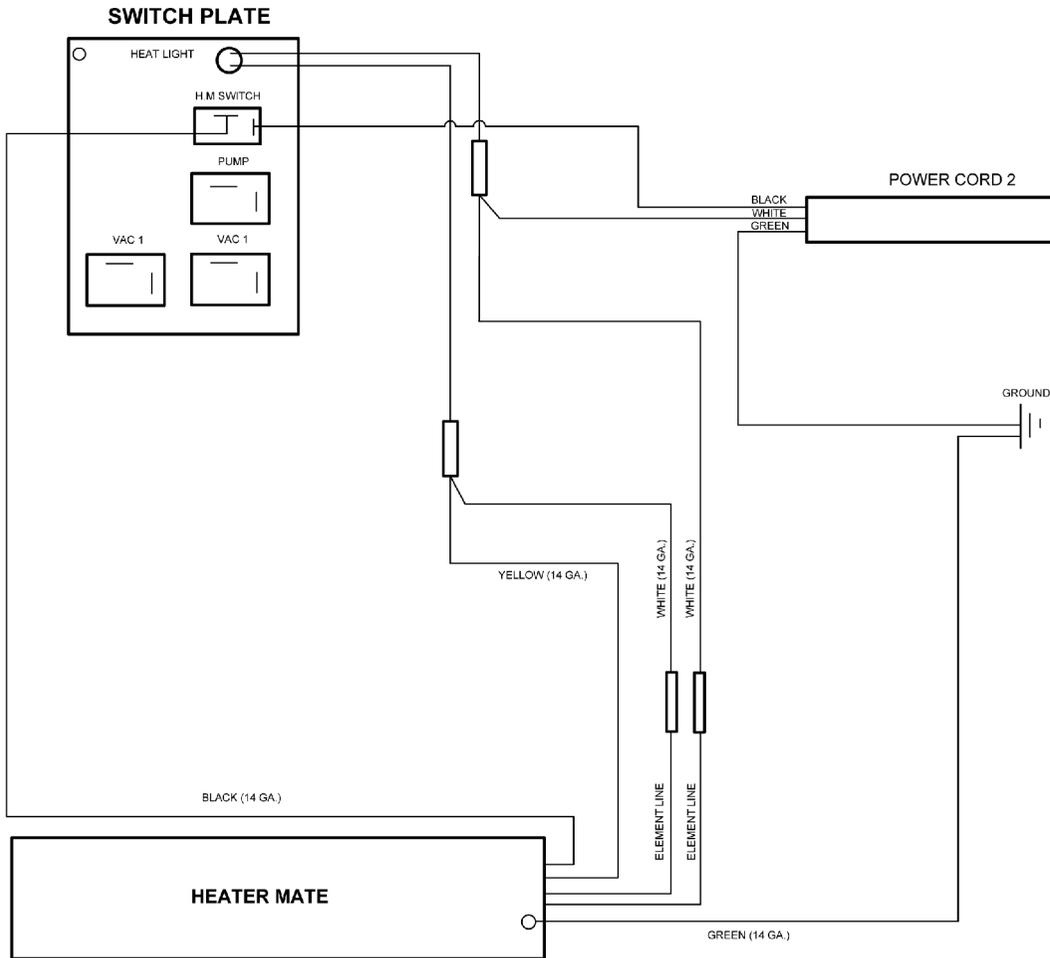
NINJA 500 2-3 STAGE VAC WIRING



NINJA HEATER MATE WIRING P. 1



NINJA 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

ESTEAM® CLEANING SYSTEMS

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.

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.

Further on the 200 PSI Pumpteck pump, a 3 AMP fuse is used to protect this motor; and the pressure regulator must not be tampered with to exceed a higher operating pressure than the 200 PSI maximum allowed.

Further on the 500 PSI Pumpteck pump, a 20 AMP fuse is used to protect this motor; and the pressure regulator must not be tampered with to exceed a higher operating pressure than the 500 PSI maximum allowed.

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