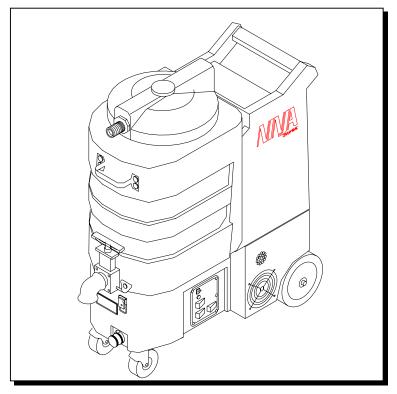




PORTABLE EXTRACTOR



Operating Instructions

MODELS: <u>411-222HMO</u> 10070290

411-225HMO 10070310

Read these instructions before using the machine



MACHINE DATA LOG/OVERVIEW

YOUR DEALER
Name:
Address:
Phone Number:

OVERVIEW

The Ninja is an electric powered carpet extractor intended for commercial use. This appliance applies a cleaning solution to the carpet and then vacuums the soiled water back into the recovery tank.

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HOW TO USE THIS MANUAL

This manual contains the following sections:

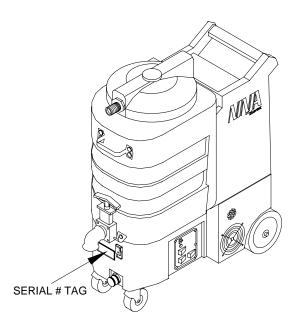
- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located to the inside of the front cover of this manual.

MODEL
DATE OF PURCHASE
SERIAL NUMBER
SALES REPRESENTATIVE #
DEALER NAME
OPERATIONS GUIDE NUMBER
PUBLISHED

The model and serial number of your machine is on the front of the Frame.



The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards are identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Maintenance
- Lubrication
- Vacuum Motor Replacement
- Solution Pump Replacement
- Troubleshooting

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF** column refers to the reference number on the parts illustration.
- **PART NO.** column lists the part number for the part.
- **PRV NO.** reference number.
- **QTY** column lists the quantity of the part used in that area of the machine.
- DESCRIPTION column is a brief description of the part.
- SERIAL NO. FROM column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs.
- NOTES column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

This machine is for commercial use.



To reduce the risk of fire, electric shock, or injury:

Connect to a **properly grounded outlet**. See Grounding Instructions.

Do not leave the machine unattended. Unplug machine from outlet when not in use and before maintenance or service.

Use only indoors. Do not use outdoors or expose to rain.

Do not allow machine to be used as a toy. **Close attention** is necessary when used by or near children.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

Do not use damaged electrical cord or plug. Follow all instructions in this manual concerning grounding the machine. If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

Do not pull or carry machine by electrical cord, use as a handle, close a door on cord, or pull cord around sharp edges or corners.

Do not run machine over cord. **Keep** cord away from heated surfaces.

Do not unplug machine by pulling on cord. To unplug, grasp the electrical plug, not the electrical cord.

Do not handle the electrical plug or machine with wet hands.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

This machine is intended for cleaning carpet only.

Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

This machine is not suitable for picking up health endangering dust.

Turn off all controls before unplugging.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs must be done by qualified personnel.

If foam or liquid comes out of machine, switch off immediately.

SAVE THESE INSTRUCTIONS

HAZARD INTENSITY LEVEL

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words -WARNING and CAUTION and FOR SAFETY. The level of hazard intensity is determined by the following definitions:

A WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

A CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:

DO NOT OPERATE MACHINE:

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects.

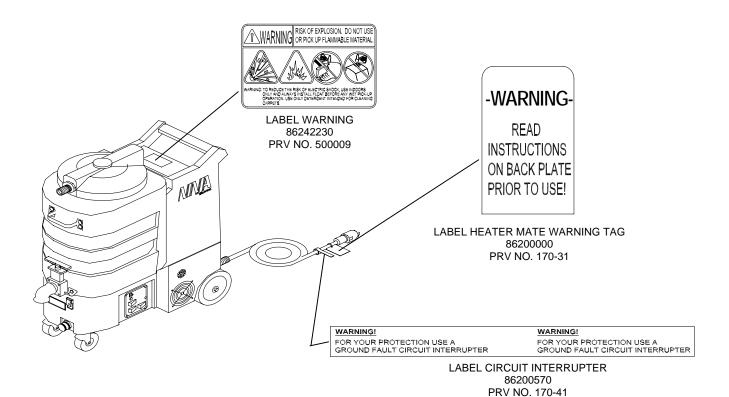
WHEN SERVICING MACHINE:

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine.

NINJA W/ HEAT 86038700 03/27/07

SAFETY LABEL LOCATION

NOTE: These drawings indicate the location of safety labels on the machine. If at any time the labels become illegible, promptly replace them.



NINJA W/ HEAT 86038700 03/27/07

GROUNDING INSTRUCTIONS

THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

ELECTRICAL:

In the USA this machine operates on a standard 15 amp 115V, 60 hz, A.C. power circuit. The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

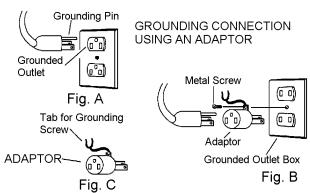
EXTENSION CORDS:

If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

GROUNDING INSTRUCTIONS:

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

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or wire extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw

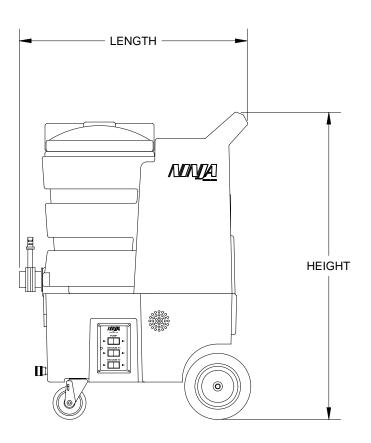


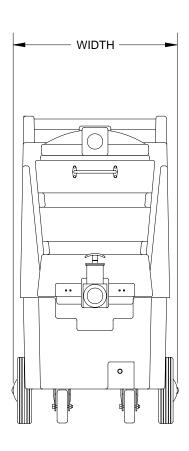
Note: Adaptors are not allowed in Canada.

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

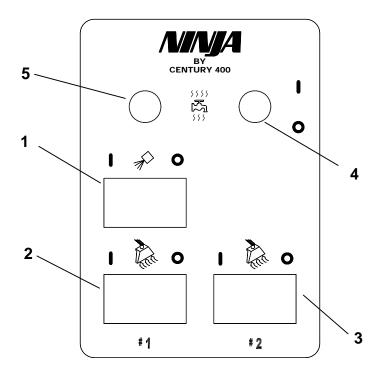
TECHNICAL SPECIFICATIONS

ITEM	MEASURE
Electrical	115 Volt, 60 hz
Vacuum Motor	Dual 2 stage
	Dual 3 stage
Solution Pump	200 psi
	500 psi
Solution Capacity	10 gal (38 L)
Recovery Capacity	8 gal (240 kg)
Weight- Empty	110 lbs (240 kg)
Weight-Full Solution	200 lbs (440 kg)
Height	36 inches (91.44 cm)
Length	29 inches (73.66 cm)
Width	19.5 inches (49.53 cm)
Power cord	22 feet (6.71 m)





CONTROLS



- 1. Pump Switch
- 2. Vacuum #1 Switch
- 3. Vacuum #2 Switch
- 4. Heater Switch
- **5.** Heater Indicator Light

PRE-RUN INSPECTION

- **1.** Check all fittings and connectors for proper assembly.
- **2.** Check all hoses for leaks. Repair or replace any damaged hoses.
- **3.** Check power cord(s) for any damage. If damaged, replace.

EQUIPMENT SET-UP

- **1.** Plug power cord from machine into properly grounded wall outlet.
- 2. Turn vacuum motor switch on and off to make sure there is electrical power at machine.
- Connect vac hose to machine. Slide the swivel cuff over the outlet on the tank.
- 4. Connect the hose to your machine and wand. Pull back the knurled collar on the quick disconnect coupler and push onto the connection on the chassis. To avoid leaks, check to be that a positive connection was made.
- 5. Using a clean container, fill the solution tank with clean hot water. Mix in a non-foaming cleaning concentrate for use in hot water extraction machines, following the manufacture's instructions printed on container.

NOTE: When using a powder cleaner, pre-mix with hot water in a clean container before adding to the solution tank.

- **6.** Turn pump and vacuum switch(s) to the on position.
- 7. Start cleaning.

HEATER OPERATION



The disconnect fittings on the heater

will become extremely hot during operation. Allow sufficient time to cool, or run solution through the machine with the heater turned off before disconnecting the or performing any maintenance on the heater.

Before disconnecting the heater, open wand valve to relieve the system of all pressure by depressing the valve trigger.

DO NOT spray water directly on to the heater. To clean, unplug the unit and wipe with a damp cloth.



Make certain that the solution tank is filled adequately before

plugging in the machine and heater.

- 1. Plug the machine and heater into separate grounded circuits. The heater draws 15 amps of current.
- 2. Turn the solution pump **ON**. Turn the heater switch **ON**. The solution pump must be turned on **BEFORE** the heater is turned on.
 - The heater requires about 5-6 minutes to reach operating temperature.
- When turning the machine and heater OFF, make certain that you turn the heater off FIRST.

PRIMING THE PUMP [SELF PRIMING VALVE]

- **1.** Turn pump and both vacuums on.
- Press lever (located above the accessory connection; front of machine) toward machine.
- 3. Do this for 30 seconds or until there is a steady flow of water flowing through the sight tube (located on right side of recovery tank.)

MACHINE OPERATION

EMPTYING AND CLEANING

A WARNING: Always use defoamer if foaming occurs

Foam will suspend large particles that may damage vacuum(s) as well as allow liquid into the vacuum motor(s) without activating the float shutoff.

- 1. Before proceeding, make certain that the nozzle is functioning properly.
 - **a.** To check, hold the wand about one foot above the surface to be cleaned and open the wand valve. A full spray should be observed from the nozzle.
 - **b.** If the nozzle is not showing a full spray pattern, adjust nozzle for proper pattern, clean, or replace nozzle.
- 2. Normally, chemical is applied on the push stroke of the wand when cleaning. Vacuuming is done on the pull stroke. For heavily soiled carpets the wand may be used in a scrubbing manner, applying chemical in both the push and pull stroke.
- 3. When cleaning, keep the working opening (wand mouth) flat on the surface being cleaned. Keep the wand moving when the valve is open.
- 4. The shutoff float inside the vacuum tank will impede the vacuum flow when the vacuum tank is full. When this occurs, empty the vacuum tank by opening the dump valve and dispose of the waste in a proper manner.
- 5. Once the vacuum tank has been emptied, you may once again proceed with cleaning

DAILY MAINTENANCE



Unplug power cord(s) before servicing or making any repairs.

- 1. Flush the entire system, including floor tool, hand tool, etc., with 1 to 3 gallons of clean, hot water.
- 2. Vacuum out the solution tank.
- 3. Rinse tank with fresh water. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 1-10 bleach to water solution. Wastewater should be disposed of properly.
- Occasionally check filter screen at the bottom of the solution tank and rinse clean with hot water if necessary.
- Inspect hoses for wear. Frayed or cracked hoses should be replaced to avoid vacuum or solution pressure loss.
- 6. Inspect power cord for wear or damage. This cable will lie on wet carpet. To prevent electrical shock replace cords that are frayed or have cracked insulation immediately.
- Clean all dirt and obstructions from drain valve and gaskets to prevent possible leakage and premature wear.
- **8.** Run clean water through solution pump when work is complete.
- **9.** Empty both tanks and rinse, run vacuum (s) for at least one minute to dry motor(s).
- **10.** Store with access covers removed to allow tanks to dry.



DO NOT attempt to repair hose! Repairing high-

pressure hoses may result in severe burns and serious injury.

PERIODIC MAINTENANCE

 Twice a month, flush a white vinegar solution (One quart vinegar to two gallons of water) or anti-browning solution (mixed as directed) through the extractor, turning pump switch on/off several times, flush with clean water. This will prevent build-up of alkaline residue in the system.

- Check hoses for wear, blockages, or damage. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure.
- Check all handles, switches, knobs, electrical cables and connections on your machine for damage. If the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with electrical fire or shock.
- **4.** Clean out solution tank. Remove and clean solution screen.
- **5.** Clean outside of all tanks and check for damage.

MONTHLY MAINTENANCE

- 1. Check all bearings for noise and wear.
- 2. Check all gaskets for wear and leakage.
- **3.** Check pump pressure; observe spray pattern and check gauge if necessary.
- 4. Check overall performance of machine.

SEMI-ANNUALLY

1. Check vacuum motor brushes.

LUBRICATION

For pressure regulator and pump cam lubrication, use a light silicone lubricant which will not damage o-rings. A small tube (86246790, PRV NO. 51391) is supplied with your machine.

STORAGE

Thoroughly clean machine if it is to be stored. You must protect this machine from freezing while in storage.

By using the Self Priming Lever you may help clear out all water lines.

Make sure both recovery and solution tanks are empty. Turn on both vacuum switches and press lever. All water should be removed and sprayed into the recovery tank.

Empty the remaining water and wipe dry.

HEAT MODELS ONLY: Be sure to thoroughly drain water out of heater lines prior to storage in colder climates. This heater will freeze and possibly crack voiding your warranty.

MAINTENANCE

A WARNING:

Only qualified maintenance personnel are to perform the following repairs.

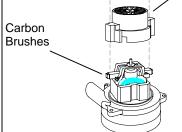
VACUUM MOTOR REPLACEMENT

- 1. Turn off all switches and unplug machine.
- 2. Remove recovery tank.
- Locate the vacuum motor wires and disconnect at the connector.
- **4.** Remove the vacuum motor.
- **5.** Reverse process to install vacuum motor.

SOLUTION PUMP REPLACEMENT

- 1. Turn off all switches and unplug the machine.
- 2. Remove recovery tank.
- **3.** Remove solution hoses from fittings in pump.
- **4.** Remove the screws that fasten the pump to the frame.
- **5.** Reverse process to install pump.

Vacuum Motor Carbon Brushes Replacement (Windsor)



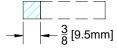
WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



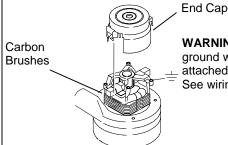
Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



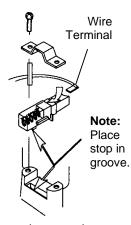
Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

Vacuum Motor Carbon Brushes Replacement (Ametek)



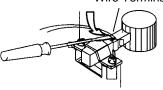
WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

Note: When replacing carbon brushes loosen wire terminal **BEFORE** removing screws on bracket.



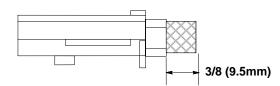
If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.

Wire Terminal

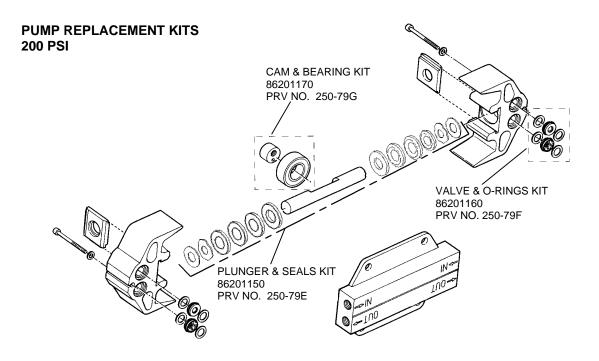


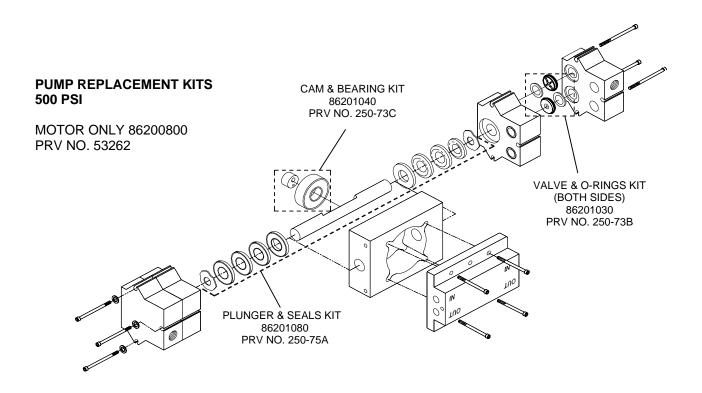
Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.





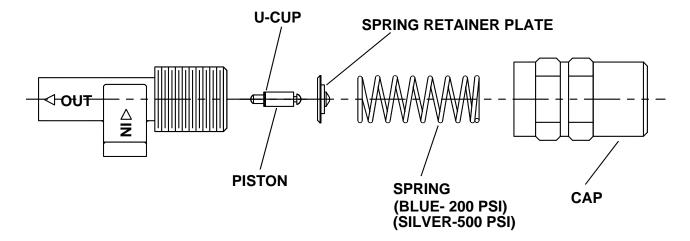
MAINTENANCE

PRESSURE REGULATOR

For best results with the pressure regulator, we recommend that you clean and lubricate the piston and u-cup with Superlube lubricant monthly or when pressure drop seems excessive.

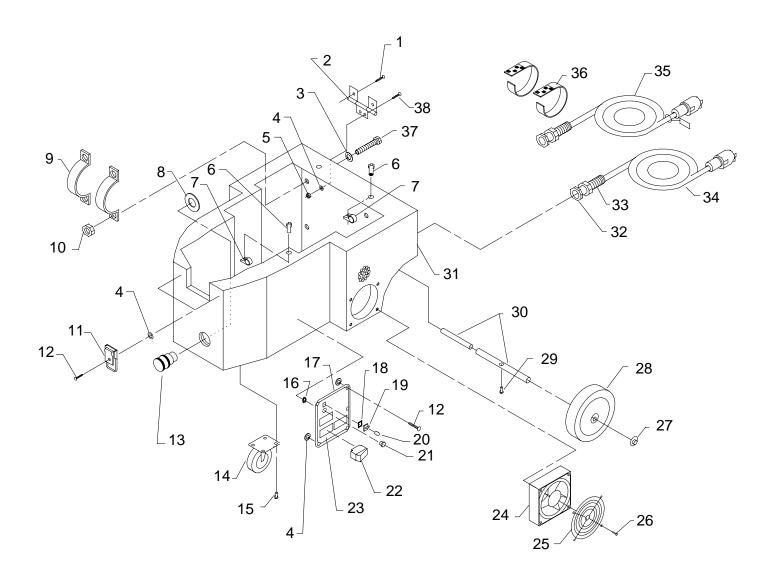
- 1. Turn unit off before lubricating.
- 2. Remove cap, spring and spring retainer plate.
- 3. With fingertips remove piston and u-cup.
- 4. Wipe piston and u-cup clean of any film or scale.
- 5. Lubricate the piston and u-cup with Superlube.
- 6. Reassemble regulator.
- 7. With pump ON, re-adjust pressure regulator for normal operation.

LUBRICATE U-CUP WITH SUPERLUBE MONTHLY.



PROBLEM	CAUSE	SOLUTION	
Loss of Power	Dead electrical circuit	Check building circuit breaker or fuse box.	
Loss of Power	Faulty power cord	Replace	
	Equipment not grounding	Follow grounding instructions exactly	
Electrical shock	Receptacle not grounded	Contact an electrician to check building's wiring	
Electrical Shock	Internal wiring problem	Have a trained service technician check machine's wiring	
Vac mater and varios	Worn motor brushes	Replace	
Vac motor speed varies or doesn't run	Motor worn out	Replace	
or docsir run	Faulty switch	Replace	
	Loose vacuum dome	Center and seal dome over tank	
	Crack in dome of poor joint	Replace or repair using acrylic plastic cement only	
	Lint or dirt clogging vacuum screen	With power off clean screen	
Loss of vacuum	Loose cuffs on vacuum hose	Tighten cuffs turning counterclockwise	
	Vac motor seals leaking	Replace	
	Floor tool vac chamber clogged	Wash out with hose. Pick lint out with a wire	
	Vac motor, hose, or dome gasket	Replace	
	Pump inlet screen plugged	Clean inlet screen	
Pump runs no solution	Pump air locked	Press trigger to open valve on cleaning wand to relieve air	
T diffp fulls file solution	Internal or external solution line damaged and leaking	Replace	
	Internal pump components wearing out Replace, see pump kit components (pg 4-3)		
Pump runs, loss of pressure	will cause pump to cavitate of components.	ing a wand or hand tool with an orifice of less than .06 or pulsate and could result in premature wear of pump	
	Check valves in pump head for particles or cuts in seals	Take piston from BPR and lubricate with Superlube. If problem still exists change BPR kit	
Pump will not run	Unit not plugged in	Connect unit to 3 prong grounded outlet	
-	Loose wiring	See dealer	
Solution hose fitting hard to connect	Corrosion on fittings.	Clean with steel wool. Soak in acetic acid (white vinegar). Lubricate lightly with silicone base lubricant.	
Carpet not getting clean	Severe soil conditions	Make several passes at right angles to each other. Use a pre-spray.	
Carpet too wet	Over saturation	Adjust solution pressure to lower settings. Make several passes without spray	
	Leaving carpet too wet	Check for loss of vac pressure	
Carpet browning	Too much chemical	Check label for correct solution concentration	
- Carpot browning	Light carpet with no brown prevention	Go over carpet with browning prevent only	
	Solution hose connection	Check for positive connection	
Solution not flowing	Faulty pump	Repair or replace	
properly	Faulty floor tool valve	Repair or replace	
	Faulty pump switch	Repair	

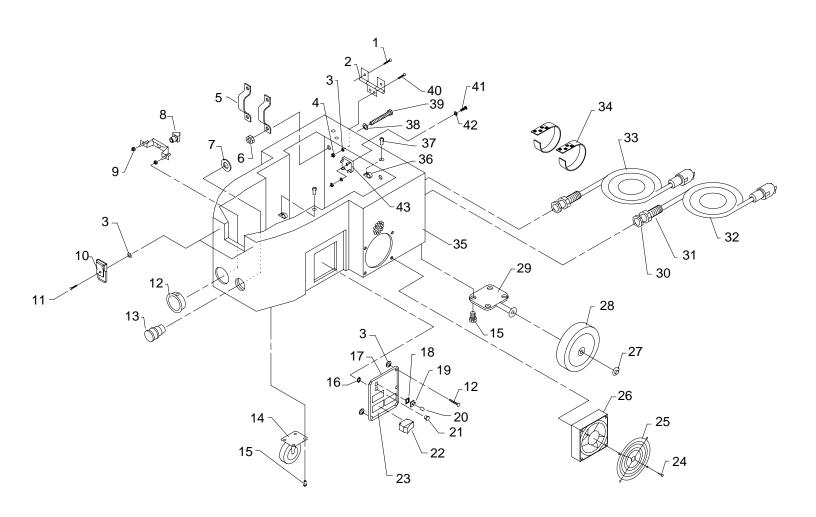
FRAME GROUP (200 PSI)



FRAME GROUP (200 PSI)

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86006700	70232	4	SCR, 10-32 X 3/8 FHMS SS		
2	86200010	140-01	1	HINGE SET CHROME		
3	86010630	87013	4	WASHER, 1/4 ID X 5/8 OD SS		
4	86279190	87095	10	WASHER, #10 FLAT PLTD		
5	86005640	57030	4	NUT, 10-32 HEX NYLOCK		
6	86201300	280-03	2	RIVIT ALUMINUM 3/16 X 3/4		
7	86198460	20008	2	CLAMP, 5/8 NYLON UL/USA		
8	86202230	390-09A	1	WASHER 9/16 S/S USS-THICK		
9	86202230	065-38A	2	BRKT, HEATER SUPPORT NJA		
10	86005810	57245	4	NUT, 1/4-20 HEX NYLOCK SS		
11	86199600	140-05	2	DRAW PULL LATCH STD		
12	86201290	280-02	11	RIVIT AL. 3/16 X 1/2 CLOSED		
13	86002450	22015	1	COUPLER, 1/4 QD		
14	86199430	040-03	2	CASTER SWIVEL 4"		
15	86273830	70020	8	SCR, 1/4-20 X 1/2 HHCS SS NP		
16	86098390	22046	1	CLIP, NEON LAMP		
17	86090930	335-06	1	SWITCH PLATE NJA FOR HEAT UNIT		
18	86201880	335-04	1	TOGGLE SWITCH PLATE ON/OFF		
19	86201840	330-05	1	TOGGLE SWITCH		
20	86201860	330-06	1	TOGGLE SWITCH BOOT		
21	86261300	51116	1	LIGHT ASM, 115V BRUSH WEAR		
22	86256960	72142	3	SWITCH, SPST 15A EURO ROCKER		
23	86200560	170-40	1	LABEL 300 PSI SWITCH PLATE		
24	86199650	070-08	1	FAN 105 CFM AXIAL		
25	86199660	070-08A	1	FAN FINGER GUARD		
26	86276290	70626	4	SCR, #10 X 3/4 PHST HI-LO BLK		
27	86103460	57196	2	NUT, 1/2 PUSH-ON DOME CAP		
28	86202250	040-06	2	WHEEL 8" BLK CENTERED HUB		
29	86273810	70018	1	SCR, 1/4-20 X 1 HHCS SS		
30	86199200	010-04B	1	AXLE SINGLE NINJA		
31	86064960	08061	1	BASE, NJA 100 PSI 2ST W/H		
32	86005670	57040	2	NUT, 1/2 NPT CONDUIT		
33	86256200	73200	2	STRAIN RELIEF 1/2 NPT FLEX		
34	86199540	060-04A	1	CORD 25' BLK 14/3 SJTW/A PLUG		
35	86199530	060-04	1	CORD 25' BLK 12/3 SJTW/A PLUG		
36	86202160	320-05	2	VELCRO STRAP		
37	86274210	70129	4	SCR, 1/4-20 X 3 HHCS PLTD		
38	86274040	70076	4	SCR, 10-32 X 1 PFHMS PLT		

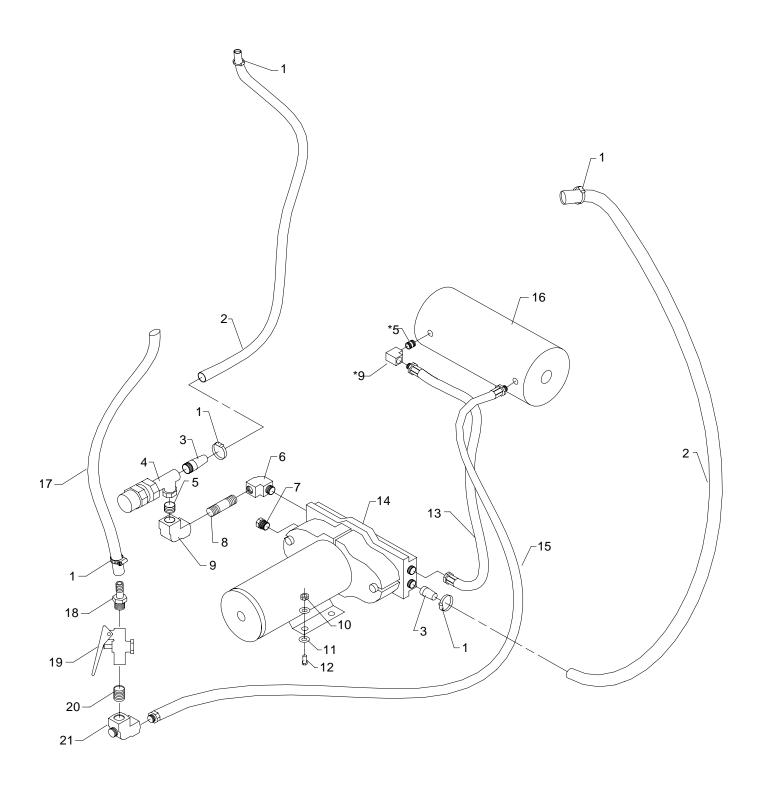
FRAME GROUP (500 PSI)



FRAME GROUP (500 PSI)

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86006700	70232	4	SCR, 10-32 X 3/8 FHMS SS		
2	86200010	140-01	1	HINGE SET CHROME		
3	86279190	87095	10	WASHER, #10 FLAT PLTD		
4	86005640	57030	5	NUT, 10-32 HEX NYLOCK		
5	86090790	140744	2	BRKT, HEATER SUPPORT NJA		
6	86005810	57245	4	NUT, 1/4-20 HEX NYLOCK		
7	86202230	390-09A	1	WASHER 9/16 S/S USS-THICK		
8	86197390	31021	1	ELBOW, 1/4 NPT X 45D STREET		
9	86005700	57104	2	NUT, 10-32 W/STAR WASHER PLTD		
10	86199600	140-05	2	DRAW PULL LATCH STD.		
11	86201290	280-02	11	RIVIT AL. 3/16 X 1/2 CLOSED		
12	86200970	190-07	1	PRESSURE GAUGE 1000 PSI		
13	86002450	22015	1	COUPLER, 1/4 QD		
14	86232600	18036	2	CASTER, 5" DIA SWIVEL		
15	86273830	70020	8	SCR, 1/4-20 X 1/2 HHCS SS NP		
16	86233480	22046	1	CLIP, NEON LAMP		
17	86090930	335-06	1	SWITCH PLATE NJA FOR HEAT UNIT		
18	86201880	335-04	1	TOGGLE SWITCH PLATE ON/OFF		
19	86201840	330-05	1	TOGGLE SWITCH		
20	86201860	330-06	1	TOGGLE SWITCH BOOT		
21	86261300	51116	1	LIGHT ASM, 115V BRUSH WEAR		
22	86256960	72142	3	SWITCH, SPST 15A EURO ROCKER		
23	86200560	170-40	1	LABEL 300 PSI SWITCH PLATE		
24	86276290	70626	4	SCR, #10 X 3/4 PPHST HI-LO BLK		
25	86199660	070-08A	1	FAN FINGER GUARD		
26	86199650	070-08	1	FAN 105 CFM AXIAL		
27	86271380	57196	2	NUT, 1/2 PUSH-ON DOME CAP		
28	86202280	89252	2	WHEEL, 12" BLK CNTRD HUB		
29	86090740	010-07	2	AXLE ASM, NJA		
30	86005670	57040	2	NUT, 1/2 NPT CONDUIT		
31	86256200	73200	2	STRAIN RELIEF 1/2 NPT FLEX		
32	86199540	060-04A	1	CORD 25' BLK 14/3 SJTW/ A PLUG		
33	86198530	060-04	1	CORD 25' BLK 12/3 SJTW/ A PLUG		
34	86202160	320-05	2	VELCRO STRAP		
35	86065000	08065	1	BASE, NJA DLX 500 2 ST W/H		
36	86198460	20008	2	CLAMP, 5/8 NYLON UL/USA		
37	86201300	280-03	2	RIVIT ALUMINUM 3/16 X 3/4		
38	86010630	87013	4	WASHER, 1/4 ID X 5/8 OD SS		
39	86007010	70663	4	SCR, 1/4 -20 X 3 1/4 HHCS PLTD		
40	86274040	70076	4	SCR, 10-32 X 1 PFHMS PLT		
41	86006830	70386	1	SCR, 10-32 X 1.0 PPHMS		
42	86010650	87018	2	WASHER, #10 X 9/16 OD		
43	86006350	67029	1	RECTIFIER, BRIDGE		

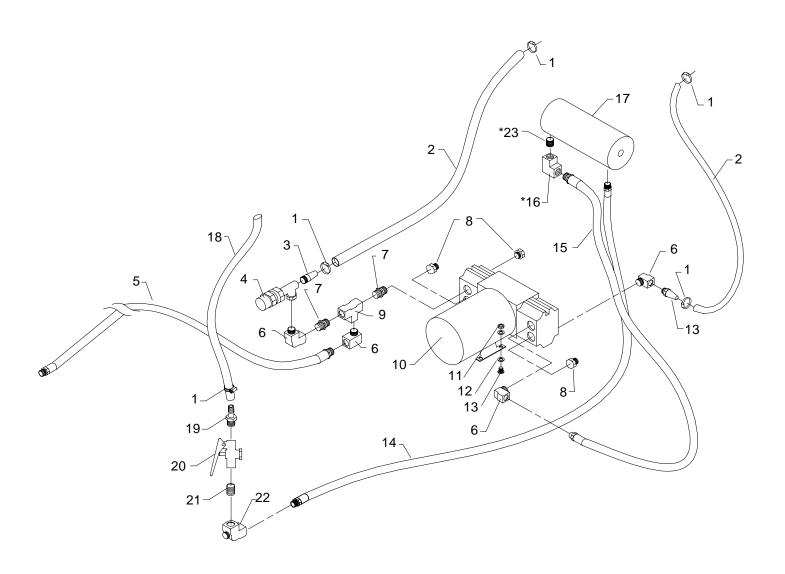
PUMP AND HEATER GROUP (200 PSI)



PUMP AND HEATER GROUP (200 PSI)

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86233150	20042	5	CLAMP, 3/8 HOSE (D-SLOT)		
2	86280750	151-38A	2	HOSE, 1/2 WIREBOUND X 21"		
3	86197570	40028	2	HOSEBARB, 1/4 MPT X 1/2 DL		
4	86198230	250-33	1	BPR PUMPTEC NINJA 200PSI		
5	86005590	56014	1	NIPPLE, 1/4 CLOSE		*INCLUDED IN ASM
6	86197360	31016	1	ELBOW, 1/4 NPT STREET		
7	86272730	66017	1	PLUG, 1/4 BRASS PIPE		
8	86247710	56022	1	NIPPLE, 1/4 X 3		
9	86197370	31017	1	ELBOW, 1/4 FPT X 1/4 FPT		*INCLUDED IN ASM
10	86005810	57245	2	NUT, 1/4-20 HEX NYLOCK SS		
11	86010630	87013	4	WASHER, 1/4 ID X 5/8 OD SS		
12	86273820	70019	2	SCR, 1/4-20 X 1.25 HHCS SS		
13	86200140	151-38C	1	HOSE, PULSE 21.0 1/4MPT X 1/4MPT		
14	86201130	250-79	1	PUMPTEC 200PSI PUMP & MOTOR		
15	86200150	151-38D	1	HOSE, PULSE 27.0 1/4MPT X 1/4MPT		
16	86033590	41516	1	HEATER ASM, NINJA COMPLT		
17	86282310	39699	1	HOSE, 3/8 WIREBOUND X 35"		
18	86197550	40014	1	HOSEBARB, 1/4MPT X 3/8 DL		
19	86258970	84193	1	VALVE, KNGSTN 3" LVR 500 PSI		
20	86197670	56023	1	NIPPLE, 1/4 X 1.5		
21	86197760	78308	1	TEE, 1/4 STREET		

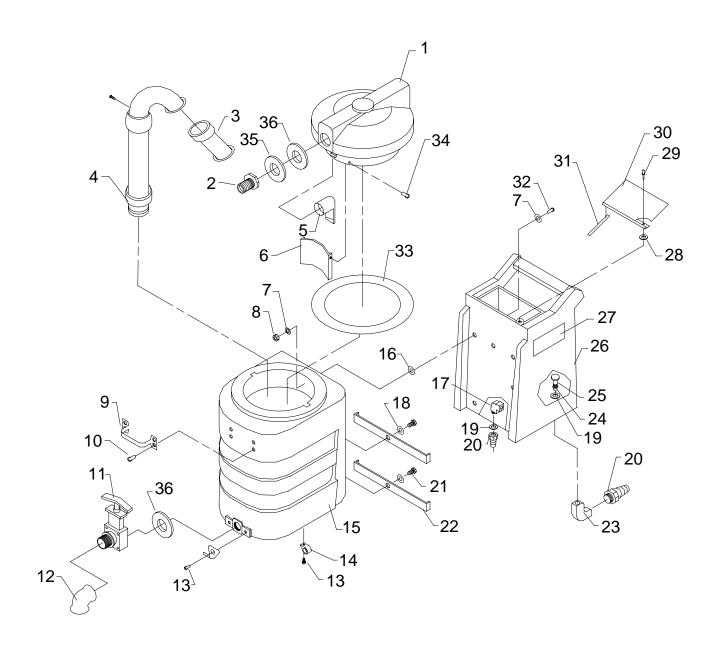
PUMP AND HEATER GROUP (500 PSI)



PUMP AND HEATER GROUP (500 PSI)

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86233150	20042	5	CLAMP, 3/8 HOSE (D-SLOT)		
2	86280750	151-38A	2	HOSE, 1/2 WIREBOUND X 21"		
3	86197540	40013	2	HOSEBARB, 3/8 MPT X 1/2 DL		
4	86199270	250-36	1	BPR 500 PSI		
5	86200170	151-42C	1	HOSE, PULSE 15.0 1/4 FBS X 3/8 MPT		
6	86197420	31026	4	ELBOW, 3/8 NPT STREET		
7	86200840	56005	2	NIPPLE, 3/8 X 1.5 BRASS		
8	86197720	66029	3	PLUG, 3/8 MPT		
9	86201780	78029	1	TEE, 3/8		
10	86201050	250-74	1	PUMPTEC 500 PSI PUMP/MOTOR		
11	86005810	57245	2	NUT, 1/4-20 HEX NYLOCK		
12	86010630	87013	4	WASHER, 1/4 ID X 5/8 OD SS		
13	86273810	70018	2	SCR, 1/4-20 X 1 HHCS SS		
14	86200150	151-38D	1	HOSE, PULSE 27.0 1/4 MPT X 1/4 MPT		
15	86200370	39581	1	HOSE, PULSE 20.0 1/4 MPT X 3/8 MPT		
16	86197370	31017	1	ELBOW, 1/4 FPT X 1/4 FPT		*INCLUDED IN ASM
17	86033590	41516	1	HEATER ASM, NINJA COMPLETE		
18	86282310	39699	1	HOSE, 3/8 WIREBOUND X 35"		
19	86197550	40014	1	HOSEBARB, 1/4MPT X 3/8 DL		
20	86258970	84193	1	VALVE, KNGSTN 3" LVR 500PSI		
21	86197670	56023	1	NIPPLE, 1/4 X 1.5		
22	86197760	78308	1	TEE, 1/4 STREET		
23	86005590	56014	1	NIPPLE, 1/4 CLOSE		*INCLUDED IN ASM

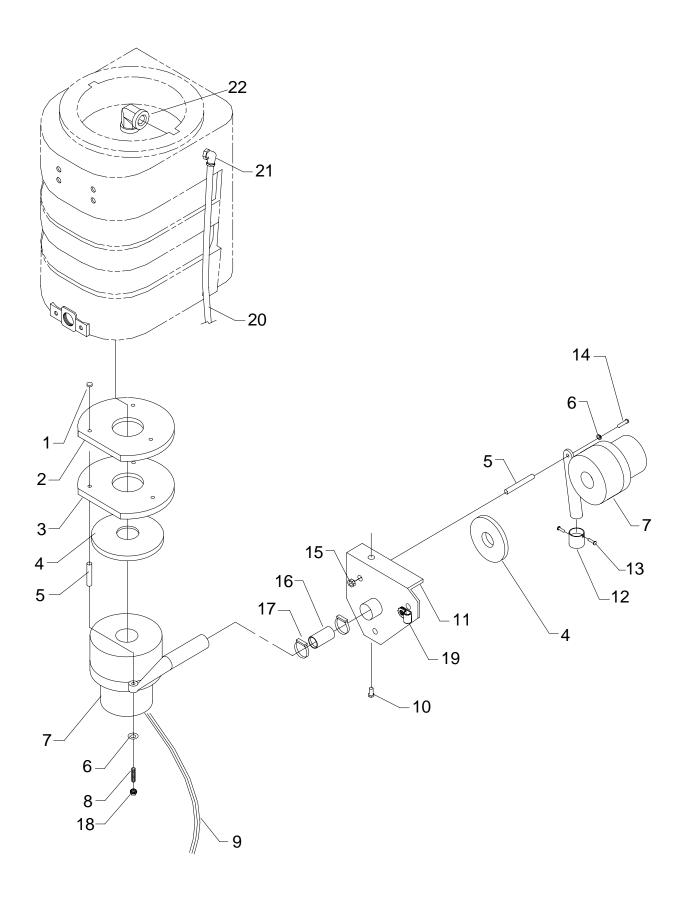
RECOVERY & SOLUTION TANK GROUP



RECOVERY & SOLUTION TANK GROUP

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86033370	51355	1	LID, NJA DLX LT GRY ALL		
2	86200290	260-33	1	HOSEBARB, 1.5MPT X 1.5		
3	86199840	090-12A	1	FLOAT CAGE ASSY COMPLETE SLIP		
4	86033240	090-17	1	NINJA STAND PIPE ASSY		
5	86064760	31082	1	ELBOW, 1.5FS X 1.5FPT PVC MCHD		
6	86090850	065-42	1	FLOOD MACHINE BAFFLE		
7	86279610	87190	12	WASHER, SEAL 5/8 OD NEOPRENE		
8	86005810	57245	6	NUT, 1/4-20 HEX NYLOCK SS		
9	86199970	120-08	1	MACHINE HANDLE BRASS/CHROME		
10	86006670	70201	4	SCR, 1/4-20 X 3/4 FHCS DL		
11	86161460	15-808123	1	DUMP VALVE, 2"		
12	86161470	11-800444	1	ELBOW, 2" 45D PVC SCH40		
13	86007050	70683	5	SCR, 10-32 X 3/8 PPHMS SS NP		
14	86198460	20008	1	CLAMP, 5/8 NYLON UL/USA		
15	86033410	75330	1	TANK, RECVRY NJA ALL		
16	86237510	35182	6	GASKET, FRAME		
17	86197370	31017	1	ELBOW, 1/4 FPT X 1/4 FPT		
18	86010630	87013	2	WASHER, 1/4 ID X 5/8 OD SS		
19	86090230	87015	2	WASHER, 9/16 ID X 1.06 OD SS		
20	86197570	40028	2	HOSEBARB, 1/4 MPT X 1/2 DL		
21	86273830	70020	2	SCR, 1/4-20 X 1/2 HHCS SS NP		
22	86090770	065-37	2	BRKT, RECOVERY BUCKET NINJA		
23	86199630	030-13	1	ELBOW, 45 DEGREE 1/4 FPT		
24	86247680	56015	1	NIPPLE, 1/4 HEX		
25	86201590	290-08	1	SOL SCREEN (ACORN) W/RUB BASE		
26	86033500	75346	1	TANK, SLTN NJA 200/500 PSI		
27	86200580	500341	2	LABEL, NINJA MAIN		
28	86010690	87068	3	WASHER, 1/8 RIVET BACKUP		
29	86201280	280-01	3	RIVET AL. 1/8 X 1/2		
30	86023430	065-03C	1	SOLUTION COVER NINJA DELUXE		
31	86198530	99809	5"	FOAM TAPE, 1/8T X 3/4 1SDA		
32	86273820	70019	6	SCR, 1/4-20 X 1.25 HHCS SS		
33	86199900	110-26A	1	GASKET NINJA LID		
34	86201290	280-02	2	RIVET AL. 3/16 X 1/2 CLOSED		
35	86090320	87257	1	WASHER, HOSEBARB		
36	86237770	35256	2	GASKET, DUMP VALVE		

VACUUM MOTOR GROUP



VACUUM MOTOR GROUP

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86201510	390-26	3	SPACER NYLON 1/4ID X 1/2OD		
2	86199910	110-26B	1	GASKET, VAC BRACKET		35168WAS
3	86090960	360-23A	1	PLATE, VAC		
4	86003760	35166	2	GASKET, VAC MTR		
5	86201970	065-92	6	VAC SPACER 2 1/4 II STAGE		
6	86010630	87013	6	WASHER, 1/4ID X 5/8OD SS		
7	86202040	360-04A	2	VAC MOTOR, 120V 5.7 2ST TD		
-	86202070	360-04B	-	BRUSHES, VAC FOR 116392-00		SERVICE ONLY
-	86135320	140687	-	BRUSH SET, 120V VAC WINDSOR	1000121568	SERVICE ONLY
8	86211180	70814	3	STUD 1/4-20 X 4.5 SS		
9	86134400	99656	1	DUCT, 5/8 ID SPLIT FLEX		
10	86274460	70205	1	SCR, 1/4-20 X 3/8 HHCS PLT DL		
11	86090950	360-23	1	PLATE ASM, REAR VAC		
12	86091230	78463	1	TUBE, VAC EXHAUST 2.5" LONG		
13	86201280	280-01	2	RIVET AL. 1/8 X 1/2		
14	86007010	70663	3	SCR, 1/4-20 X 3-1/4 HHCS PLT		
15	86005810	57245	3	NUT, 1/4-20 HEX NYLOCK SS		
16	86063170	39566	1	HOSE, VAC EXHAUST 2"ID X 2" LONG		
17	86233430	81431	2	CLAMP, 2.50" WORM GEAR		
18	86005710	57105	3	NUT, 1/4-20 HEX W/ STAR WASHER		
19	86075210	20062	1	CLAMP, 3/8 NYLON MCHND		
20	86282300	39698	1	HOSE, 3/8 CLR PLYURTHN X 24"		
21	86003500	31076	1	ELBOW, 1/4MPT X 3/8 TUBE, QC		
22	86197370	31017	1	ELBOW, 1/4 FPT X 1/4 FPT		

WIRING GROUP (200 PSI)

