

Tsunami / High Flow Extractor



PACIFIC

Operations & Maintenance



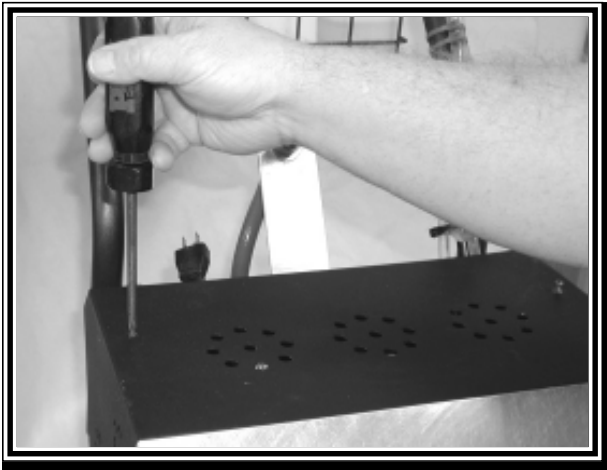
Tsunami Carpet Extractor Setup and Operations

Setting the Chemical Dilution Ratio on the Machine

Before using the machine, it should be set up to feed the proper dilution ratio of your traffic lane extraction cleaner to the prespray wand. The machine is preset to feed a water chemical mix at a rate of 33:1 or about 4 ounces of cleaner to one gallon of water.

The machine comes with a set of 14, color coded, Dema injector tips. Each tip will offer a different feed ratio. The injector tip is located in a plumbing manifold under the machine top cover.

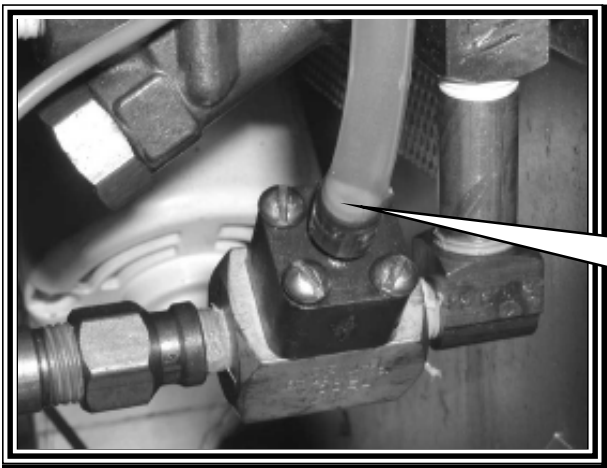
Tip Color	Ratio	Ounces / Gallon
Tan	102:1	1.25
Orange	75:1	1.70
Turquoise	60:1	2.15
Pink	43:1	3.00
Clear	33:1	3.90
Brown	28:1	4.55
Red	22:1	5.80
White	18:1	7.00
Green	16:1	7.90
Blue	13:1	9.80
Yellow	9:1	14.80
Black	6:1	20.15
Purple	5:1	27.80
Gray	4:1	31.60
None	3.6:1	35.00



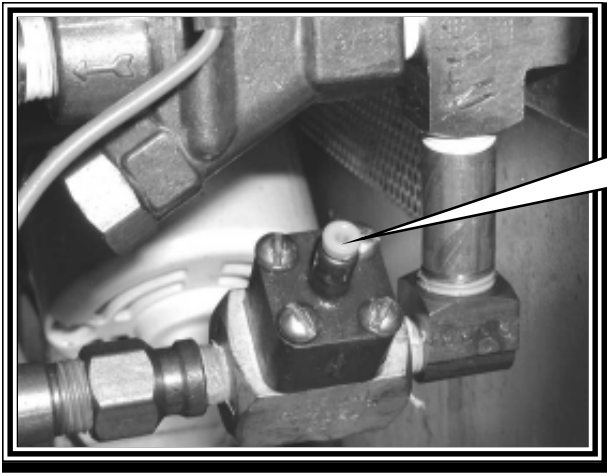
Remove the two cover mounting screws on the top of the machine body.



The black cowling can now be removed. This exposes the electrical and plumbing hardware in the machine.

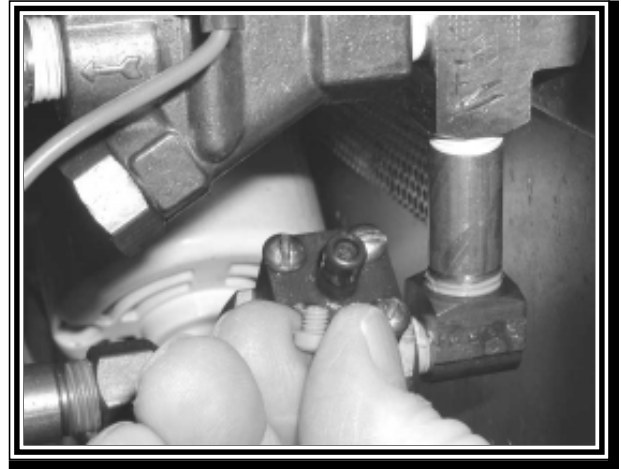


The Dema tip is located in the plumbing on the left side of the machine.



Remove the feed hose and the Dema tip will be exposed. Unscrew the tip from the feed system by hand.

Install the proper color coded tip and replace the feed hose. Reinstall the machine cover and tighten the mounting screws.

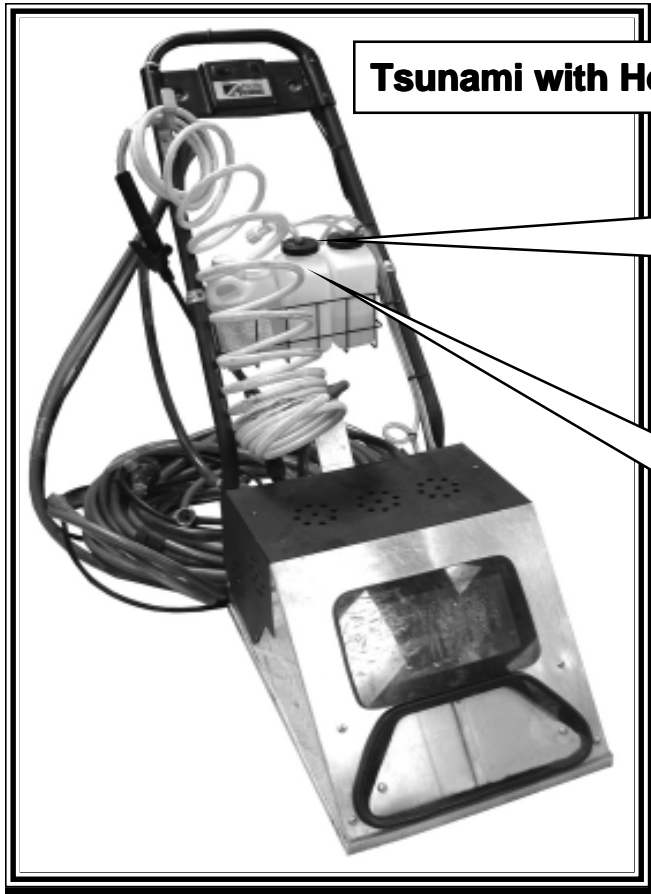


Machine Operations

Read and understand the Operators Manual that came with the machine. If this manual is not on hand it may be ordered from your local Pacific dealer or by calling Pacific directly at 800-968-1332 and speaking with a customer care representative.

The Tsunami is a wet extraction, direct hookup, carpet cleaning tool. It is meant to be used in conjunction with other carpet maintenance machines. The frequent use of a good two motor upright vacuum or a high performance wide area vacuum in conjunction with a good extraction spotter is essential for a complete carpet cleaning program. When the situation dictates, this machine may be used in conjunction with a slow speed buffer and carpet bonnets and or carpet brushes. Air blowers should be used when ever possible to aid in the drying process.

Assemble the Needed Tools

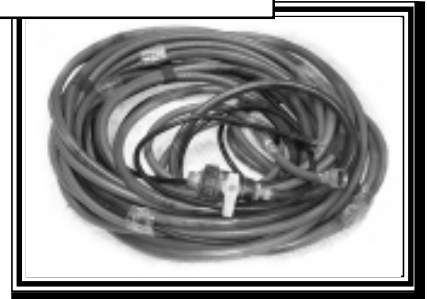


Tsunami with Hoses and Chemicals

Traffic Lane Extraction Cleaner goes into this bottle and is metered into the yellow pre-treat hose and wand.

Anti-foam liquid goes into this bottle and is metered into the recovery tank when the operator depresses a feed switch.

Extra hoses as needed



HD extension cable & pliers



Faucet adapters



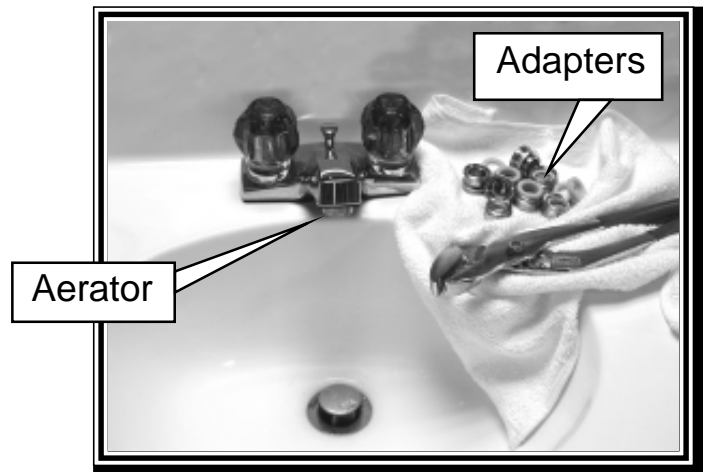
Vacuum the Carpet Area

Genius 14, a good 2 motor upright vacuum



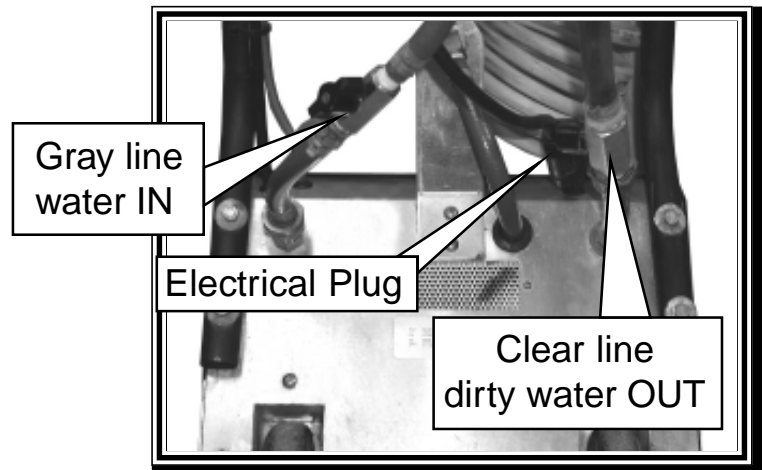
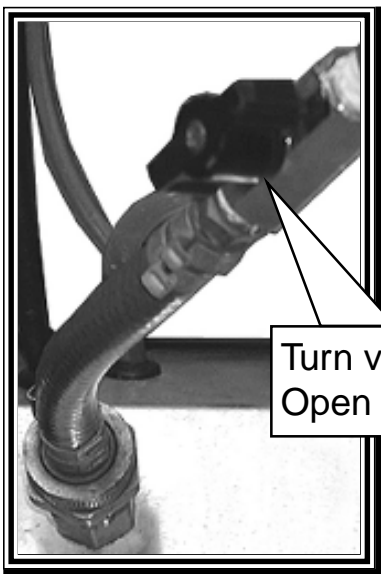
Prepare the Sink

Remove the aerator from the sink and install a matching adaptor from the hardware kit supplied with the machine.



Prepare the Machine

Unroll the hoses and attach to the machine. The gray hose is for the clean water IN and the clear hose is for dirty water OUT. Plug the electrical cable into the pig tail on the machine.

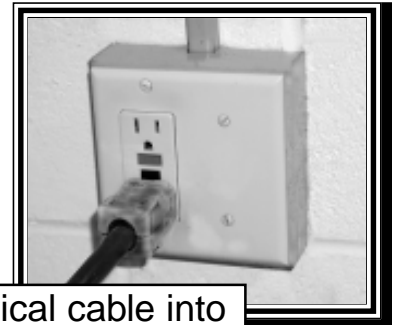


Attach the Hose Assembly



Attach the gray hose to the faucet and check for leaks.

Secure clear drain hose in sink, floor drain or commode.

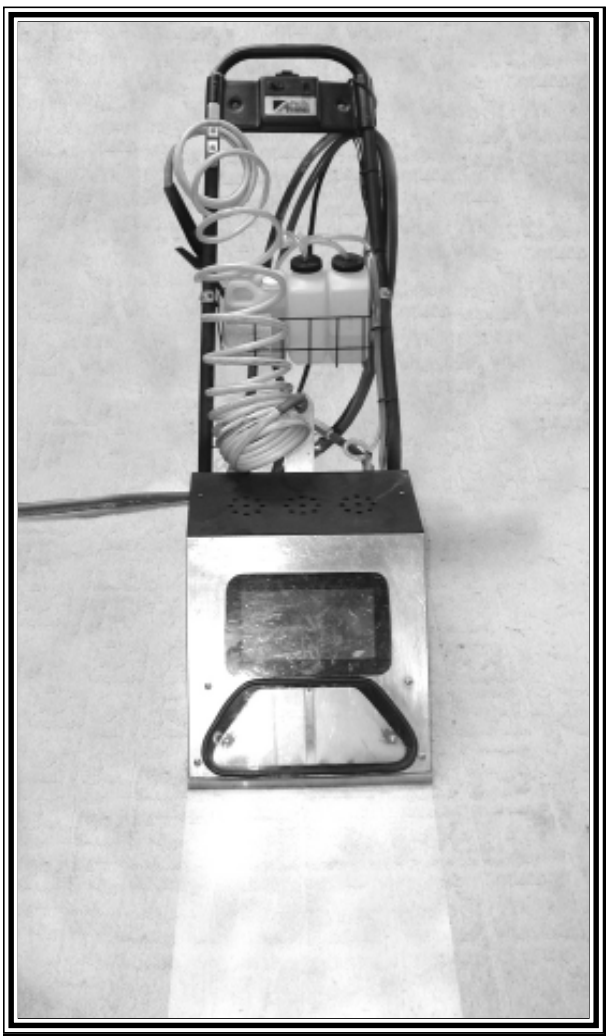


Plug electrical cable into grounded outlet.

These valves are turned to OFF.
Turn all valves ON to begin cleaning.

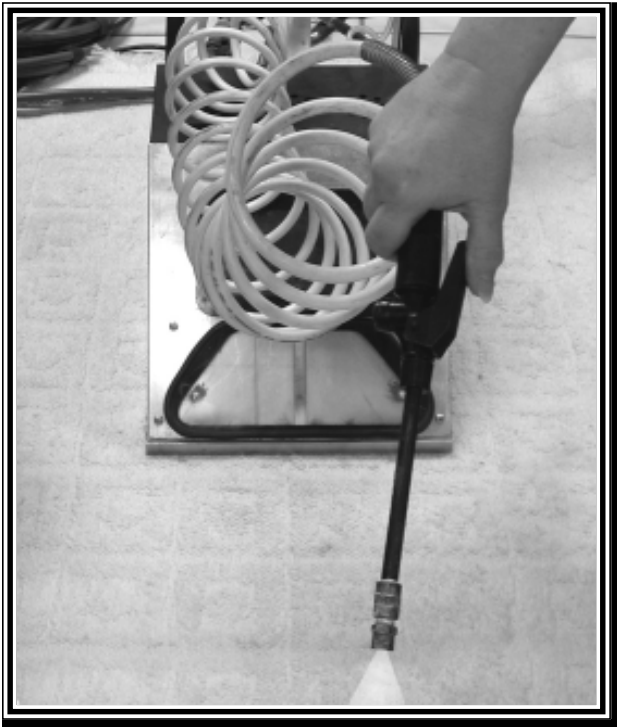


Do a Test Pull with the Machine

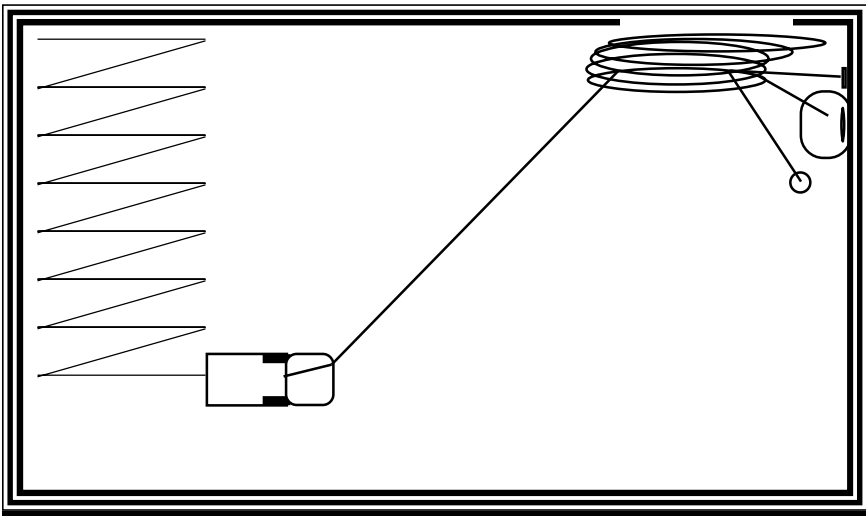
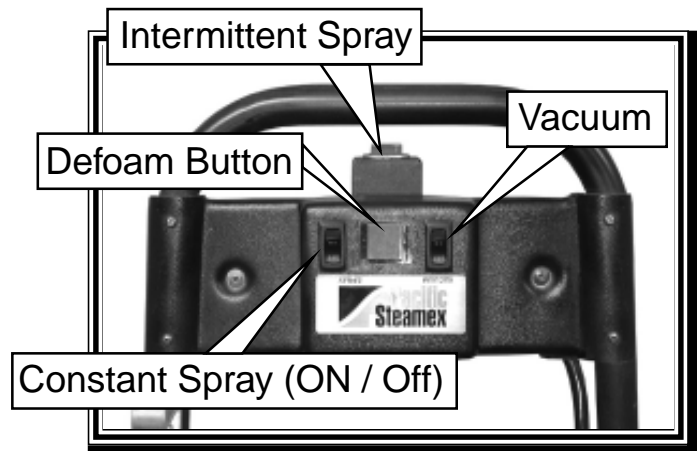


Test clean an area using no chemicals. If there is cleaner residual in the carpet from previous cleaning no pretreating will be necessary. However, defoam liquid may be needed if too much residue cleaner is in the carpet. Watch the see through cover on the front of the machine and you will be able to tell if over foaming is going to be a problem. If you note excess foam or the vacuum motor sounds like it is slowing down you should depress the Defoam button on the machine control panel. This allows defoam liquid to be pulled into the recovery tank. If the carpet seems to be clear of cleaner residual, you may pretreat the area as needed.

Pretreat as Needed and Begin Cleaning



Position the machine for the first cleaning pass. Turn the vacuum switch ON. Depress the Intermittent Spray button and pull the unit backwards. Lift up on the handle just enough to keep the vacuum shoe in good contact with the carpet.



At the end of the cleaning pass let off the spray button and pull the machine a few inches more so the vacuum can pick up the remaining water. Reposition the machine for the second pull being sure to overlap the cleaning stroke about 2 inches. Continue in this manner

until the entire room is cleaned. Always try to work away from the hoses. Keep both hands on the machine and work the hoses with your feet as needed. Extra hoses are available in 50' sections with valves on each end. The maximum workable hose length is 250 feet. If more distance is needed, an extra externally mounted discharge pump may be used.

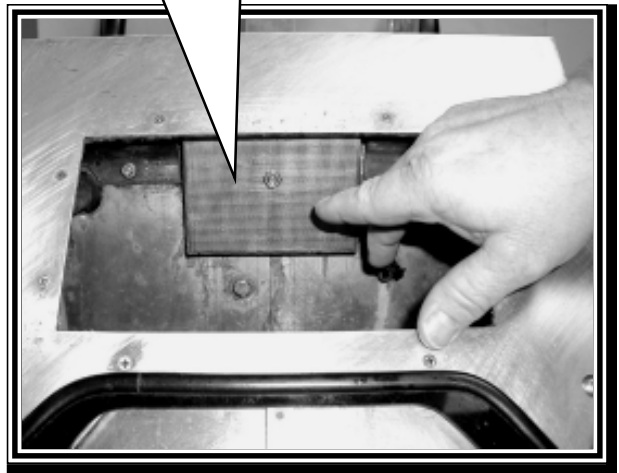
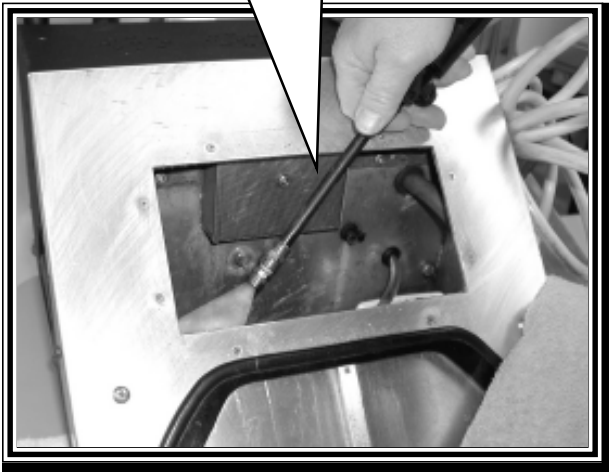
Machine Maintenance



Remove the see through cover on the front of the machine to access the filters and the float switch.

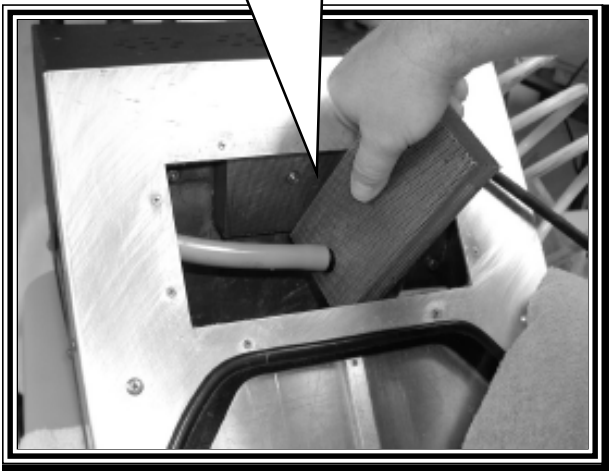
The vacuum filter screen should be cleaned after each job. Wipe the screen clean on a regular basis and periodically remove to do thorough cleaning.

Use the spray wand to clean the inside of the tank.



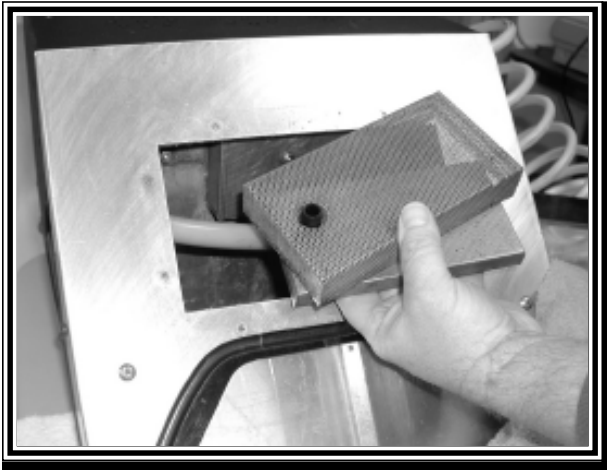
Use the spray wand to clean the float mechanism and pump filters.

Remove the pump filter screens for a complete cleaning.



Unscrew the brass thumb nut to remove the float for a more complete cleaning.

The pump filter screens can be removed from the machine and disassembled for a complete cleaning.



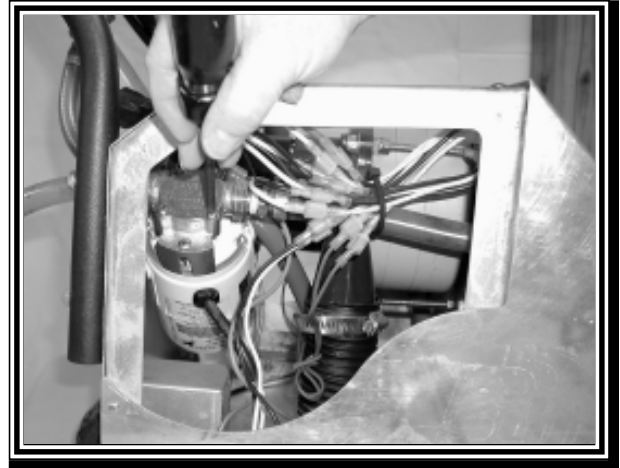
The pump float switch should be removed periodically and given a thorough cleaning and inspection.



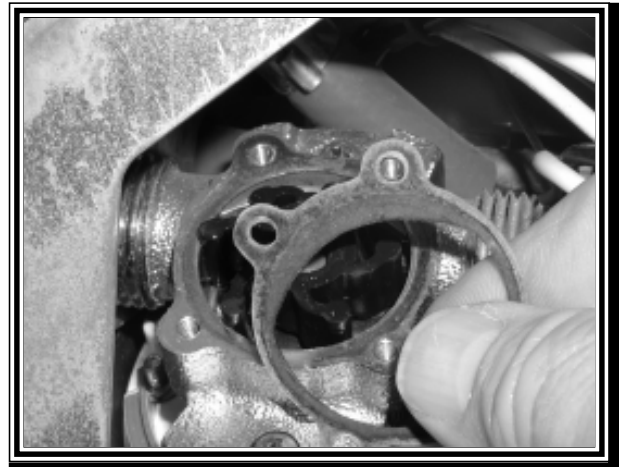
The see through channel cover should be removed for cleaning on a regular basis. Use a wet pick up vacuum to remove residual sand and water.



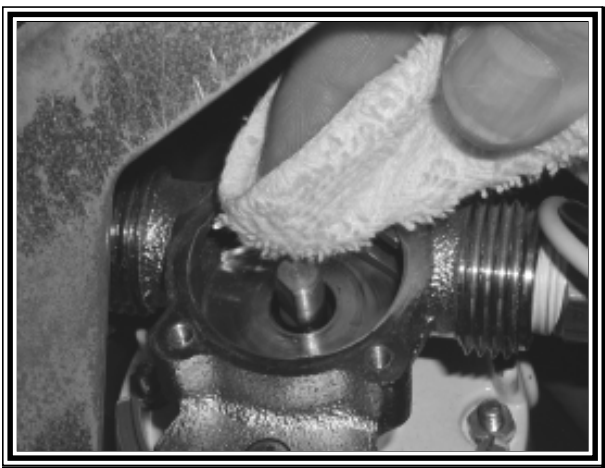
The rubber, paddle wheel, impeller is a wear item and will need to be replaced periodically. This pump is located in the right rear of the machine.



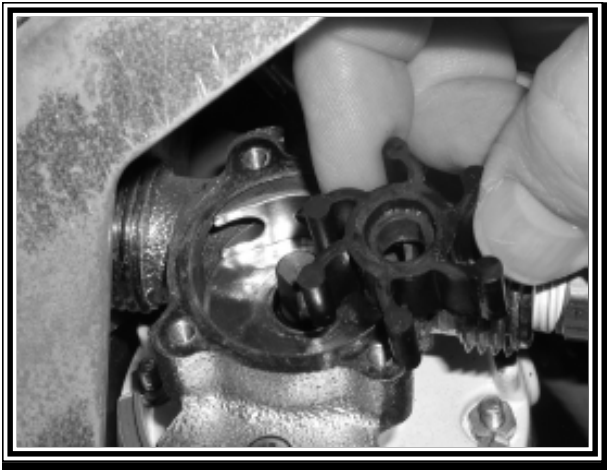
Remove the cover plate and the gasket seal. It has been noted that the use of 2 gaskets instead of 1 gives longer and more trouble free impeller life.



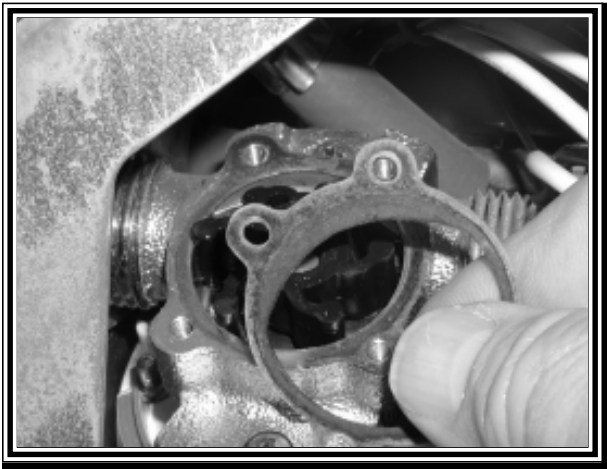
Remove the impeller and wipe clean the running surfaces inside the pump housing. Coat the new impeller and running surfaces with a bit of vegetable oil.



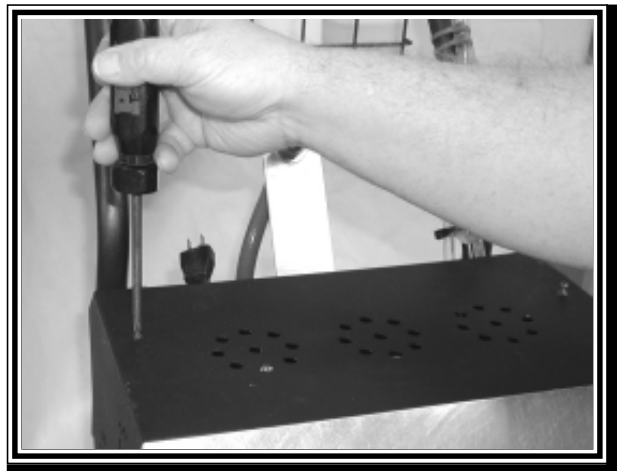
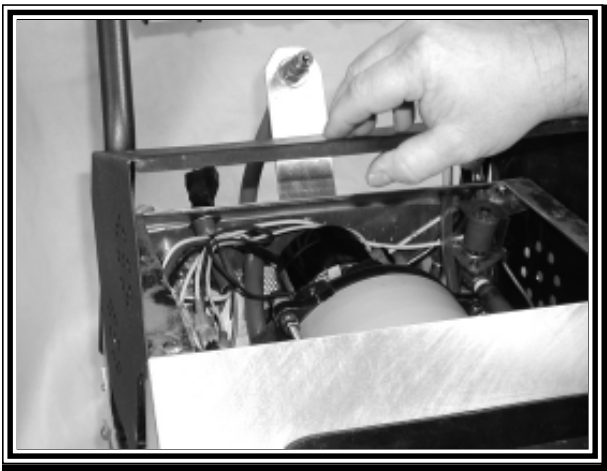
After inspection, install the new coated impeller. Make sure the impeller fits tightly on the motor shaft and is well seated in the housing.



Check the gasket seal for integrity and install over the machined housing surface. Install the pump cover plate and secure with the 4 mounting screws.



Reinstall the machine cowling and secure with the 2 mounting screws. Do an assurance test on the pump before sending the unit back into the service.



TROUBLE SHOOTING CHART

PROBLEM	CAUSE	SOLUTION
1. Recovery tank will not drain	<ol style="list-style-type: none"> 1. Valves are closed 2. Dirty float switch 3. Pump is over heated 4. Drain hose is kinked 5. Pump not priming 6. Clogged tank filters 7. Float switch dirty or faulty 8. Pump impeller faulty 	<ol style="list-style-type: none"> 1. Open all drain valves 2. Clean float switch 3. Shorten pump out distance 4. Straighten hoses 5. Tighten fittings inside recovery tank 6. Clean filters 7. Clean float and replace as needed 8. Replace impeller
2. No water at machine	<ol style="list-style-type: none"> 1. Faucet is OFF 2. Valves are closed 3. Water hose is kinked 4. In line screens clogged 	<ol style="list-style-type: none"> 1. Turn ON 2. Open valves 3. Straighten hoses 4. Clean or replace screen
3. Vac motor RPMs very low	<ol style="list-style-type: none"> 1. Recovery tank over full 2. Excess foam in tank 	<ol style="list-style-type: none"> 1. (See solutions for problem #1) 2. Use more defoamer
4. Vac motor will not turn ON	<ol style="list-style-type: none"> 1. Cable not plugged in 2. Circuit breaker blown 3. Bad switch 4. Loose wiring connector 5. Bad vac motor 	<ol style="list-style-type: none"> 1. Re-plug cable 2. Reset breaker 3. Service CK & replace 4. Service CK & secure 5. Service CK & replace
5. No chemical injection with prespray	<ol style="list-style-type: none"> 1. Clogged injector or tip 2. Chemical residue in system 3. Worn or pitted injector 4. Clogged chemical line filter 	<ol style="list-style-type: none"> 1. Remove and clean 2. Remove spray tip from prespray wand then run an acid rinse through the system 3. Replace injector 4. Clean filter
6. Back filling of prespray bottle	<ol style="list-style-type: none"> 1. Worn O rings in chemical injector 	<ol style="list-style-type: none"> 1. Replace O rings & injector
7. Water going to machine but not to prespray system	<ol style="list-style-type: none"> 1. Quick connect not seated 2. Clogged injector 	<ol style="list-style-type: none"> 1. Reseat connection 2. Remove & clean
8. Hazing of view windows	<ol style="list-style-type: none"> 1. Using strong solvents 	<ol style="list-style-type: none"> 1. Use a different chemical
9. Slow drying times	<ol style="list-style-type: none"> 1. Dirty vacuum filter 2. Vac shoe clogged 3. Poor vacuum seal 	<ol style="list-style-type: none"> 1. Clean filters 2. Remove obstruction 3. Reseat cover or replace seals
10. Machine shocks operator	<ol style="list-style-type: none"> 1. Short in unit or cable 	<ol style="list-style-type: none"> 1. Stop using & Service CK
11. Defoamer not injecting	<ol style="list-style-type: none"> 1. Clogged tube 2. Faulty switch 3. Faulty solenoid 	<ol style="list-style-type: none"> 1. Clean tube 2. Service CK & replace 3. Service CK & replace