



IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING MACHINE



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

- Connect machine to a properly grounded outlet only. See grounding instructions.
- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- Use indoors only. Do not use outdoors or expose to rain.
- Do not allow 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 attachments.
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.
- Do not pull or carry by cord, use cord as a handle, close a door on a cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without filter screens in place (Located in dome and in lower tank).
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.

SAVE THESE INSTRUCTIONS



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Record the model and serial number on the blue data label located at the rear of the machine .
These numbers are used when calling upon the Windsor dealer for parts and service.

MODEL _____ SERIAL NO. _____ PURCHASE DATE _____

IMPORTANT SHIPPING NOTE

Carefully unpack your scrubber and inspect it for shipping damage. Any damages which occurred during shipping are the responsibility of the carrier, who must be notified immediately.

THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

ELECTRICAL:

In the USA this vacuum operates on a standard 15 amp 115 volt A.C. power circuit (120V nominal). Special voltage models are available for international applications. 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 the same **type** and at least **one** size larger than the power cord on the machine. Do not use over 50 ft. (15m) of extension cord(s). The SPIR-IT is equipped with a 50 ft. (15m) 14/3 SJTW/-A power cord.

NOTE:

If connected to a circuit protected by fuses, use time-delay fuses with this product.

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 the like 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.

WARNING:

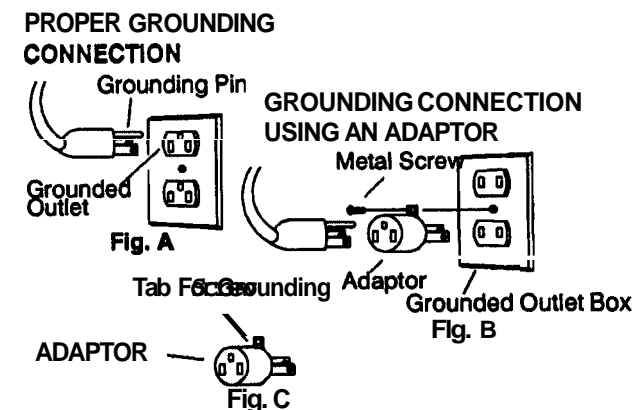
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet,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

INSTRUCTIONS VISANT LA MISE À LA TERRE

Cet appareil doit être mis à la terre. En cas de défaillance ou de panne éventuelles, la mise à la terre fournit au courant un chemin de moindre résistance qui réduit le risque de choc électrique. Cet appareil est pourvu d'un cordon muni d'un conducteur de terre et d'une fiche avec broche de terre. La fiche doit être branchée dans une prise appropriée correctement installée et mise à la terre conformément aux règlements et ordonnances municipaux.

ADVERTISSEMENT:

Un conducteur de terre mal raccordé peut entraîner un risque de choc électrique. Consulter un électricien ou un technicien d'entretien qualifié si vous n'êtes pas certain que la prise est correctement mise à la terre. Ne pas modifier la fiche fournie avec l'appareil - si elle ne peut être insérée dans la prise, faire installer une prise adéquate par un électricien qualifié.

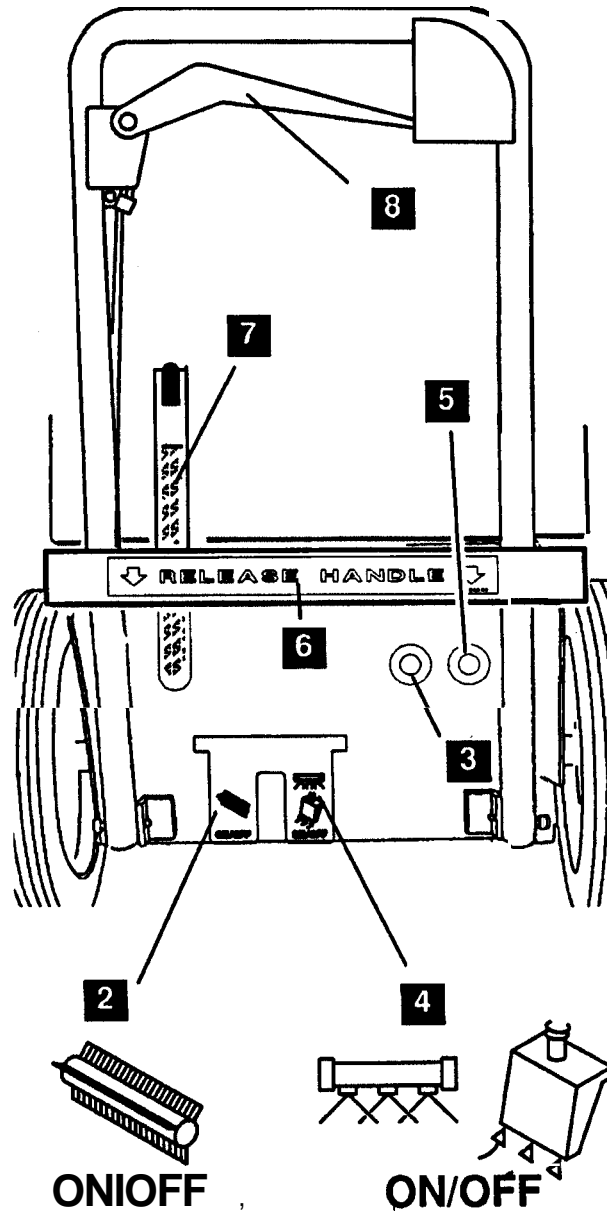
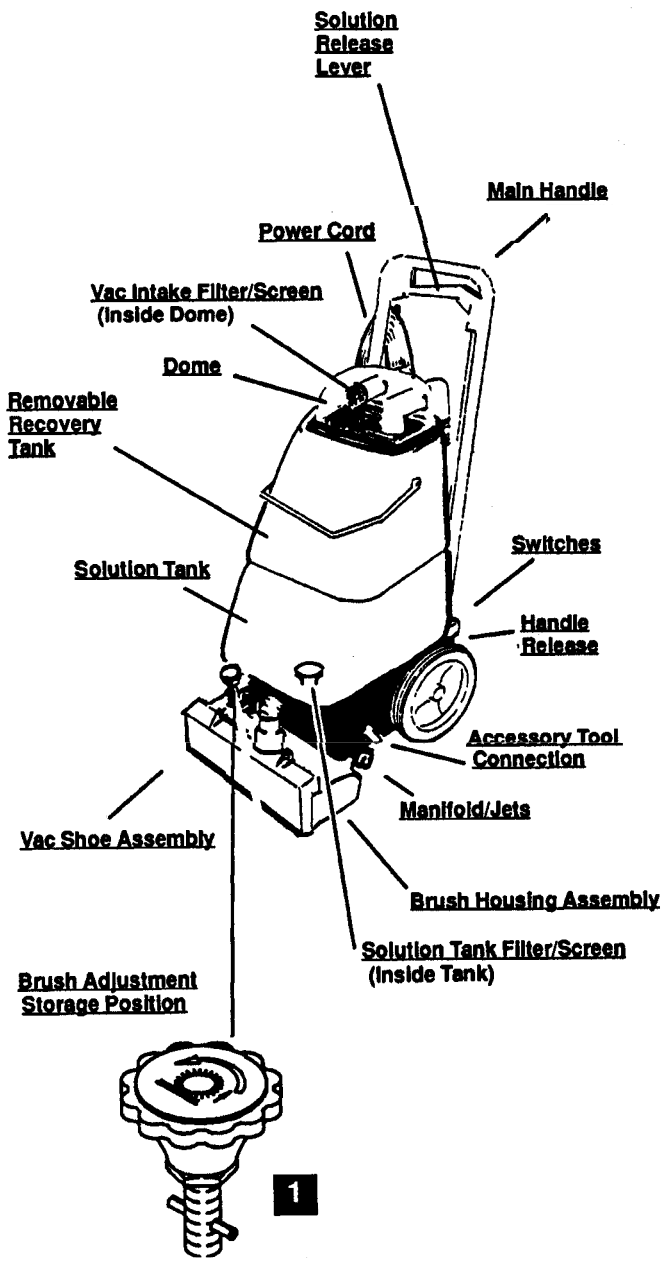


NOTE In Canada, the use of a temporary adaptor is not permitted by the Canadian Electrical Code

NOTE Au Canada, l'utilisation d'un adaptateur temporaire n'est pas autorisée par le Code canadien de l'électricité.

Equipment Set-Up:

- 1.) Connect hoses to dome.
- 2.) Loop power cord through strain relief as shown.
- 3.) Become familiar with the machine.



ON/OFF

ON/OFF

CONTROLS;

- 1.) Brush storage/Height adjustment.
- 2.) Brush On/Off switch.
- 3.) Brush circuit breaker. (6amp)
- 4.) Vac/Pump On/Off switch.
- 5.) Vac/Pump circuit breaker. (15amp)
- 6.) Handle release bar.
- 7.) Solution drain hose.
- 8.) Solution release lever.

Filling Solution Tank:

- 1.) Set dome and recovery tank to the side.
- 2.) Use a clean bucket to fill the solution tank with hot water.

CAUTION:

**Do not use water temperatures in excess of 150° F (65°C).
Water which is too hot may distort the polyethylene tanks.**

- 3.) Add a cleaning concentrate for use in hot water extractors. Closely follow manufacturer's instructions found on container. Read ingredients listed on the container to ensure compatible chemicals are used. The solution tank capacity is 6 gallons (23 liters).

CAUTION:

Use only the suitable chemicals listed below. Using incompatible chemicals will damage the machine. Damages of this type are not covered under the 6-3-1 warranty. Carefully read ingredients on manufacturer's label before using any product in this machine.

SUITABLE CHEMICALS

Alkalis
Clorox II Bleach'
Defoaming Agents
Detergents
Hydroxides
Oxygen Bleaches
Soaps
Sta-Puf Fabric Softener'
Vinegar
White Monday Bleach'

* Registered Trademark

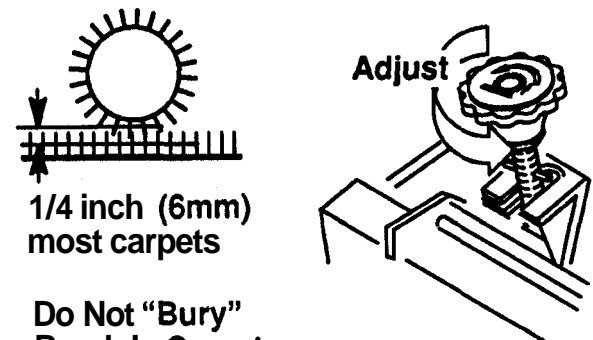
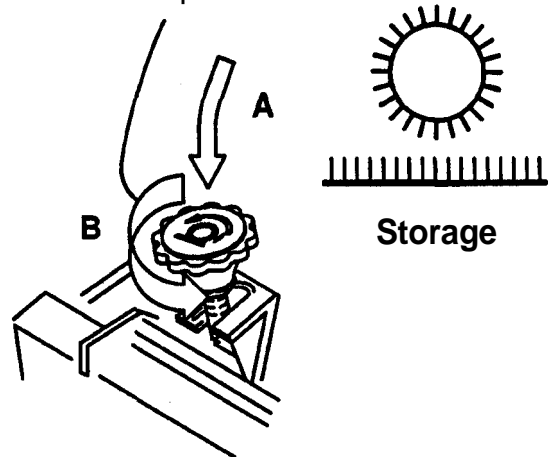
INCOMPATIBLE CHEMICALS

Aldehydes
Aromatic Hydrocarbons
Butyls
Carbon Tetrachloride
Clorox'
Chlorinated Bleaches
Chlorinated Hydrocarbons
D-Limonene
Lysol*
Methyls (MEK)
Perchloroethylene(perc)
Phenols
Trichlorethylene

- 4.) Place the recovery tank onto the solution tank.
- 5.) Set the dome in place on the recovery tank. Dome must be seated correctly to ensure proper vacuum seal.

Brush Height Adjustment:

- 1.) Lower brush housing to the floor. Turn the control knob until the pin lines up with the slot in the bracket and the housing comes down.
- 2.) With the brush housing lowered, turn control knob clockwise to lower or counterclockwise to raise the brush housing assembly, as shown on knob.
- 3.) Lower brush while looking under machine until brush bristles contact the carpet. The amount of contact required to clean the carpet will vary depending on the carpet. Try different amounts of brush pressure until the desired result is achieved. More than 3/8" (1cm) of contact between the brush bristles and carpet may cause the brush motor circuit breaker to trip, turning off machine. 1/4" (6mm) of engagement will be sufficient to clean most carpets.

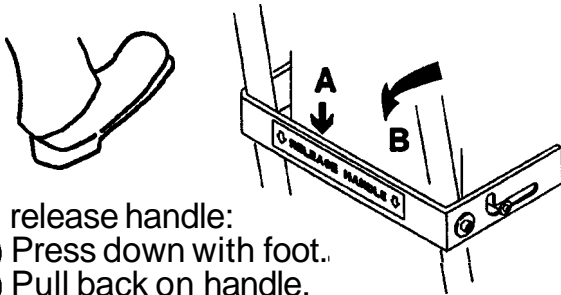


**Do Not "Bury"
Brush In Carpet**



Operating I Spirit:

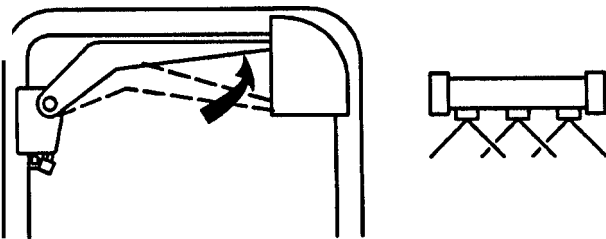
- 1.) Fill the solution tank.
- 2.) Move machine to the cleaning area.
- 3.) Lower the brush housing to the floor.
- 4.) Adjust the brush to the desired height.
- 5.) Plug machine into electrical outlet.
- 6.) Release handle by pressing bar with foot. Push handle forward to lock.



To release handle:

- A.) Press down with foot.
- B.) Pull back on handle.

- 7.) Press Vac/Pump switch with foot to turn on.
- 8.) Tilt the machine back on rear wheels until brush is off the carpet. Press brush switch with foot to turn on.
NOTE:
Starting the machine with dry brush resting on carpet may trip the brush motor circuit breaker.
- 9.) Squeeze the solution control lever to dispense cleaning solution.



- 10.) Pull the machine backwards at a steady pace. Different carpet conditions will determine the speed required, approximately 25 to 30 feet per minute (8-9 m). Do not press down on the handle while cleaning, this will cause the brush housing to raise slightly and reduce efficiency.

- 11.) Release the solution lever about 6 inches (15,0 cm) before the end of each pass to ensure all solution is picked up.
- 12.) Allow each cleaning pass to overlap the previous pass about 1 inch (2,5 cm).
- 13.) While cleaning check for foam build-up in recovery tank. When excessive foam begins to build up, add a defoaming compound to the recovery tank according to the instructions on the manufacturer's package. Foam build-up depends on the type of cleaning concentrate.

Warning:

An overflow of foam from the recovery tank into the vacuum intake can damage the vacuum motor. Always be aware of the waste water level and foam in the recovery tank, especially when using an accessory tool. **BEFORE** foam or solution is pulled into **vac** intake empty the recovery tank.

CAUTION:

Never put defoaming compound in the solution tank. Damage to pump will result.

- NOTE: The **vac** motor is protected by a circuit breaker which will only trip under conditions of abuse, such as an overflow of foam into the dome. When an overflow does occur the **vac** motor must be allowed to dry thoroughly before continuing work.
- 1.) Remove source of overflow.
 - 2.) Run motor to dry.

- 14.) When solution tank empties the machine will **start** streaking and won't completely clean the carpet. Turn both switches off, empty the recovery tank, and refill the solution tank. Use the clear drain hose on the rear of the solution tank **as** a sight gage to determine amount of fluid in tank.

- 15.) Ventilate the room when cleaning has been completed. Keep all traffic off the carpet until it is thoroughly dry.
- 16.) When done cleaning for the day bring the machine to a utility sink and floor drain. Perform the daily/regular maintenance. Set the recovery tank aside so solution tank will dry.

CAUTION:

When not using the machine put the brush in the storage position. (see daily maintenance on page 8) Leaving the brush on the floor for long periods of time may ruin it.

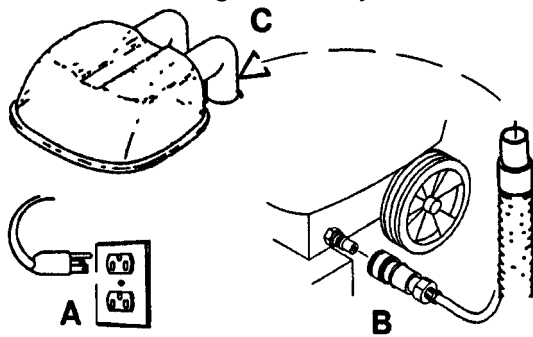
To Use an Accessory Tool:

- 1.) Turn the machine completely off and unplug it from electrical outlet.
- 2.) Connect the solution hose to the brass fitting on lower left side of machine.
- 3.) Connect the vac hose to the left side of the dome (side with white hose cuff).
- 4.) Fill the solution tank.
- 5.) Plug the machine in and turn on only the vac/pump switch.

CAUTION:

Using accessory tool with brush switch on may damage floor.

- 6.) Turn off the machine and unplug it from electrical outlet before disconnecting accessory tool.



Approved Accessory Tools;

- Standard Floor Wands (SFW, SW, or **SW-PRO**)
- Deluxe Hand Tool (DHT)
- Upholstery Hand Tool (UPH3)

SPIRIT™

t Inspection:

Determine precisely what areas you are going to clean. Note problem areas in the carpet or tack strip. Look for loose carpet, heavily damaged areas, discolored stains, or grease spots that will require prespotting. Note the carpet type. Check the availability of hot water, drains, and suitable electrical outlets. If the carpet is loose or worn, have it repaired **before** attempting to clean it.

Plan Cleaning Route:

Work from the most remote area towards the exit. Try not to travel over the cleaned areas when getting fresh water or dumping old. Furniture should be moved away from the walls before cleaning. If furniture is moved back in place before carpet is completely dry, place plastic or foil protectors under the legs to prevent possible carpet staining. When possible use a Windblower (WB3) and open all windows and doors to speed carpet drying.

General Carpet Cleaning Information;

Vacuum carpet first! Always take the time to thoroughly vacuum carpet before using the extractor.

On heavily soiled carpets, or on areas of high foot traffic, it may be necessary to use a prespray or traffic lane cleaner applied with a separate sprayer. Do not add presprays to the machine's solution tank. If a spotter is used, follow the manufacturer's instructions exactly as printed on the label.

Use an accessory tool to remove spotter. Spotter left in the carpet may bleach or brown it permanently.

Shag or deep pile carpets may require several passes from different directions, but the operator must be careful not to over saturate the carpet. Make several passes without spray to extract as much moisture as possible.

Rinse carpet after cleaning so that sticky soap build-up will not cause carpet to quickly become soiled again. Go back over carpet using only clean warm water in solution tank.

WARNING OF POTENTIAL INJURY

This product contains moving parts.

To reduce the risk of injury – unplug the machine before servicing.

Maintenance and repairs must be done by qualified personnel ONLY.

CAUTION:

Using non-Windsor parts to repair this machine will void the 6-3-1 warranty.

Suggested Service Parts List

DESCRIPTION	PART NUMBER
<u>Belt</u>	11031
<u>Brush Adjustment Knob</u>	48051
<u>Brush Bearings</u>	09019
<u>115V Cord Assembly (USA/Japan)</u>	23572
<u>230V Cord Assembly (Europe)</u>	23574
<u>240V Cord Assembly (Australian)</u>	23619
<u>115V Cord End (USA)</u>	26006
<u>230V Cord End (European)</u>	26036
<u>240V Cord End (Australian)</u>	26037
<u>Dome Assembly</u>	28034
<u>Dome Gasket</u>	35060
<u>Hose Cuff, Blue</u>	27354
<u>Hose Cuff, White</u>	27079
<u>Jet Assembly</u>	44055
<u>Jet</u>	44061
<u>Jet Seal</u>	44051
<u>Jet Body w/Seal</u>	44052
<u>Manifold Assembly (No Jets)</u>	54147
<u>Pump Service Kit</u>	47020
<u>Screen/Filter, Dome</u>	34140
<u>Screen/Filter, Solution Tank</u>	73250
<u>Solution Release Cable</u>	27580
<u>Solution Release Lever</u>	51200
<u>115V Switch</u>	72074
<u>230V Switch</u>	72121
<u>Valve</u>	84134

Daily Maintenance:

These procedures are followed at the end of each work period to extend the life of the machine.

- 1.) Empty unused cleaning solution by disconnecting clear hose on back of machine and pouring into floor drain.
- 2.) Inspect and clean solution filter screen inside tank and vac intake screen inside dome.
- 3.) Flush the system. Fill solution tank with 1 or 2 gallons (4 - 8 liters) of clean hot water. With machine over floor drain turn on vac/pump switch until solution tank is empty.
- 4.) Inspect spray pattern of jets. Remove jets and rinse if clogged.
- 5.) Rinse recovery tank with clean hot water.
- 6.) Remove any lint or debris from brush.
- 7.) Inspect power cord. Remember, this cord will lay on damp carpet.

Warning:

IMMEDIATELY HAVE WORN OR FRAYED POWER CORDS REPLACED.

- 8.) Inspect hoses. Worn or cracked hoses may cause loss of vac pressure.
- 9.) Place the brush in the storage position. Press back slightly on the main handle, press down on the control knob and turn until the pin drops into the slot; rotate another 90° to lock.

For infrequent use or long periods of storage, flush the system with a neutralizing solution of 1 quart (1 liter) white vinegar mixed with 2 gallons (8 liters) hot water. Flush the system with clean hot water after neutralizing.

Periodic Maintenance:

These procedures are performed by a trained service technician. The regularity of these procedures may depend on the machine's use.

- 1.) Flush the system with a special solution to reduce scaling (alkaline build-up).

Use acetic acid (white vinegar) or an anti-browning solution. Mix one quart acetic acid with 2 gallons (1:8 liters) of hot water in the solution tank (if an anti-browning solution is used follow manufacturer's instructions). Turn on the vac/pump switch and allow the machine to run over a floor drain until the solution tank is empty (approximately once a month).
- 2.) Inspect hoses and cords, replace as needed.
- 3.) Inspect filter screens, clean or replace as needed.
- 4.) inspect spray pattern of jets, replace or clean as needed.
- 5.) Check the tension of the solution valve cable, tighten if necessary.
- 6.) Inspect the vac motor, remove any lint build-up at cooling intake, service carbon vac motor brushes (Approximately every 750 operation hours).
- 7.) With the machine running, the brush should rotate freely without rattling or grinding. Replace bearings if necessary.

CAUTION:

Do not allow this machine to remain in a vehicle or area where the temperature will be below 40°F (4°C). Allowing this machine to freeze will cause damage not covered by the 6-3-1 warranty.

CAUTION:

Protect this machine from freezing if it becomes necessary to store it at temperatures below 40°F (4°C).

Use a methyl hydrate window washer type anti-freeze; mix a gallon or two (4-8 liters) of anti-freeze solution, following the manufacturer's instructions. Add the anti-freeze solution to the solution tank. With the hoses in place run the machine until the anti-freeze begins spraying out (don't empty solution tank). Vacuum out the remaining anti-freeze solution in the solution tank. Disconnect the hoses and empty the recovery bucket. Always allow the unit to return to room temperature before filling with hot water or operating.

CAUTION:

Do not use Ethylene Glycol or any cooling system anti-freezes.

Troubleshooting Chart

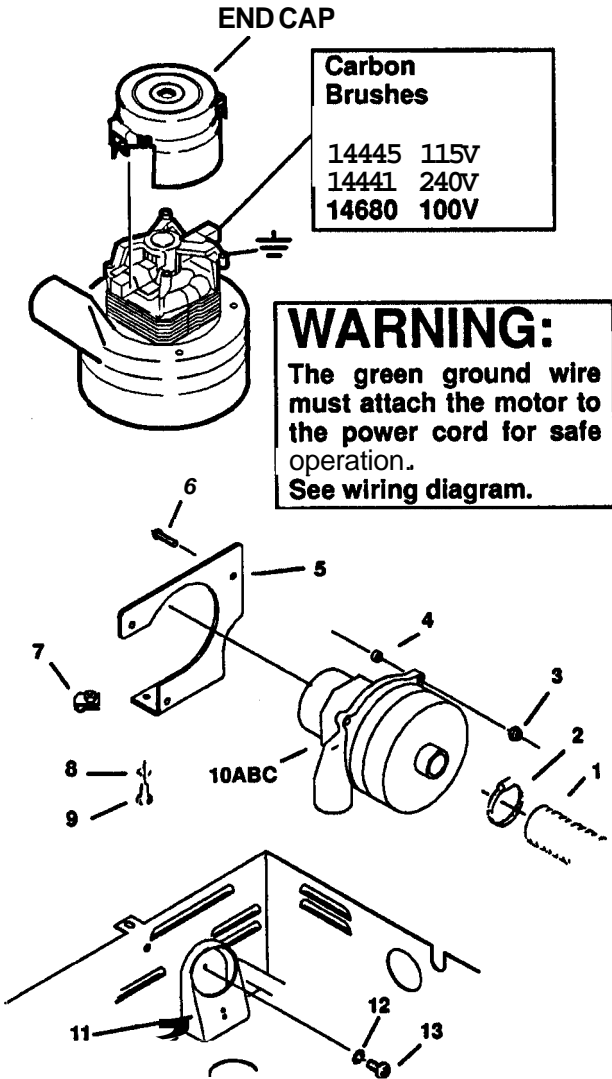
Condition	Corrective Action
No Power To Machine:	
Dead electrical circuit breaker in fuse box	Check building circuit breaker.
Faulty power cord	Replace
Power switch failure	Test switch for continuity/ Replace if necessary.
Faulty circuit breaker	Test circuit breaker for continuity/ Relace if neccessaary.
Internalwiring problem	With the machine unplugged, check for, and correct, any loose wire connections inside the machine at the switches and terminal block.
Electrical Shock:	
Equipment not grounding	Follow grounding instructions exactly.
Receptacle not grounded	Have an electrician inspect the building's wiring.
Internalelectrical problem	Ensurethatthe machine's wiring matchesthe appropriate wiring diagram. Check for and correct any loose wire connections. Replace any wires or components which are short circuiting.
Nuisance Tripping of Circuit Breaker:	
Brush "buried" in carpet (More than 3/8" (1cm)	Brush is adjusted too low, adjust position using the adjustment control at the front of machine. Best cleaning results are achieved with a minimal brush/carpet contact of less than 3/8" (1 cm).
Dry brush	Turn brush motor and pump switches on with machine tilted rearward (brush off floor). Lower machine back to carpet slowly.
Faulty circuit breaker	Test circuit breaker for continuity/ Replace if necessary.
Mechanical problem	Higher amp draws may indicate a mechanical problem. Find parts which are not moving freely and repair or replace.
Vacuum Motor Speed Varies or Doesn't Run:	
Worn motor brushes	Replace
Motor worn out	Replace
Faulty switch	Replace
Faulty circuit breaker	Replace
Internalwiring problem	Check for and correct any loose wire connections,
Loss Of Vacuum:	
Loose vac dome	Center dome over tank.
Crack in dome or poor joint	Replace or repair using acrylic plastic cement only.
Loose cuffs on vacuum hose	Tighten cuffs (turn counter clockwise).
Damaged Dome Gasket	Replace gasket.
Lint or dirt clogging vacuum intake screen	With power off clean vac intake screen found in dome.
Accessory tool clogged	Clean out tool, ensure free airflow.
Vac hose damaged	Replace
Internalelectrical problem	Have a trained service technician inspect and repair the machine.

Troubleshooting Chart

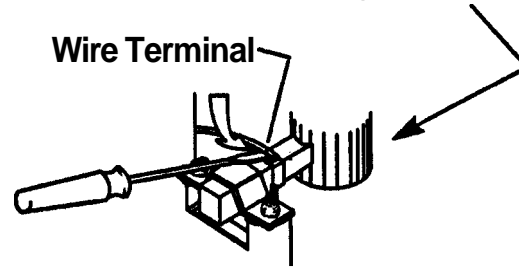
Condition	Corrective Action
<p>Accessory Tool Fitting Difficult to @ ——— Corrosion on fitting</p>	<p>Clean with steel wool.</p> <p>Remove and soak in acetic acid (white vinegar).</p> <p>Lubricate lightly with silicone base lubricant.</p>
<p>Carpet Not Getting Clean: Severe soil conditions</p>	<p>Make several passes at right angles to each other.</p> <p>Use a prespray.</p>
<p>Carpet Too Wet: Worn spray jet(s)</p>	<p>Replace spray jets which are producing more than a fine mist.</p>
<p>Carpet Not Getting Wet: Solution filter screen clogged</p> <p>Spray jet(s) clogged</p> <p>Pump not running</p> <p>Faulty pump</p> <p>Solution valve adjustment</p>	<p>Clean solution filter screen located inside lower tank near the front.</p> <p>Clean or replace jets.</p> <p>Do not use a wire to clean Jet.</p> <p>Damaged jets will cause over-saturation.</p> <p>Check for and correct any loose wires</p> <p>Repair or replace</p> <p>Adjust solution valve cable until valve operates when handle is pulled.</p>
<p>Brush Not Turning: Belt broken</p> <p>Faulty switch</p> <p>Faulty circuit breaker</p> <p>Faulty brush motor</p>	<p>Remove belt cover on right side of machine. Inspect belt. Replace if necessary.</p> <p>Replace.</p> <p>Replace.</p> <p>If the belt, circuit breaker, and switch have been tested and found to be in good working order, the brush motor may need to be replaced.</p>
<p>Worn Bearings: Squealing or grinding sound in brush housing</p>	<p>Replace bearings.</p>

Servicing the Vac Motor

To access the vac motor first remove the solution tank. There are (2) screws which attach the vac motor mounting bracket to the chassis. Loosen the clamp to remove the hose. To replace the motor assembly it will be necessary to remove the (3) screws which attach the motor to the vac motor mounting bracket.

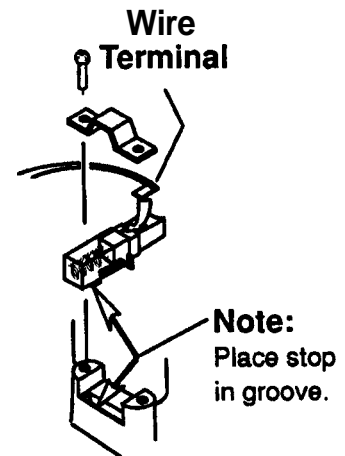


If armature commutator is not concentric, extremely pitted, or grooved the motor will need to be replaced or sent to a qualified service center to restore vac performance.



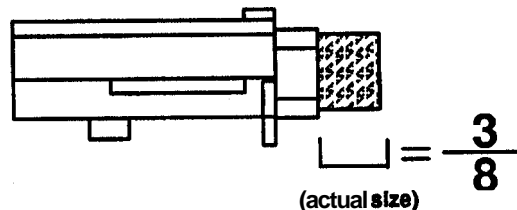
Note:
When replacing carbon vac motor brushes loosen wire terminal **BEFORE** removing screws on bracket.

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.**



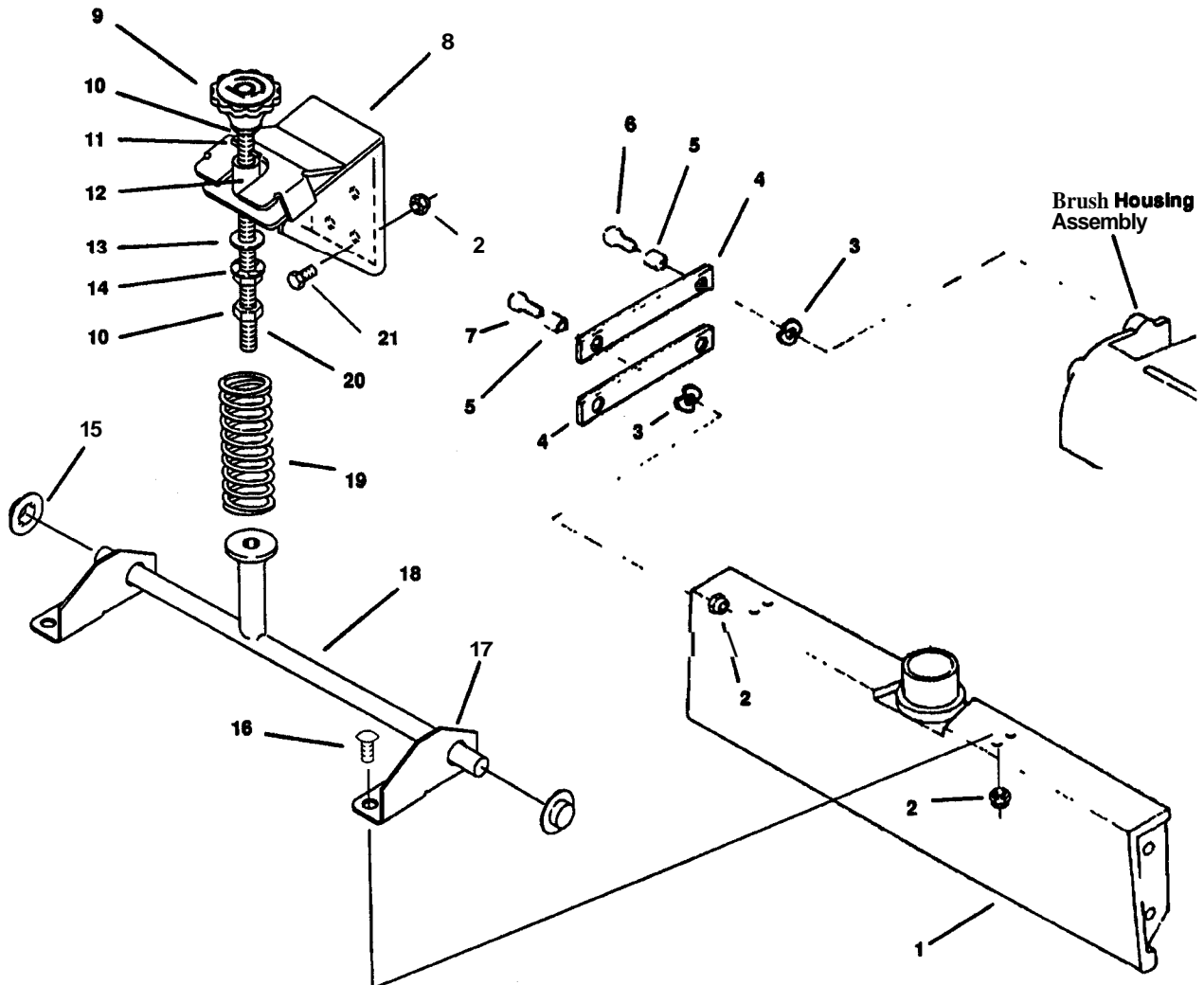
PARTS LIST:

KEY	PART NO.	DESCRIPTION
1	39343	Hose, 1.5 x 34" Vac
2	20063	Clamp, 1.75 Worm Gear
3	57047	Nut, 1/4-20 Nylock
4	73215	Spacer, 3/8 OD x 1/4
5	14887	Bracket, Vac Motor Mounting
6	70018	Scr. 1/4-20x 1.00 HHCS
7	57082	Nut, 1/4-20 Captive J
8	87025	Washer, 1/4 Star
9	70011	Scr. 1/4-20x 5/8 HHCS
10A	53134	Vac Motor, 115V 3 Staae TD TB
10B	53163	Vac Motor, 240V 3 Staae TD TB
10C	53183	Vac Motor, 100V 3 Staae TD TB
11	29171	Duct, Vac Coolina Intake
12	87018	Washer, #10 Flat
13	70363	Scr 10-32 x 3/8 PHTR



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

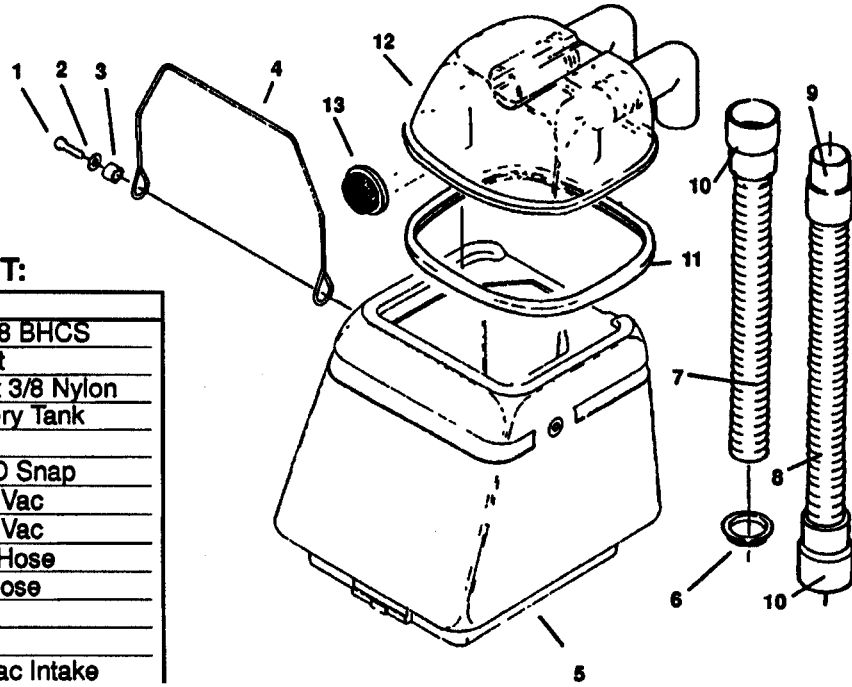
Vac Shoe Assembly



PARTS LIST:

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	85032	Vac Shoe	12	14826	Bushing, Height Adjustment
2	57047	Nut, 1/4-20 Nylock	13	87030	Washer, 3/8 ID x 3/4 OD Nylon
3	87074	Washer, 3/8 ID x .010 Wave	14	57032	Nut, 3/8-16 Serrated
4	05016	Arm, Vac Shoe Parallel	15	41241	Cap
5	73181	Spacer, .259 ID x .38 x .25	16	70360	Scr, 1/4-20 x 3/4 PHMS
6	70190	Scr, 1/4-20 x 1/2 BHCS	17	14888	Bracket, Vac Shoe Adjustment
7	70057	Scr, 1/4-20 x 1.0 PHMS	18	67282	Rod, Vac Shoe Adjustment
8	14893	Bracket, Vac Shoe Adjustment	19	73609	Spring, 2.75 x .97 Compression
9	48051	Knob, Adjustment	20	70446	Scr, Adjustment
10	57085	Nut, 3/8-16 Hex Jam	21	70015	Scr, 1/4-20 x 3/4 HHCS
11	66237	Pin, 1/8 x 3/4 Solid			

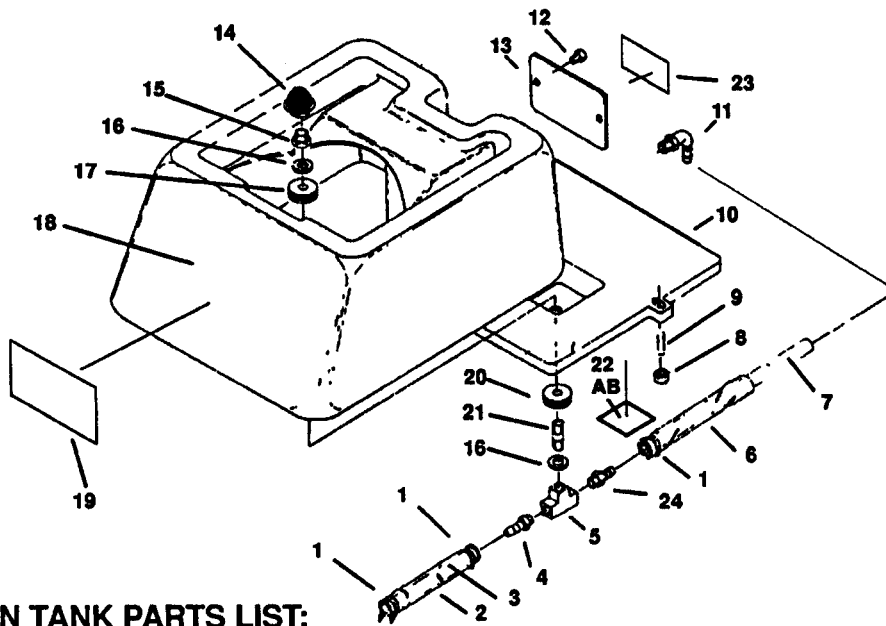
Tanks...Vac Hoses



RECOVERY TANK PARTS LIST:

KEY	PART NO.	DESCRIPTION
1	70194	Scr, 1/4-20 x 5/8 BHCS
2	87013	Washer, 1/4 Flat
3	73280	Spacer, 1/4 ID x 3/8 Nylon
4	38088	Handle, Recovery Tank
5	75078	Tank, Recovery
6	14042	Bushing, 1.63 ID Snap
7	39343	Hose, 1.5 x 34" Vac
8	39411	Hose, 1.5 x 52" Vac
9	27079	Cuff, White 1.5 Hose
10	27354	Cuff, Blue 1.5 Hose
11	35060	Gasket, Dome
12	28034	Dome
13	34140	Filter Screen, Vac Intake

Each tank has a filter screen which protects the machine's internal parts from damage. Ensure that these screens are in place and clean before operating the machine.



SOLUTION TANK PARTS LIST:

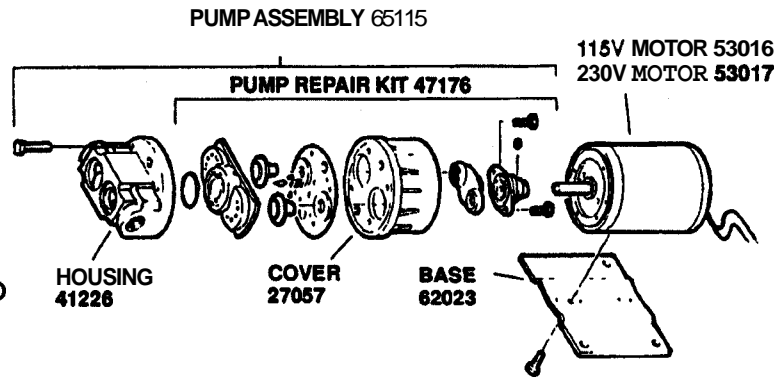
KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	20042	Clamp, Hose	13	40027	Hosebarb, 90° 3/8 MPT x 1/2
2	39310	Hose, 3/4" x 10" Vinyl	14	73250	Strainer, 80 Mesh
3	39312	Hose, 3/8" Wirebound	15	14076	Bushing, 3/8 MPT x 1/4 FPT Hex
4	40014	Hosebarb, 1/4 MPT x 3/8 Hose	16	87010	Washer, 1/2 Flat
5	78156	Tee, 1/4 FPT	17	36055	Grommet, 1/2 ID With 1/4 Groove
6	39308	Hose, 3/4" x 14" Vinyl	18	75202	Tank, Solution
7	39278	Hose, 18" Clear Drain	19	50616	Label, Main
8	57105	Nut, 1/4-20 w/Star Washer	20	36082	Grommet, 1/2 ID With 3/32 Groove
9	70251	Set Scr, 1/4-20 x 1.0	21	56044	Nipple, 1/4 NPT 1.12
10	66188	Pan, Tank	22A	50637	Label, 115V Wiring
11	67272	Retainer, Hose	22B	50641	Label, 230V Wiring
12	70189	Scr, 1/4-20 x 5/16 PHMS	23	50630	Label, Warning
			24	40037	Hosebarb, 1/4 MPT x 1/2 Nylon

Spray Jets

The SPIRIT is equipped with quick change jet nozzles which are easy to clean or replace.

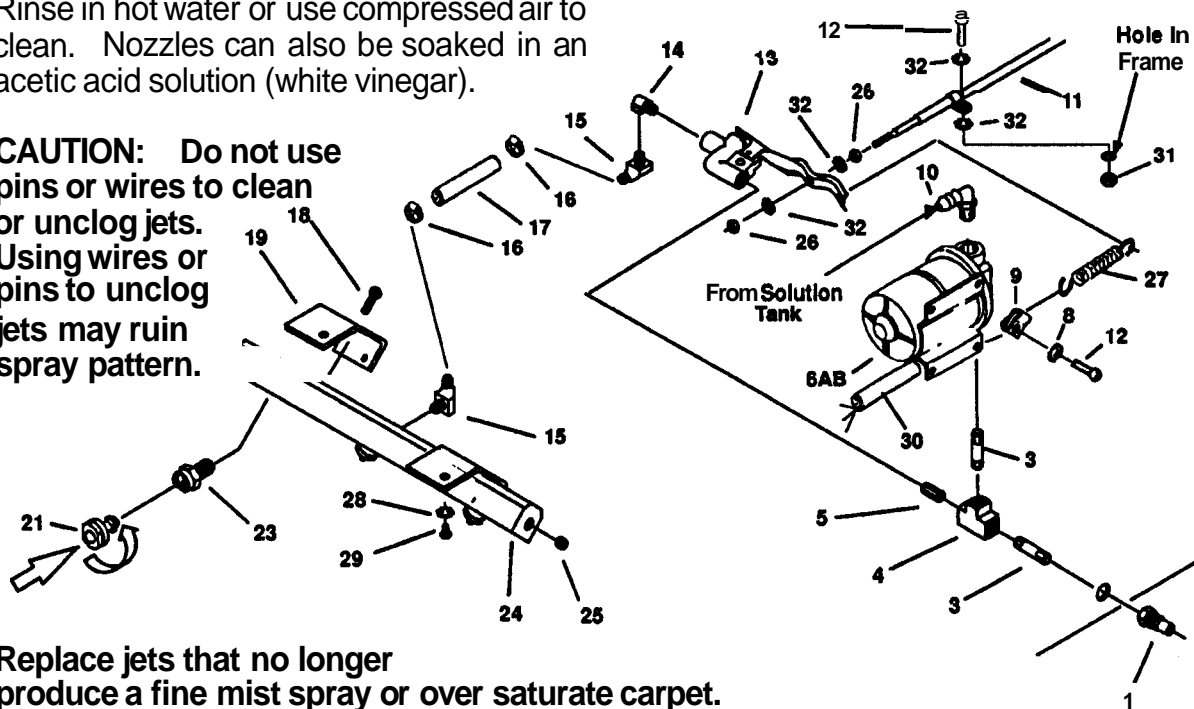
- 1.) With tanks empty, tilt machine back.
- 2) Press in and turn nozzle 90° to remove.
- 3.) When putting nozzles back into manifold ensure slot in tip runs parallel to manifold.

Pump Repair...Manifold..Valve



Rinse in hot water or use compressed air to clean. Nozzles can also be soaked in an acetic acid solution (white vinegar).

CAUTION: Do not use pins or wires to clean or unclog jets. Using wires or pins to unclog jets may ruin spray pattern.

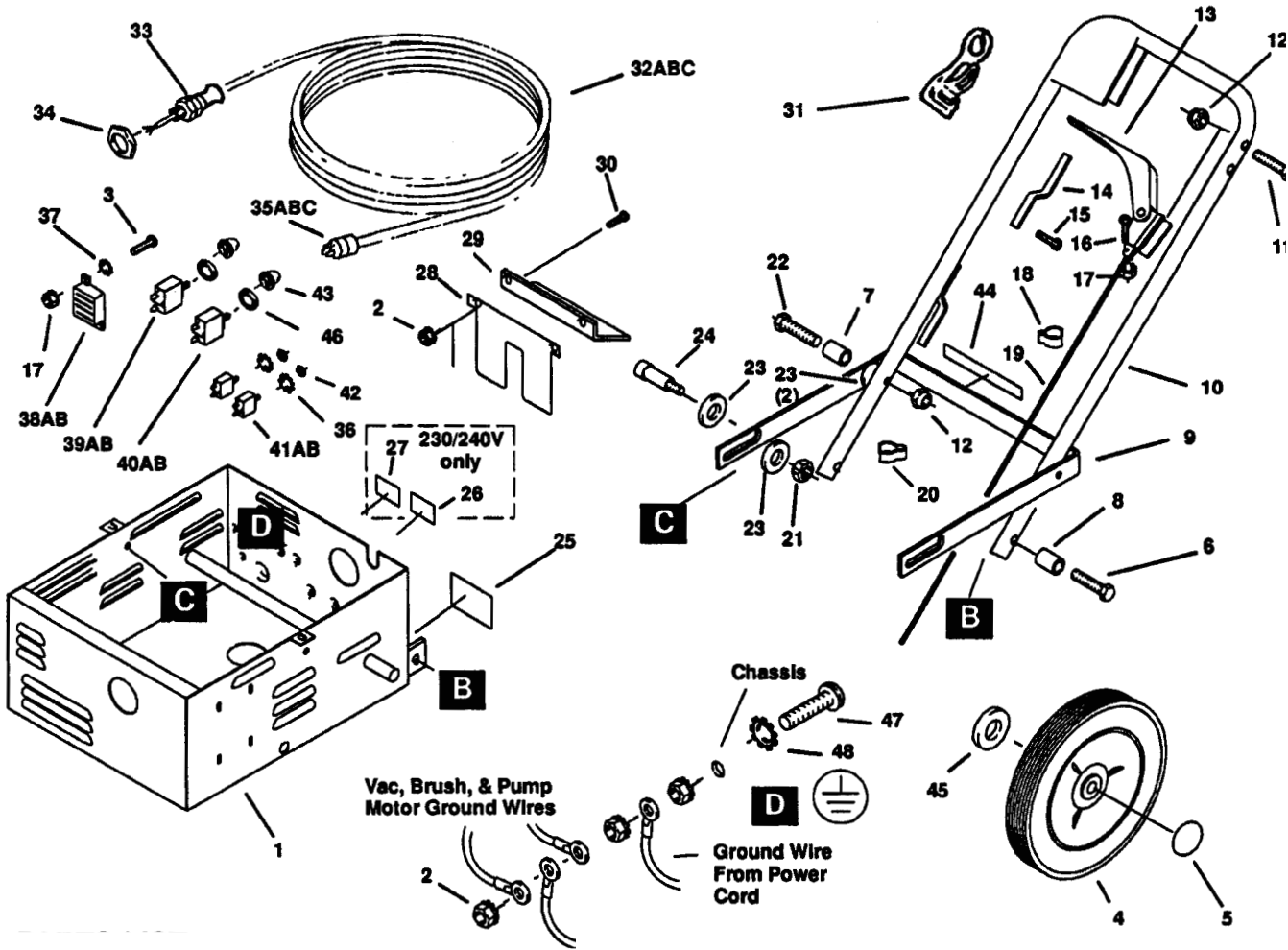


Replace jets that no longer produce a fine mist spray or over saturate carpet.

PARTS LIST:

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	56012	Nipple, 1/4 FPT Qck Disconnect	17	39410	Hose, 3/8 x 4" Nylobraid
3	56048	Nipple, 1/4 MPT x 1.75	18	70114	Scr. #10 x 3/4 Polyfast
4	78156	Tee, 1/4 FPT	19	14523	Bracket, Manifold
5	56014	Nipple, 1/4 Close	21	44061	Jet, 11003 Mini-Quick
6A	65108	Pump, 115V 50 PSI Int. by-pass	23	44052	Jet Body w/Seal, Mini-Quick
6B	65119	Pump, 230V 50 PSI Int. by-pass	24	54146	Manifold
8	87016	Washer, #10 Star	25	66095	Plug, 1/8 MPT
9	57081	Nut, 10-32 Captive J	26	57018	Nut, 10-24 Lock nut
10	40033	Hosebarb, 1/4 MPT x 3/8 90°	27	73426	Spring, 2.5 x .43 x .047 Ext
11	27580	Cable Asm. Solution Control	28	87025	Washer, 1/4 Star
12	70088	Scr, 10-32 x 1/2 PHMS	29	70085	Scr, 1/4-20 x 1/2 PHMS
13	84134	Valve, Solution	30	39364	Hose, 1/2 ID Clear x 10"
14	31016	Elbow, 1/4 NPT Street	31	57104	Nut, 10-32 w/Star Washer
15	40038	Hosebarb, .45 dia 1/4 MPT x 3/8	32	87016	Washer, #10 Star
16	20042	Clamp, Hose			

Handle...Chassis...Switches



KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	34229	Frame, Main Chasis	29	73621	Awning
2	57104	Nut, 10-32 w/Star Washer	30	70088	Scr, 10-32 x 1/2 PHMS
3	70449	Scr, 8-32 x 7/8 PHMS	31	73169	Strain Relief
4	89081	Wheel, 1 0 Non-Marking Grey	32A	23572	Cord Asm, 115V SJTW/-A 5 0
5	41236	Hub Cap, 5/8" Shaft	328	23574	Cord Asm, 230V European
6	70249	Scr, 1/4-20 x 1.25 HHMS	32C	23619	Cord Asm. 240V Ajustrailian
7	73636	Spacer, 5/16 x 1.2"	33	73505	Strain Relief, Trumpet
8	73596	Spacer, 5/16 x 1"	34	57040	Nut, 1/2 NPT Conduit
9	51193	Linkage, Handle Adjustment	35A	26006	Cord End, 125V 15A NEMA 5-15P
10	38211	Handle, Main	358	26036	Cord End, 250V CEE 7/7 Euro
11	70049	Scr, 1/4-20 x 1.75 PHMS	35C	26037	Cord End, 10A/240V Austrailian
12	57047	Nut, 1/4-20 Nylock	36	87104	Washer, 1/2 Star
13	51200	Lever, Solution Release	37	87007	Washer, #8 Star
14	41144	Hook, Cord	38A	14462	Terminal Block, (USA & Japan)
15	70361	Scr, 10-32 X 1/2 PHTR	38B	14133	Terminal Block, 3 strip terminal
16	70174	Scr, 8-32 x 5/8 PHMS	39A	14700	Breaker, 15 Amp Circuit
17	57106	Nut, 8-32 w/Star Washer	39B	14312	Breaker, 7 Amp Circuit
18	27561	Clip, Solution Cable	40A	14832	Breaker, 6 Amp Circuit
19	27580	Cable, Solution	40B	14279	Breaker, 4 Amp Circuit
20	27371	Clip, Power Cord	41A	72074	Switch, 20 Amp 125V 1.5 HP Push
21	57113	Nut, 5/16-18 Nylock	41B	72121	Switch, 230V Toggle
22	70105	Scr, 1/4-20 x 1.75 HHMS	42	57017	Nut, 15/32-32 Hex
23	87030	Washer, 3/8 Nylon Flat	43	14942	Cover, Circuit Breaker
24	70272	Scr, 3/8 x 3/8 5/16-18 SHSB	44	50638	Label, Handle Adjust
25	50498	Label, 15 Amp Time Delay Fuse	45	87088	Washer, 5/8 Flat
26	50647	Label, Brush Switch On/Off	46	87100	Washer, 3/8 Int. Star
27	50648	Label, Vac-Pump Switch On/Off	47	70066	Scr, 10-32 x 3/4 PHMS
28	27591	Cover, Switch	48	87016	Washer, #10 Ext. Star

Brush Drive Assembly

Belt Replacement

Periodically check the drive belt for wear. Replace worn or frayed belts before they break, when possible.

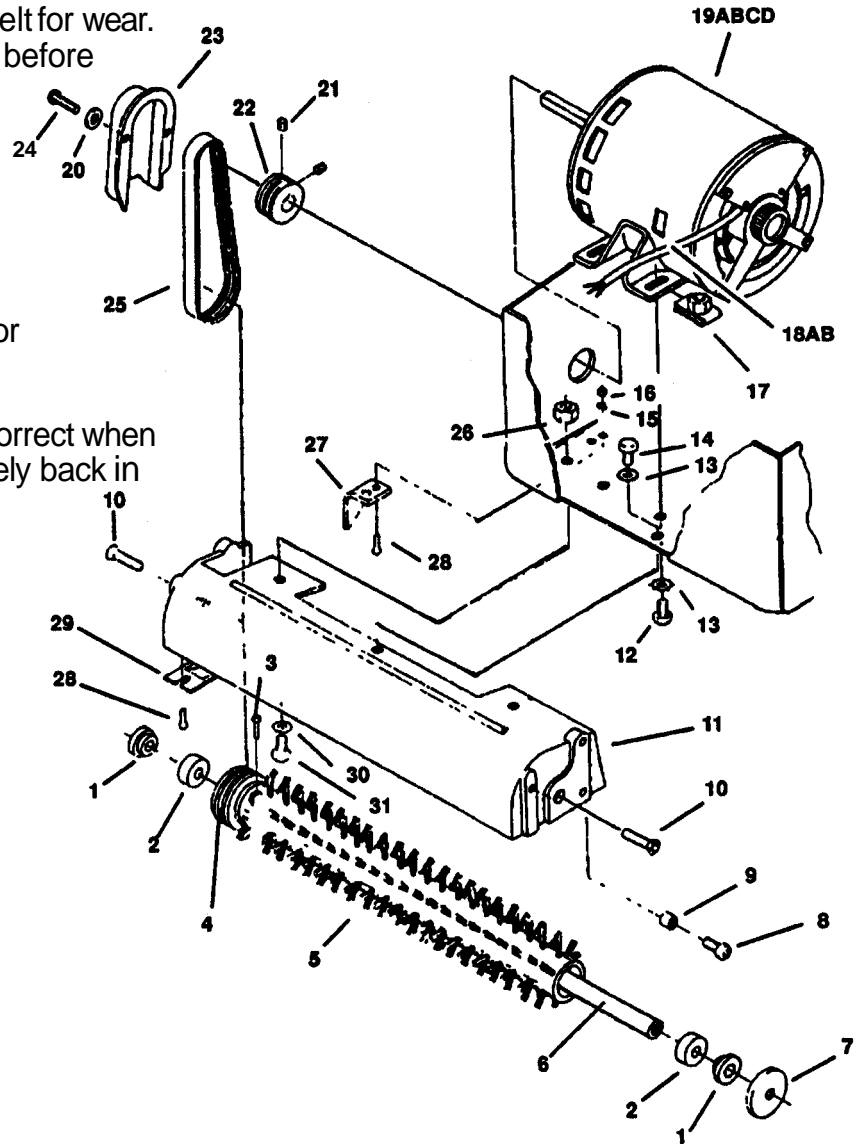
To access the belt remove the belt cover.

To replace the belt it is necessary to loosen the motor and remove the brush.

The "preset" belt tension is correct when the motor and belt are securely back in place.

Check pulley alignment and correct if necessary. The brush pulley and motor pulley can be aligned using a straight edge.

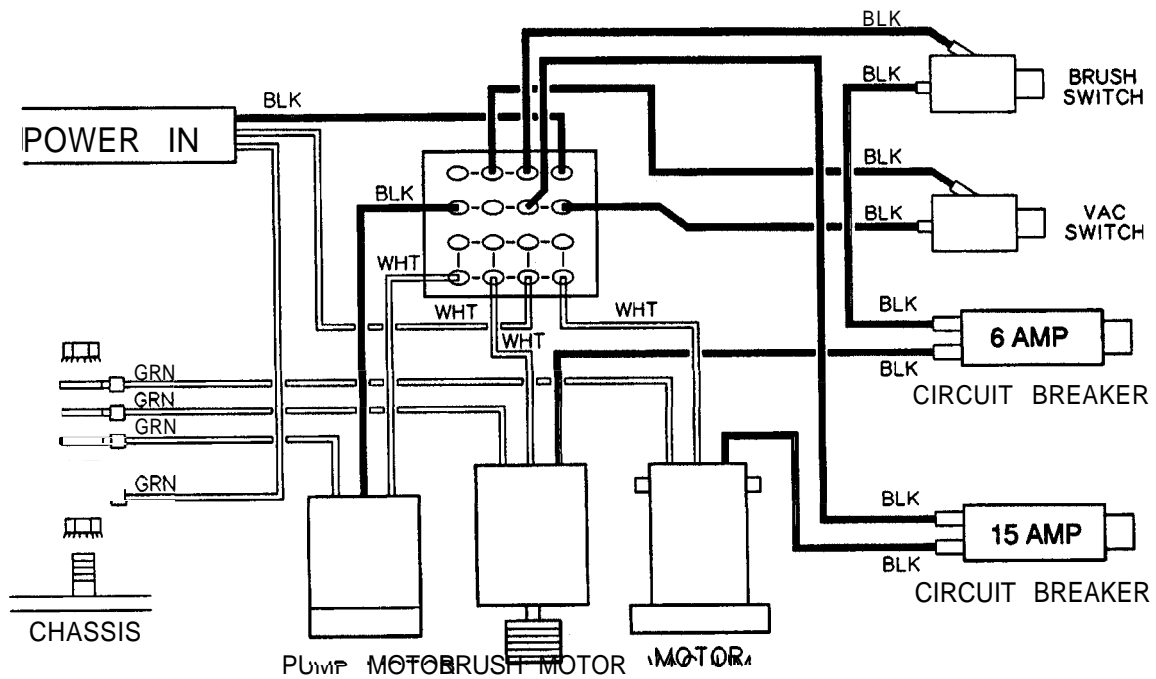
Ensure that both protective covers are back in place before operating the machine.



PARTS LIST:

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	73207	Spacer, Brush	18A	88939	Wire Asm, 115V Brush Motor
2	09019	Bearing, Brush	18B	88940	Wire Asm, 230V Brush Motor
3	70177	Scr, 10-32 X 1/2 FHMS SS	19A	53093	Motor, 115V Brush
4	64070	Pulley, Brush	19B	53154	Motor, 230V Brush
5	14924	Brush	19C	53165	Motor, 250V Brush
6	03033	Axle, Brush	19D	53173	Motor, 100V Brush
7	36054	Guard, Thread	20	87018	Washer, #10 Flat
8	70190	Scr, 1/4-20 x 1/2 BHCS	21	70074	Scr, 10-32 x 1/4 KCP
9	73181	Spacer, .259 ID x .38 x .25	22	64071	Pulley, Motor
10	70201	Scr, 1/4-20 x 3/4 FHMS	23	36044	Guard, belt
11	41109	Housing, Brush	24	70363	Scr, 10-32 x 3/8 PHTR
12	70011	Scr, 1/4-20 x 5/8 HHCS	25	11031	Belt
13	87025	Washer, 1/4 Star	26	57047	Nut, 1/4-32 Nylock
14	70020	Scr, 1/4-20 x 1/2 HHCS	27	36050	Gusset, Belt Guard
15	87026	Washer, #6 Star	28	70056	Scr, 6-32 x 1/2 PHMS
16	57012	Nut, 6-32 Hex	29	36043	Guard, Brush Pulley
17	57123	Nut, 1/4-20 Captive	30	87013	Washer, 1/4 ID x 5/8 OD
			31	70015	Scr, 1/4-20 x 3/4 HHCS

115V SPR Wiring Diagram



230V SPR-I Wiring Diagram

