

Olympus M1200 Operating Manual TABLE OF CONTENTS

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Introduction

Congratulations on your purchase of the Hydro-Force Olympus M1200. The M1200 is designed to give truckmount-level performance in a portable machine that combines versatility with ease of transport. Years of experience, engineering, and planning have gone into the design and manufacturing of the M1200. We take a great deal of pride in the M1200; our goal is no less than your complete satisfaction.

This manual will provide users with the knowledge required to operate the Olympus M1200 safely, to understand how to properly operate and maintain the machine, and to ensure that the equipment operates at its maximum performance level.

All users must read and understand this manual completely before operating the machine.

Always maintain this manual in legible condition adjacent to the Olympus M1200, or place in a secure location for future reference.

Any questions pertaining to the operating or servicing of this unit should be directed to your nearest Hydro-Force distributor.

This manual is written specifically for the Olympus M1200 portable extractor units manufactured by:

Aramsco

4282 South 590 West Salt Lake City, UT 84123 801-268-2673 801-268-3856 FAX

Information in this manual is subject to change without notice and does not represent a commitment on the part of Hydro-Force or its parent or affiliated companies.

Technical Specifications

M1200 High Pressure Extractor

Height: 38"	
Length: 28"	
Width: 19-1/2"	
Weight: 141 lbs.	
Solution Tank Capacity:	12 gallon
Recovery Tank Capacity:	12 gallon
Solution Pump:	Pump-Tec #356 pump with 1-1/2 HP Motor 0-1200 psi – 2.2 gpm
Vacuum Motors:	Two AMETEK Lamb 5.7" diameter – tangential discharge One two stage & One three stage – Mounted in series
Pump-out Pump:	Little Giant 120VAC 8-20 gpm Maximum psi 11.4 – Maximum pumping height 26 ft.
Power Draw:	Cord #1 – 19.00Amp wide open / 11.80amp full load Cord #2 – 19.30Amp max total (14.30 Pump /5.00 Waste Pump)

Standard Equipment M1200 High Pressure Extractor

Vacuum Hose:	25' X 1-1/2" with 1-1/2" cuff & 2" cuff 4' x 1-1/2" with 2" cuffs Hydro-Filter Inline Filter - AC11 Foam Downer
HP Solution Hose:	25' x 1/4" with 1/4" male / female quick connects
Auto Fill System with c	hemical draw:
Metering Tip Kit:	14 different tips for changing chemical dilution rate
Water Supply Hose:	50' x 3/8" with 1/4" female quick connect & female garden hose fitting
Auto Pump-out System	:
Pump-out Hose:	50' x $3/4$ " with male & female garden hose fittings
Power Cords: Electrical:	2 – 50' x 12gauge with male & female plug ends Breaker Buddy Circuit Detector 20amp Pump Circuit Breaker

Additional / Optional Equipment	
Carpet Wand:	AW29XL
SX-12 Hard Surface Tool:	AW104
SX-7 Tile & Grout Tool:	AW101
Gekko Tile & Grout Wand:	AR51A
Gekko Hand Tool:	AR5 1G
Gekko SX-7 Tool:	AW102
1-1/2" Vacuum Hose: (Sold per foot – No cuffs)	AH36
2" cuff for 1-1/2" Vac Hose:	AH46
1-1/2" cuff for 1-1/2" Vac Hose:	AH42
2" Hose Connector PVC:	AH76
1-1/2" Hose Connector PVC:	AH74
HP Solution Hose 1/4" X 25' w/M-F Quick Connects	AH79D
1/4" Male Quick Connect:	AH102B
1/4" Female Quick Connect:	AH101B
Pump-out Hose:	AH65
Replacement Bags for Hydro-Filter:	AC11A
Metering Tip Kit:	PDE001
SX-15 Surface Tool:	AW105



AR53



Section

Safety

CAUTION! This machine is an electrical appliance. Care must be taken to reduce the risk of electrical shock.

- READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE OPERATING THE M1200.
- To reduce the risk of property damage or injury, repairs to electrical systems should only be performed by experienced technicians. Contact your distributor for assistance.
- Unplug machine power cord from outlet before performing any repairs on the extractor.
- Plug unit into grounded outlets only. Do not remove ground prong from plug. Use of a Ground Fault Interrupting (GFI) device will reduce the risk of electrical shock.
- Do not use the M1200 outdoors, in standing water or on wet surfaces.
- Do not store the M1200 in wet conditions.
- If extractor is leaking, unplug machine power cords from outlets before approaching or touching machine.
- Do not unplug power cord by pulling on the cord. Grasp the plug when unplugging the cord.
- Do not pull the extractor by the cord.
- If cord or plug is damaged, do not use cord. Replace with new cord or repair as needed before use.
- The power cords used must be able to handle an electrical load of 20amps each.
- Overloaded circuit may not always trip circuit breaker. Reduced voltage to machine on overloaded circuit will prevent components from operating properly.
- The two power cords must be plugged into separate circuits during operation. Power Cord #1 must be on a 20amp circuit to use both vacuums. Power Cord #2 can be on a 15amp if the Auto Pump-out is not used or a 20amp circuit if it is used. The Breaker Buddy will ensure that the two cords are operating on different circuits (see page 8 for details.)

WARNING! This machine must be protected from conditions which may damage the pump, tank, hoses and other components.

- Freezing of water in this machine will cause serious damage. The M1200, solution hoses, and tools must be protected from freezing temperature. Store, transport, and use this equipment only in temperatures well above freezing. (32°F or 0°C). If you suspect the M1200 has been frozen, do not plug in or turn on machine until you are sure it has thawed completely.
- If the equipment cannot be stored or transported in a warm environment, it can be guarded from freezing by running an anti-freeze solution through the incoming water lines, chemical feed system, solution pump, solution lines, tools and pump-out pump. The machine is filled at the factory with anti-freeze to eliminate damage during shipment in cold weather.
 - The anti-freeze solution must be completely flushed from the machine before it is returned to service.
- The M1200 must not be used to pick up flammable or combustible materials or used in areas where these materials may be present.
- Solvent-based or water-based solutions containing solvents may damage the pump, hoses, and other components. Do not assume chemical compatibility. Contact your distributor or Hydro-Force if you have questions regarding the compatibility of your chemicals with the machine.
- Do not clean with solutions that are at temperatures above 140°F.
- Rinse the solution tank, chemical system, and pump with fresh water after each day's use.
- Do not allow pump to run dry. Always maintain adequate solution level to supply solution pump.
- HP hoses may rupture if worn or damaged. Do not use HP solution hoses if hose covering is cut, bulging, or otherwise damaged. Examine HP solution hoses daily and replace or repair hoses as needed.
- Use Hydro-Filter and clean the recovery tank daily to keep pump-out pump from becoming clogged. Store the M1200 with the recovery tank lid open.
- Keep Vacuum Inlet Filter clean and check float ball for proper operation. Do not operate the M1200 without the Vacuum Inlet Filter in place. Use defoamer to eliminate foam build-up during cleaning and prevent foam/moisture from entering vacuums.

****Use common sense to protect yourself and others while using this equipment.****

- Keep pets and children away from the machine when in use.
- Keep all body parts, hair, and loose clothing away from openings and moving parts. Always wear appropriate clothing and safety equipment when operating unit.
- Use extra care when cleaning on stairs. Wet carpet on stairs can be slippery.
- Do not move the M1200 up or down stairs when tanks are full of water. Drain solution and recovery tanks before moving unit up or down stairs. Lift using only the appropriate handles.
- Water may be spilled, drip, or be exhausted from vacuums during operation. Place unit in area where water will not cause damage or use drop cloth to protect surfaces.



Operation Procedures

Knowledge of the proper operation of the M1200 is required to ensure user safety and efficient performance of the extractor.

SET UP AND OPERATION

1. Electrical Cords:

Two 50' power cords are supplied with the Olympus M1200. Cord #1 powers both vacuum motors; Cord #2 powers the high pressure solution pump and the waste pump. The amperage required by each cord requires that the two cords be plugged into separate circuits:

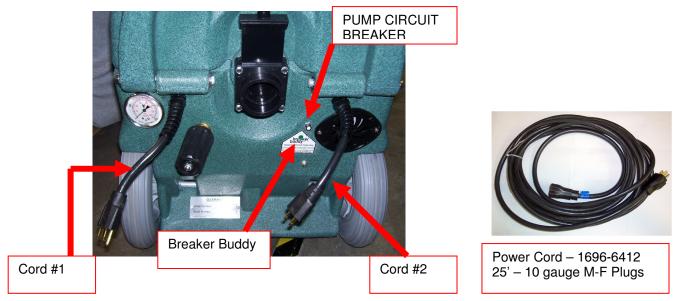
- Cord #1 (Left side) will require a 20amp circuit to run both vacuums.
- Cord #2 (Right side) can be plugged into a 15 amp circuit if Auto Pump-out is not used or a 20 amp circuit if the Auto Pump-out is used.

20amp circuits are usually found in kitchens and bathrooms.

Make sure no other items are plugged into these circuits. An overloaded circuit may not always trip the breaker, but may not provide sufficient power to operate the machine.

Plug the two power cords into two outlets from different circuits. If the Breaker Buddy green indicator light fails to light, you may be on the same circuit and may need to select a different plug for one of the cords. If the Breaker Buddy green indicator light comes on, you are plugged into two different circuits. Proceed with your set-up procedure.

If a circuit breaker trips or the pump circuit breaker trips during operation, reset the breakers and move the cord to another outlet as needed.



2A. Water Supply & Chemical Mixing- Manual Fill:

- Pour up to 12 gallons of hot water into the solution tank at the front of the machine. The water temperature cannot exceed 140°F.
- Measure and add the appropriate amount of the desired liquid chemical to the water in the solution tank. The amount of chemical will vary depending on the type of chemical used, the amount of water in the tank, and the material being cleaned; consult the chemical packaging for specific mixture ratios.
- Powdered chemicals should be dissolved in water before adding to the water in the solution tank.

DO NOT RUN OUT OF WATER WHILE USING THE MACHINE! Ensure that the tank contains enough water to complete each job. If the water level is low: stop cleaning, turn off the pump, and refill the tank. Running the pump dry will damage the pump and void the warranty.



Pour appropriate amount of hot water into solution tank



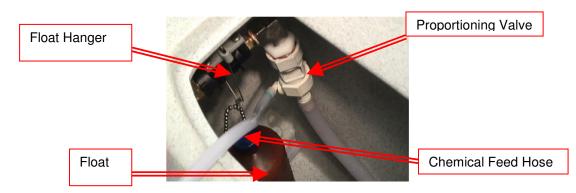
Add appropriate amount of chemical to water in solution tank

2B. Water Supply & Chemical Dilution – Auto-Fill:

• The chemical dilution rate is controlled by the metering tip, and the dilution rate can only be changed by changing the metering tip (See "How to Change the Metering Tip" on Page 10 for instructions.)

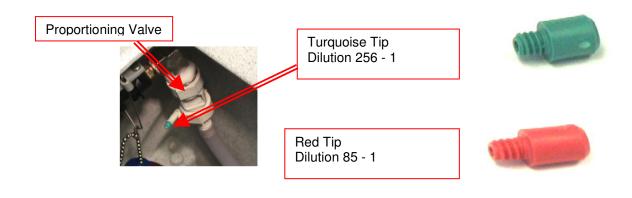
Chemical Feed Setup:

- Remove the chemical feed hose from the solution tank. Make sure float is attached to valve and hanging freely.
- Place the end of the hose into a container of liquid chemical.
- If the tip is removed, and the proportioning system operated with no tip, the dilution rate will be 8:1 (the equivalent to adding 16-1/40z of chemical to each gallon of water.)
- The standard tip included with the M1200 is the turquoise tip with a dilution rate of 256:1. This means that for each gallon of water flowing into the machine, 1/2 ounce of chemical will be added.
- If a fresh water rinse with no chemical is desired, simply leave the chemical feed hose inside the solution tank.



How to Change the Metering Tip:

- Remove the chemical feed hose from the barb on the side of the proportioning valve.
- Unscrew and remove the old tip.
- Screw in the proper tip for your chemical tip and place the hose back on the barb



Metering Tip Kit – PDE001

Metering Tip Kit (Hydro-Force Item# PDE001) contains 14 different colored metering tips, allowing dilution rates from 11:1 up to 427:1. Refer to the chart below to select the tip that meets the dilution rate for your chemical application.

- For example: if you require 1-1/2 ounces of chemical per gallon of water, change to the red metering tip with the dilution rate of 85:1.
- The dilution rates are based on chemicals with water-like viscosity. Thicker (more viscous) chemicals will dilute at a different rate.
- For powdered chemicals, a liquid concentrate must be made. Mix the concentrate according to the manufacturer's directions, and then select the appropriate metering tip.
- Contact your distributor or Hydro-Force if you have questions about your chemical.

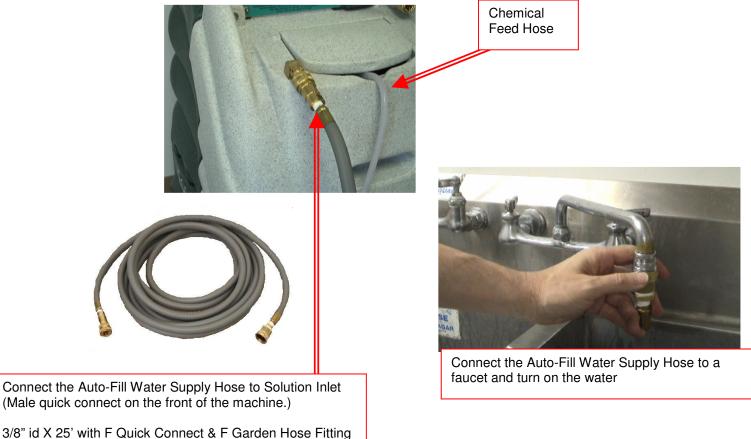
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Metering Tip Application Chart:

TIP	CHEMICAL I	DILUTION RATES
COLOR	OZ / GAL	(RATIO)
TAN	0.30	(427:1)
ORANGE	0.40	(320:1)
TURQUOISE	0.50	(256:1)
PINK	0.75	(170:1)
LIGHT BLUE	1.00	(128:1)
BROWN	1.12	(114:1)
RED	1.50	(85:1)
WHITE	1.75	(73:1)
GREEN	2.00	(64:1)
BLUE	2.50	(51:1)
YELLOW	3.75	(34:1)
BLACK	5.00	(26:1)
PURPLE	8.50	(15:1)
GRAY	11.50	(11:1)
NO TIP	16.25	(8:1)

Water Supply:

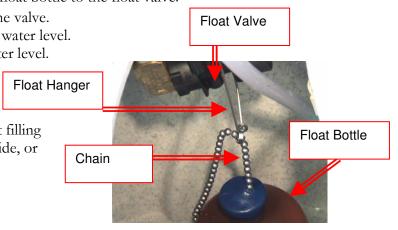
- Once the correct metering tip is in place:
 - Connect the Auto-Fill Water Supply Hose to the water inlet (the male quick-connect on the front of the machine.)
 - Connect the other end of the hose to a water faucet, and then turn on the water.
- Hot water can be used as long as the temperature does not exceed 140°F.
- Faucet adapter kits (Hydro-Force item #AX21 & AX22) are available that allow connection to different types of faucets if needed.



To adjust the water level in the solution tank:

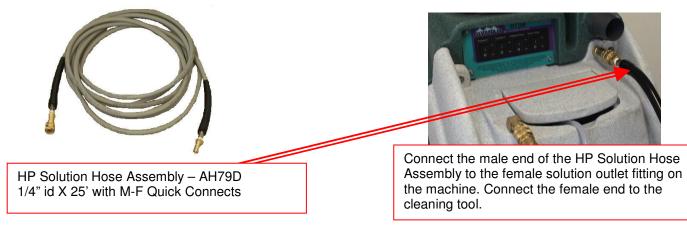
- Turn off the water supply.
- Adjust the length of the chain connecting the float bottle to the float valve.
- Snap the beaded chain off the connector on the valve.
 - Move the bottle down to decrease the water level.
 - Move the bottle up to increase the water level.
- Snap the chain back into the connector.
- Turn the water supply back on.

If the chemical is not drawing, or if the tank is not filling or is overflowing, refer to the trouble shooting guide, or contact your distributor for assistance.



3. Connection of Solution Hose:

Connect the high pressure solution hose to the solution outlet (female quick connect on the front of the machine). Connect the other end of the hose to the male quick connect on the cleaning tool. When you are ready to start cleaning, turn the solution pump switch to the ON position



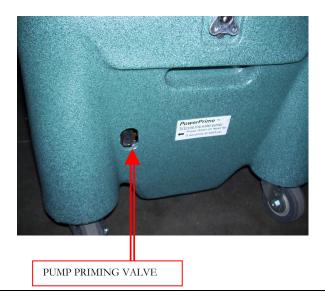
4. Priming the High-Pressure Pump:

Once water is in the solution tank, the high pressure pump must be primed:

- There is a prime valve located on the lower front portion of the machine.
- Turn on both vacuums and the solution pump. Press the priming lever for a few seconds while you block off the vacuum inlet with your hand. The vacuum will pull solution through the pump and prime valve into the vacuum tank.
- Cup a hand around the hose & barb to increase the vacuum suction on the hose.
- Let off the prime valve and your pump is primed. As long as there is solution in the tank the pump should remain primed.
- After priming, turn off the solution pump. If you have not yet connected your solution hose or tool, you may have to relieve the pressure in the line, so you can connect your hose or tool.

If the pump still does not prime, or if flow is low or unsteady, check the hose from the solution tank to the pump (as well as the filter) for clogging, kinks, or restrictions. Clean or replace hose and/or filter and repeat the priming procedure.

If you are having trouble with the pump, refer to the trouble shooting guide or contact your distributor for advice or assistance.





PRESSING THE PUMP PRIMING VALVE

TO PRIME THE SOLUTION PUMP:

- 1. TURN ON BOTH VACUUMS
- 2. TURN ON THE SOLUTION PUMP
- 3. BLOCK OFF THE VACUUM PORT
- 4. PRESS THE PUMP PRIMING VALVE

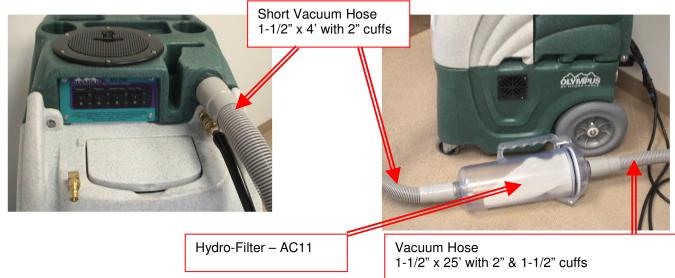


5. Connection of Vacuum Hoses:

There are three components used to connect the cleaning tool to the vacuums and recovery tank:

- 1. A short 4' vacuum hose: Connected to the vacuum barb on the front of the machine and to the outlet side of the Hydro Filter.
- 2. A Hydro Filter
- 3. A 25' Vacuum Hose: The 2" cuff on the 25' vacuum hose is connected to the inlet side of the hydro filter. The other end with the 1-1/2" cuff is connected to the cleaning tool.

When ready to begin cleaning, turn both vacuum switches to the ON position. While the M1200 can be operated with only one vacuum for cleaning delicate fabrics, in most situations you will turn both vacuum switches ON.



6. Connection of Pump-out Hose:

The pump-out hose is a 50' section of 3/4" garden hose.

- Remove the cap from the pump-out outlet fitting on the back of the machine.
- Connect the pump-out hose to the outlet fitting.
- Place the other end of the hose in a commode or drain connected to the sanitary sewer system.
- Secure hose end to prevent movement during pumping.

Use defoamer to prevent foam build-up in recovery tank during cleaning and to keep foam/moisture from entering vacuums.

When ready to begin cleaning, turn the waste pump switch to the ON position.

• Do not turn on waste pump switch unless pump-out hose is connected and has been routed to a proper drain.



Pump-out Hose – AH65 3/4" id X 50' with M-F Garden Hose Fittings



Connect the Female Garden Hose Fitting end of the Pump-out Hose to the outlet fitting on the back of the recovery tank. Place the other end of the pump-out hose in a sanitary drain.

If not using the waste pump-out, the pump-out hose does not need to be connected. When the recovery tank fills during cleaning, the float ball assembly in the vacuum inlet filter will rise and will automatically shut off the vacuum air flow to prevent the recovery tank from overfilling and waste water from getting into the vacuums. When this occurs:

- Immediately shut off the vacuum switches.
- Drain the recovery tank.
 - Turn off the pump switch while draining the tank.
 - Turn pump switch back upon resumption of cleaning.
- Close the drain valve and turn the vacuum switches back on when ready to resume cleaning.

If the pump-out or vacuum shutoff is not working properly, refer to the trouble shooting guide or contact your distributor for advice or assistance.



Float Shutoff Assembly – NM5037



Draining the Recovery Tank

7. Pressure Adjustment:

When the high-pressure solution pump is on and primed, pressure will show on the gauge only while the tool is being sprayed. When the tool is sprayed the gauge will display the pressure being delivered to the tool. When the tool is not being sprayed the gauge will return to zero.

- To decrease the pressure, turn the black knob on the pressure regulator to the left (counterclockwise.)
- To increase the pressure, turn the black knob on the pressure regulator to the right (clockwise.)
- To adjust pressure to your tool and surface requirements:
 - Spray the tool.
 - Check the pressure on the gauge.
 - o Re-adjust as needed to set the machine at the desired pressure.
 - Choose the pressure setting that best meets your type of cleaning.



To increase the solution pressure, turn the regulator knob clockwise.



To decrease the solution pressure, turn the regulator knob counter-clockwise.

The maximum pressure setting is 1200psi; however, the highest pressure attained is dependent on the amount of water flow at the tool:

- Smaller jets and lower flow will allow for higher pressure at the tool.
- Larger jets and higher flow will lower the maximum pressure attained at the tool.

The desired setting will depend on the type of cleaning and tool used. For example:

- Carpet Cleaning with 2-jet AW29 wand: 400psi
- Tile Cleaning with SX-12: 1000psi

If adjusting or maintaining pressure becomes a problem, refer to the trouble shooting guide or contact your distributor for advice or assistance.



Pressure gauge

Shutdown Procedures:

- If using the auto-fill system, turn the water supply off before finishing each job. This will allow use of the water and chemical already in the tank, and will reduce the amount of excess water to be disposed of later.
- When finished cleaning, turn off all switches.
- If the auto-fill system was used and there is still water in the solution tank, push the float down to release the water inlet hose pressure before disconnecting the hose from the faucet. Disconnect the water inlet hose from the quick-connect on the front of the machine.
- Disconnect the solution hose and vacuum hose from the cleaning tool. Pull valve trigger to release pressure from the hose before disconnecting solution hose from cleaning tool.
- Disconnect the Hydro-Filter from the vacuum hoses and clean the filter as needed. Replacement filter bags are available (AC11A.)
- Disconnect the vacuum hose and solution hose from the machine.
- If water remains in the solution tank, use the short = vacuum hose and vacuum the excess water from the tank.
- If the auto-fill system was utilized, place the chemical feed hose back into the solution tank.
- If the waste pump-out system was used:
 - Turn the waste pump switch "on" to pump out any remaining water from the recovery tank.
 - Turn switch off, remove the pump-out hose from the outlet fitting and replace the cap.
 - o Roll up hose toward drain to remove remaining water from hose.
 - Connect ends of hose together to prevent dirty water from dripping from hose during transport.
- Disconnect the power cords from the outlets and from the machine.
- Remove the float shutoff assembly from the recovery tank and clean filter as needed. Replace shutoff assembly and tank lid.
- Drain any remaining water from the recovery tank and dispose in sanitary drain. Do not use the same bucket to drain the tank that you use to fill the tank.
- Roll up all hoses and cords. Collect and store extractor, all tools, and accessories.







Section

Troubleshooting

Troubleshooting – Olympus M1200

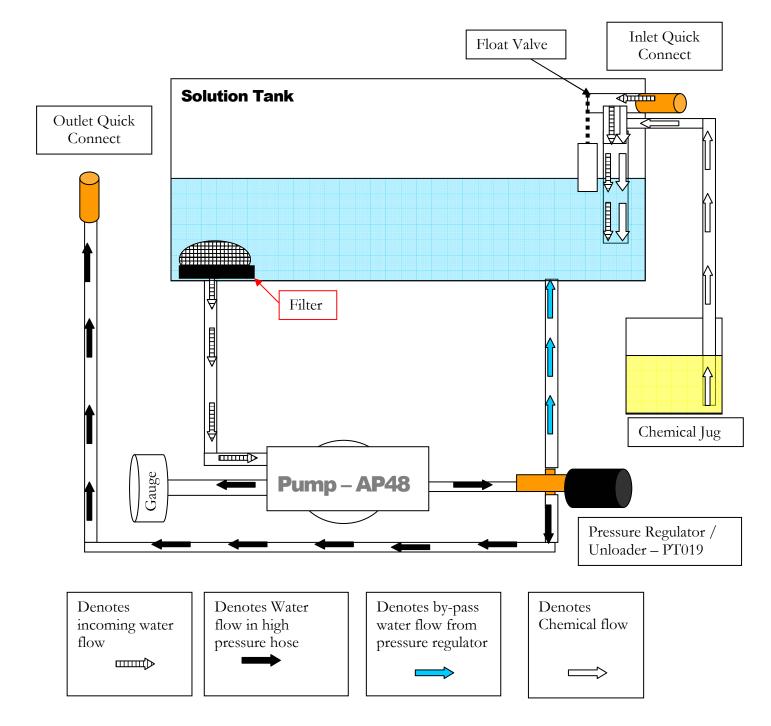
Problem	Cause	Solution	
Machine not	Building circuit breaker tripped.	Reset breakers or move cords to other outlets	
turning on -	Faulty power cord	Replace cord (1696-6412)	
No power	Faulty switches or internal wiring	Check wiring & test switches - Repair as needed *	
Solution Pump	Building circuit breaker tripped.	Reset breakers or move cords to other outlets	
not running	Pump circuit breaker tripped	Reset breaker – Check available circuit power & pump	
	Faulty power cord	Replace cord (1696-6412)	
	Faulty switches or internal wiring	Check wiring & test switches - Repair as needed *	
	Pump motor breaker tripped	Push in reset button on pump motor &/or external breaker	
	Pump motor faulty	Replace pump motor (PT059)	
	Pump seized - trips breaker	Repair or replace pump head & bearing (PT058) - Check motor and/or replace complete pump & motor assy. (AP48)	
Low Solution	Jets too large for pressure desired	Check jets size & flow rates use smaller jets or lower pressure	
Pressure and/or	Jets worn allowing too much flow	Replace jets	
Pulsation	Solution inlet filter plugged	Clean or replace filter	
	Hose from solution tank restricted	Repair or replace hose	
	Pump intake hose or fittings		
	leaking	Repair or replace hose. Tighten clamps or replace fittings	
	Pressure regulator sticking	Lube o-rings on regulator shaft	
	Pressure regulator faulty	Repair or replace pressure regulator (PT019A or PT019)	
	Filter screen or jets plugged on tool	Clean out filter or jets	
	Solution tank empty	Add water to tank - Check & repair auto fill assembly	
	Pump not primed	Perform pump priming procedure	
	Pump faulty	Repair or replace pump (PT059 or AP48)	
	Pressure Gauge faulty	Replace gauge (PT063)	
	Tool valve faulty	Repair or replace valve	
	Quick connects or hoses restricted	Clean out or replace quick connects and/or hoses	
Can't connect	Pressure in lines	Release pressure	
solution hose	Quick connects faulty	Replace quick connects (AH101B, AH102B)	
to machine	Wrong style/size quick connects	Replace quick connects to match connects on machine	
*	experienced service technicians.	hock or injury repairs to wiring should only be performed by ng electrical wiring contact your nearest authorized service	

Problem	Cause	Solution			
Pump-out	Building circuit breaker tripped.	Reset breakers or move cords to other outlets			
not working	Faulty power cord	Replace cord (1696-6412)			
0		Check wiring & test switches - Repair as needed *			
	Faulty switches or internal wiring	(NM5008)			
	Pump-out pump faulty	Replace pump-out pump (NM5053)			
	Pump-out pump clogged	Clean pump-out - Keep recovery tank clean - Use Hydro- Filter			
	Outlet check valve stuck	Clean or replace check valve			
	Discharge hose restricted	Un-kink, clean out or replace hose			
	Float switch stuck	Clean switch make sure float slides up & down easily			
	Float switch faulty	Replace float switch (NM5054)			
Vacuum	Building circuit breaker tripped.	Reset breakers or move cords to other outlets			
Motor	Faulty power cord	Replace cord (1696-6412)			
not running	Faulty switches or internal wiring	Check wiring & test switches - Repair as needed *			
	Vacuum motor faulty	Replace vacuum motor (AV010, AV14)			
Loss of	Vacuum motor faulty	Replace vacuum motor (AV010, AV14)			
Vacuum	Vacuum motor gasket damaged	Replace gasket (PA010)			
	Recovery tank lid gasket damaged	Replace gasket (NM5059)			
	Drain valve open	Close valve			
	Drain valve leaking	Repair or replace drain valve (PEA11)			
	Vacuum motor hoses loose / leaking	Reconnect or replace vacuum motor hoses			
	Vacuum hose or tool clogged	Clean out vacuum hoses and tool			
	Vacuum hoses or cuffs leaking	Replace vacuum hoses, cuffs & connectors as needed			
	Recovery tank full	Drain tank			
	Float shutoff filter clogged	Clean float shutoff filter			
	Ball stuck in float shutoff	Repair or replace float shutoff (NM5037)			
	Pump-out Check Valve stuck open	Clean out or replace check valve (NM5052)			
	Recovery tank damaged	Replace recovery tank			
Chemical not	Solution tank not filling	Check & repair auto fill assembly			
feeding	Chemical hose restricted	Un-kink, shorten, clean out or replace hose			
	Filter screen plugged	Clean or replace filter (PDE100-11P)			
	Low Incoming Water Processo	Set chemical bottle on top of machine – Shorten Chemical			
	Low Incoming Water Pressure	hose – Find other water source.			
	Wrong size metering tip	Change metering tip Replace chemical proportioner (PDE61-22-3)			
	Chemical proportioner faulty Check valve in filter faulty				
		Replace filter (PDE100-11P)			
Tool won't	Jets clogged	Clean out or replace jets			
spray - low or	Inline filter clogged	Clean out or replace filter			
uneven spray	Jets worn	Replace jets			
uneven spray	Jets not aligned properly	Re-align jets			
	Tool valve faulty	Repair or replace valve			
	Quick connects or hoses restricted	Clean out or replace quick connects and/or hoses			
*		hock or injury repairs to wiring should only be performed by			
	experienced service technicians.				
		ng electrical wiring contact your nearest authorized service			
	center to perform tests and repairs t	o wiring and switches.			

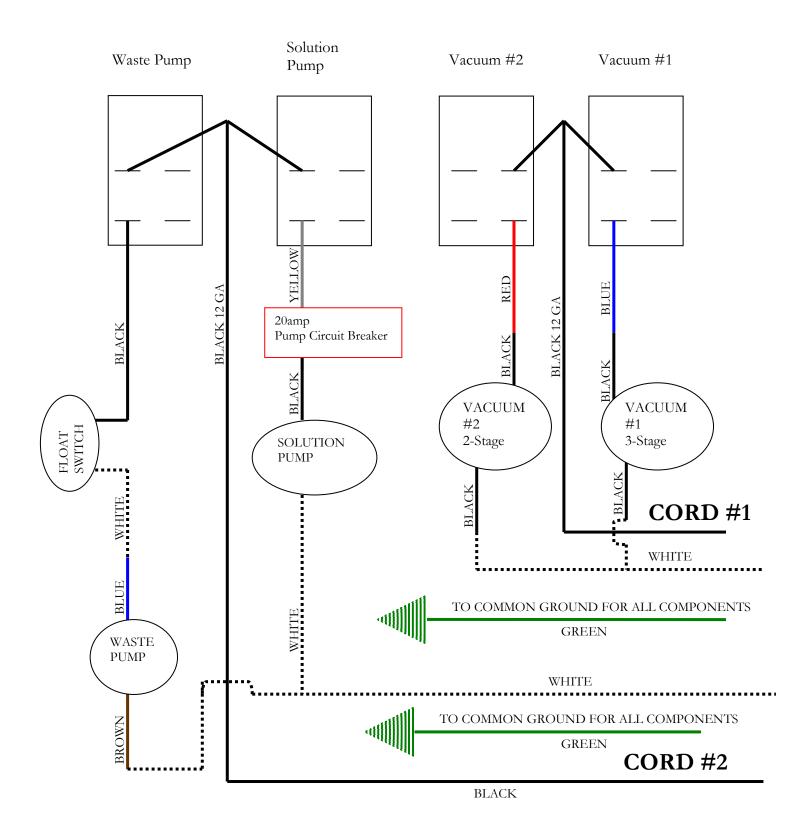
Problem	Cause	Solution		
Solution Tank	Water source turned off	Turn on faucet or find other water source		
not filling	Float not on valve arm	Reconnect float to valve arm - Adjust to proper height/level		
	Float valve faulty	Repair or replace float valve (NM5055)		
	Water hose restricted	Un-kink, clean out or replace hose		
	Quick connects faulty	Clean out or replace quick connects (AH101B, AH102B)		
Solution tank	Float too heavy/ Filled with water	Replace float (PHY005-003)		
overflowing	Float & chain tangled	Make sure float chain free & hanging properly		
	Float too high	Adjust chain to set float at proper level		
	Float valve faulty	Repair or replace float valve (NM5055)		
Chemical Jug	Foot valve in Filter stuck	Clean out foot valve and filter		
Filling with	Foot valve in Filter faulty	aulty Replace foot valve and filter (PDE100-11P)		
water -				
Overflowing				
*	experienced service technicians.	bhock or injury repairs to wiring should only be performed by ing electrical wiring contact your nearest authorized service to wiring and switches.		

• Contact your distributor for additional troubleshooting assistance, to order parts, or for advice and assistance in performing necessary repairs.

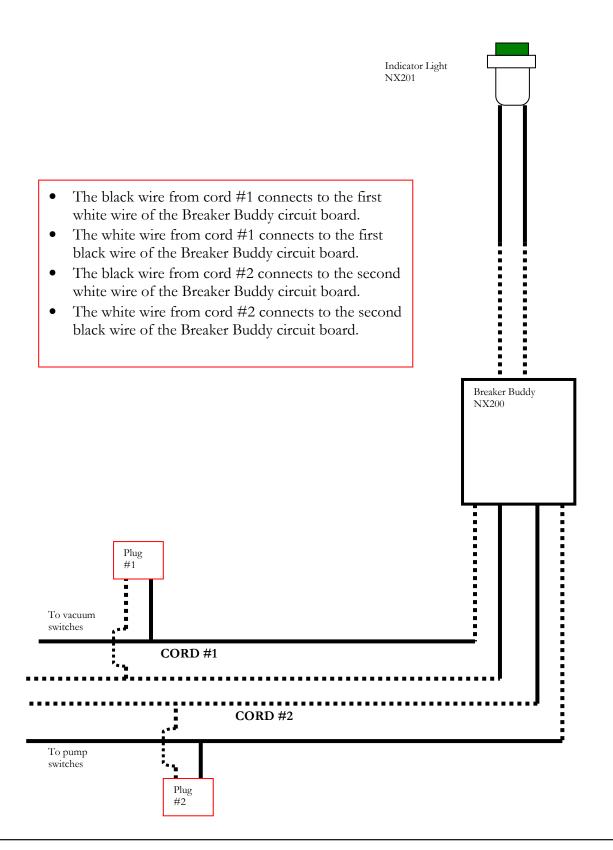
M1200 Solution Flow Path



M1200 Wiring Diagram



M1200 Wiring Diagram



OLYMPUS SWITCH PANEL:



Section

3

Maintenance

Proper maintenance is required to keep the M1200 operating properly, prevent downtime and to extend the life of your equipment.

WARNING: Disconnect electrical power before performing any service or maintenance inside machine base or before testing or repairing switches or power cords. Failure to do so may result in severe personal injury or death.

OPERATION	INTERVAL	Page #
CLEAN CHEMICAL FEED FILTER & FOOT VALVE	Daily – After Each Job	26
CLEAN VACUUM SHUTOFF ASSEMBLY SCREEN	Daily – After Each Job	26
CLEAN HYDRO-FILTER	Daily – After Each Job	27
RINSE OUT RECOVERY TANK	Daily	27
CLEAN WASTE PUMP-OUT PUMP	Daily	28
FLUSH SOLUTION TANK AND PUMP	Daily	28
CLEAN PUMP-INLET FILTER	Weekly – As needed	29
FLUSH CHEMICAL SYSTEM	Monthly	30
LUBRICATE PRESSURE REGULATOR O-RINGS	Monthly	31
CLEAN DRAIN VALVE	As needed	33
STORAGE PREP – FREEZE PROTECTION	As needed	34

CLEAN CHEMICAL FEED FILTER & FOOT VALVE:

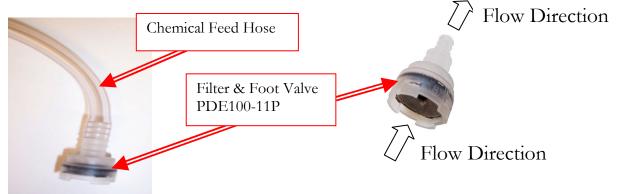
The Filter & Foot Valve is on the end of the chemical feed hose that is placed in the chemical jug as part of the chemical feed system.

Regularly examine the filter and clean as needed.

To test the Foot Valve:

- Remove the Filter & Foot Valve from the end of the chemical feed hose and rinse in fresh water.
- Blow through the valve from the filter side of the barb.
 - If the Foot Valve is functioning, air should move freely from the filter side, but will not flow from the barb side of the filter.
 - If valve is not functional, clean or replace as needed.

Heavy chemical build-up can be removed with a mild acid rinse and/or the use of a brush and compressed air.



CLEAN VACUUM SHUTOFF ASSEMBLY SCREEN:

Inside the recovery tank, on top of the stand pipe, is the Vacuum Shutoff Assembly. It functions to prevent debris and water from being sucked into the vacuum motors. Operating the M1200 without the Vacuum Shutoff Assembly or with a poorly maintained assembly will greatly decrease the life of the vacuum motors and will void the warranty.

If debris builds up on this filter, it will reduce the vacuum air flow and may cause a significant decrease in the rate of water recovery. If debris prevents the float ball from moving or seating inside the assembly, it may not stop the airflow when the tank fill with water, and the water will be sucked into the vacuums and blown out the exhaust. Use defoamer to prevent foam or moisture from entering vacuums (See Page 14). To clean:

- Twist to loosen and pull the assembly off of the stand pipe.
- Pull fibers and lint off and rinse with clean water.
- Push the assembly back onto the stand pipe and replace the recovery tank lid.



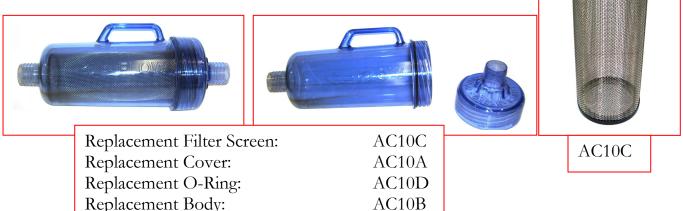
Vacuum Shutoff Assembly NM5037



CLEAN THE HYDRO-FILTER II: (Optional Accessory)

When used with the M500H, build-up of debris in the filter screen of the optional Hydro-Filter II will reduce the vacuum air flow and may cause a significant decrease in water recovery. A torn filter screen will allow debris past the filter and into the recovery tank. This debris can clog the Waste Pump and the Vacuum Shutoff Assembly. **The Hydro-Filter II must be examined and cleaned regularly to keep the M500H functioning properly:**

- Grasp and turn the lid counterclockwise to open the Hydro-Filter II lid.
- Remove the filter screen. Examine the screen and clean or replace as needed.
- Rinse the body of the Hydro-Filter II with clean water.
- Examine the o-ring lid seal and replace as needed.
- Re-install the new or cleaned screen.
- Screw the lid back onto the body and turn clockwise to tighten.



RINSE OUT RECOVERY TANK:

Build-up of fine silt and debris can damage the Waste Pump and Drain Valve. Clean out the tank on a regular basis to extend the life of these components as well as keep the tank and machine smelling better.

- Remove the recovery tank lid and open the drain valve.
- Place a bucket under the drain valve.
- Use a hose to rinse the dirt and debris out of the recovery tank.
- Close the drain valve and spray the tank with a deodorizer or disinfectant.
- Proceed to Waste Pump Cleaning and replace the recovery tank lid.
- Dispose of the dirty water and debris.





CLEAN WASTE PUMP-OUT PUMP:

Build-up of fine silt inside the Waste Pump can clog the pump even if the pump is not used, so this maintenance procedure should be performed regardless of whether the Waste Pump has been used.

- After cleaning out the recovery tank, remove the cap and connect the Pump-Out hose to the Waste Pump outlet fitting on the back of the machine; run the hose to a drain..
- With Cord #2 plugged in, turn the Waste Tank switch to the ON position.
- Use a hose to fill the recovery tank to the point where the float switch turns the Waste Pump ON.
- Let the pump run until it pumps the level down to the point when the float switch shuts off the Waste Pump.
- Unplug the cord and turn the Waste Pump switch OFF.
- Open the drain valve and drain out the remaining water.
- Close the drain valve, replace the recovery tank lid, and dispose of the dirty water and debris.

FLUSH SOLUTION TANK AND PUMP:

- Pour two or three gallons of clean water into the solution tank.
- With Cords #1 & #2 plugged in, connect the pump prime hose to the solution outlet female quick connect.
- Direct the end of the prime hose into the recovery tank vacuum barb.
- Turn one or both of the vacuums ON and turn the solution pump ON.
- Let the pump run until most of the water has been pumped out of the solution tank. Do not let the pump run dry. Turn the pump OFF before the water gets to the bottom of the tank.
- Turn the vacuums OFF and disconnect the prime hose.
- Place a bucket under the drain valve; open the drain valve to drain the water out of the recovery tank.
- Close the drain valve and dispose of the water.

If there is a heavy chemical build-up in the machine, hoses, or tools, a mild acid can be added to the rinse water in the previous procedure (REFER TO PHOTOS ON FOLLOWING PAGE.)

- After the pump has been primed, turn the solution pump switch OFF and turn the vacuums OFF.
- Remove the prime hose and connect the HP solution hose and tools.
- Turn the solution pump ON and direct the tool spray into a bucket. Let the pump run until most of the water has been pumped out of the solution tank. Do not let the pump run dry. Turn the pump OFF before the water gets to the bottom of the tank.
- Disconnect the solution hose and tool.
- Use the 4' short section of vacuum hose to vacuum the remaining acid solution out of the solution tank.
- Pour two or three gallons of clean water into the solution tank.
- Connect the pump prime hose to the solution outlet female quick connect.
- Direct the end of the prime hose into the recovery tank vacuum barb.
- Turn one or both of the vacuums ON and turn the solution pump ON. Let the pump run until most of the water has been pumped out of the solution tank. Do not let the pump run dry. Turn the pump OFF before the water gets to the bottom of the tank.
- Turn the vacuums OFF and disconnect the prime hose.
- Place a bucket under the drain valve and open the drain valve to drain the water out of the recovery tank.
- Close the drain valve and dispose of the water.



Pour 2 or 3 gallons of clean water into Solution Tank

FLUSH SOLUTION TANK AND PUMP: (continued from previous page)



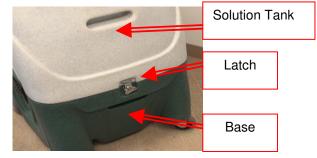


CLEAN PUMP INLET FILTER

A restricted Pump Inlet Filter can prevent the solution pump from providing adequate pressure for cleaning. A restriction or air leak on the pump inlet hose can also damage the solution pump check valves and plunger seals.

CAUTION: Before proceeding with this procedure, make sure both power cords are disconnected.

- To examine the filter, open the solution tank lid on the front of the machine. The filter is in the bottom of the solution tank.
- Grasp the filter cap and unscrew the filter from the brass nipple by turning counter-clockwise. Clean or replace the filter as needed (PP14-806504).



• To examine the pump inlet hose, release the latch on the front of the machine and tilt the tanks off

of the base assembly. Support the tanks with a chair, bucket or box while working inside the base.

- Examine the hose for kinks, clogs or holes and repair or replace the hose as needed. (Replacement Hose: NM5086 – sold per foot)
- Tilt the tanks back onto the base and secure the latch.



FLUSH CHEMICAL SYSTEM:

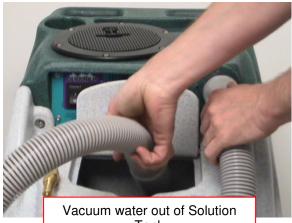
Chemical build-up in the chemical system can prevent the system from drawing chemical.

- Rinse the chemical system with fresh water (For heavy chemical build-• up, a mild acid can be added to the rinse water.)
- Remove the chemical feed hose from the solution tank and place the en water or mild acid solution.
- Connect the Auto-Fill Water Supply Hose to the water inlet (male quick connect) on the front of the machine.
- Connect the other end of the hose to a water faucet and turn on the water. Let the water flow into the tank until you are sure the rinse solution has been drawn through the proportioner and mixed with the incoming water. The metering tip can be removed from the proportioner to speed up the process.
- Once the rinse solution has been drawn through the proportioner, turn off the water faucet and • disconnect the Auto-Fill Water Supply Hose.
- Plug in Cord #1, connect the short 4' vacuum hose to the vacuum barb, turn on one or both vacuums, and use the short vacuum hose to remove the water from the solution tank.
- When the solution tank has been emptied, turn off the vacuums and unplug the power cord.
- Place a bucket under the drain valve and open the drain valve to drain the water from the recovery tank.
- Close the drain valve and dispose of the water.

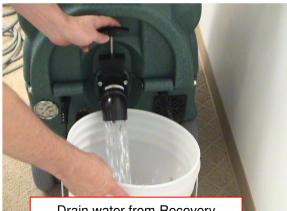




Connect Auto-Fill Water Supply Hose to machine and faucet



Tank



Drain water from Recovery Tank



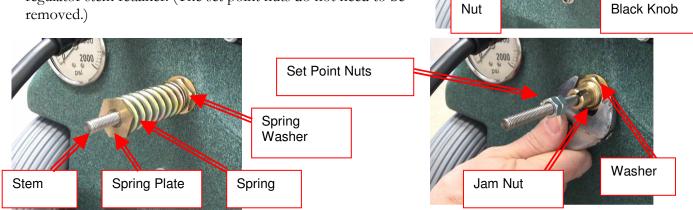
Place Chemical Feed Hose into **Rinse Solution**

29

LUBRICATE PRESSURE REGULATOR O-RINGS:

To maintain consistent adequate pressure delivery to the cleaning tool, the o-rings on the stem of the M1200 pressure regulator must be lubricated regularly.

- 1. Remove nut from the end of the regulator stem.
- 2. Remove the black knob from the regulator stem.
- 3. Remove the spring plate, spring, and spring washer from the regulator stem.
- 4. Remove the jam nut and washer from the shoulder of the regulator stem retainer. (The set point nuts do not need to be removed.)



- 5. Release the latch on the front of the machine and tilt the tanks off of the base assembly. Support the tanks with a chair, bucket, or box while working inside the base.
- 6. Disconnect the vacuum hose from the vacuum manifold and move it out of the way to gain access to the regulator.
- 7. Pull the regulator assembly from the base wall opening (back into the base) to access the regulator. A hose may have to be disconnected to move the regulator into a better working position.
- 8. Hold the body of the regulator with a wrench or vice-grip pliers. Use another wrench to loosen and remove the stem retainer, then remove the stem assembly from the body of the regulator.







9. Use a synthetic grease with Teflon such as Ultra-Slick or Super-Lube to lubricate the o-rings on the regulator stem.

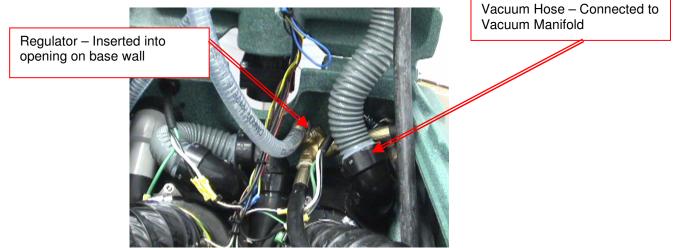
30

10. Apply thread sealant to the threads of the stem retainer and screw the retainer back into the regulator body. Tighten using wrenches.





- 11. Place the regulator back into the opening on the base wall. Reconnect any hoses which were removed to access the regulator. (Use thread sealant when reconnecting hoses.)
- 12. Reconnect vacuum hose to vacuum manifold.



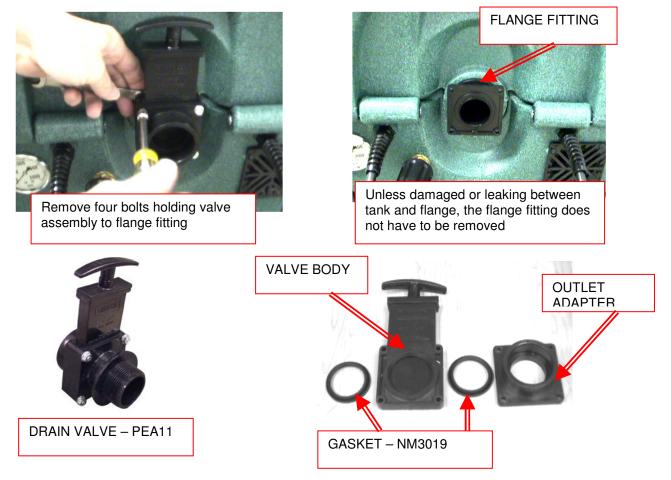
- 13. Close tanks back onto base and secure latch.
- 14. Place washer and jam nut back onto shoulder of regulator and tighten to secure regulator to base wall.
- 15. Replace spring washer, spring, and spring plate back onto regulator stem.
- 16. Screw black knob back onto regulator stem.
- 17. Screw nut back onto regulator stem. Do not screw nut on too far, as the nut may interfere with the movement of the regulator knob and prevent the knob from being backed out when trying to adjust regulator to lower pressures.



CLEAN RECOVERY TANK DRAIN

Debris and sand accumulation in the drain valve can damage the valve or prevent it from closing completely. This will result in dirty water leaking from the valve. Use of the Hydro-Filter and regular cleaning of the recovery tank will help prevent this, but occasionally the drain valve will require cleaning or replacement. **Drain the recovery tank before attempting to service the drain valve.**

- Unscrew the nuts and remove the four bolts holding the valve assembly to the flange attached to the recovery tank. Unless the flange is damaged, it does not have to be removed from the tank, even when replacing the drain valve.
- Separate the valve body, outlet adapter and gaskets from the flange.



- Examine the valve body for wear. Check the valve slide for deep scratches. Deep scratches will allow water to flow past gaskets and leak from valve. Replace valve if needed.
- Examine the gaskets and replace if cut, torn or deformed.
- Raised, rounded side of gasket goes toward valve slide. Larger flat sides seat on ring on flange and outlet adapter. Sand and debris will collect in the bottom of the valve body and prevent the slide from going down and seating properly.
- Clean debris out as needed so slide can move to bottom.
- Rinse valve body and reassemble valve body, gaskets and outlet adapter, and place assembly back onto flange fitting.
- Replace four bolts and tighten evenly to secure assembly to flange. Do not over-tighten bolts.



Clean debris from slot in bottom of valve body. Valve slide must be able to slide to bottom.

Storage Prep and Freeze Protection Procedures:

Your Olympus M1200 must be protected from freezing. Freezing can cause serious damage to the pump, pump-out, auto-fill float valve, and any other component containing water. If the M1200 is transported or stored in freezing temperatures, the following procedures should be performed.

ALSO, if the M1200 is stored for an extended period of time, the following procedure should be performed to prevent the pump seals from drying out.

- 1. In a separate container mix 1/2 gallon of water with 1/2 gallon of automotive radiator anti-freeze. (Ethylene glycol type). Mix well and pour into the solution tank.
- 2. Connect the pump prime hose to the solution outlet (female quick connect) and perform the pump priming procedure, directing the flow back into the solution tank. When the pump is primed, turn the pump off and disconnect the priming hose.
- 3. Connect the HP solution hose to the solution outlet (female quick connect.) Connect the opposite end of the HP solution hose to the Auto-Fill inlet (male quick connect.) Leave the chemical feed hose in the solution tank and ensure the check valve filter is submerged in the anti-freeze solution. To speed the process the metering tip can be removed. Turn the pressure regulator knob counter-clockwise to lower the pressure to 100psi or lower

CAUTION: Applying high pressure (over 100psi) to the Auto-Fill system will cause damage to the Float valve and chemical proportioning mechanism.

- 4. Turn the solution pump switch to the ON position. Allow the anti-freeze to circulate for 5-10 minutes. Mix and add more anti-freeze solution as needed. Make sure end of chemical feed hose stays submerged in the anti-freeze solution. This will assure that the anti-freeze will be drawn into the proportioning valve.
- 5. Connect any cleaning tools that will be stored with the M1200. Direct tool spray back into the solution tank or into a bucket. Repeat for all tools to be protected.
- 6. Turn the solution pump switch to the OFF position.
- 7. Use the 4' short section of vacuum hose to vacuum the remaining anti-freeze solution out of the solution tank and bucket.
- 8. Remove the cap from the waste-pump out outlet fitting on the back of the machine. Connect a hose to a drain or hold a bucket up to the fitting to catch the pump-out flow.
- 9. Remove the lid from the recovery tank. Turn the Waste Pump switch to the ON position and lift the float switch to engage the pump-out. Lower the float and turn off the Waste Pump Switch as soon as you see anti-freeze flowing from the outlet fitting or hose.
- 10. Drain the remaining anti-freeze solution from the recovery tank and the machine is ready for storage.

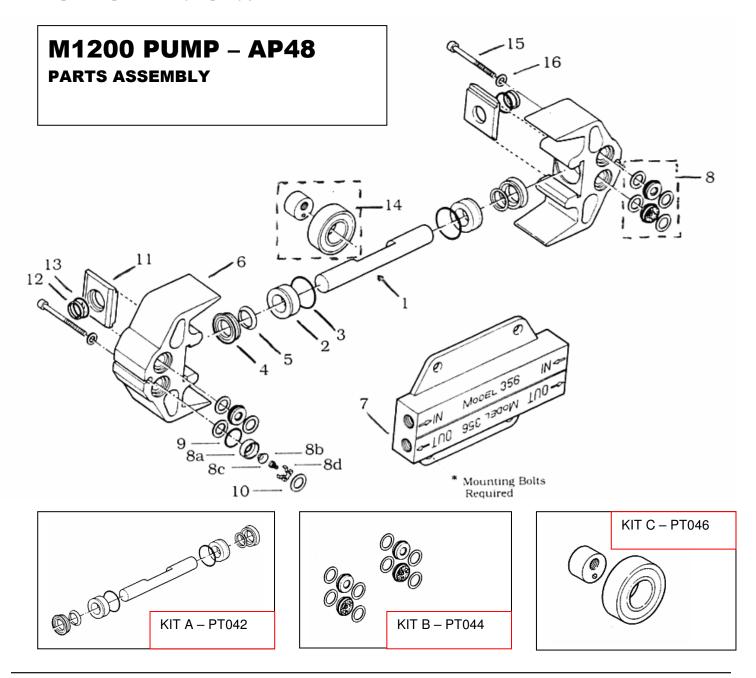
RETURNING THE M1200 TO SERVICE AFTER STORAGE OR FREEZE PROTECTION:

To return the M1200 to service, the anti-freeze must be flushed from the machine. Flush the anti-freeze out of the machine by repeating the procedures above using fresh water in place of anti-freeze.



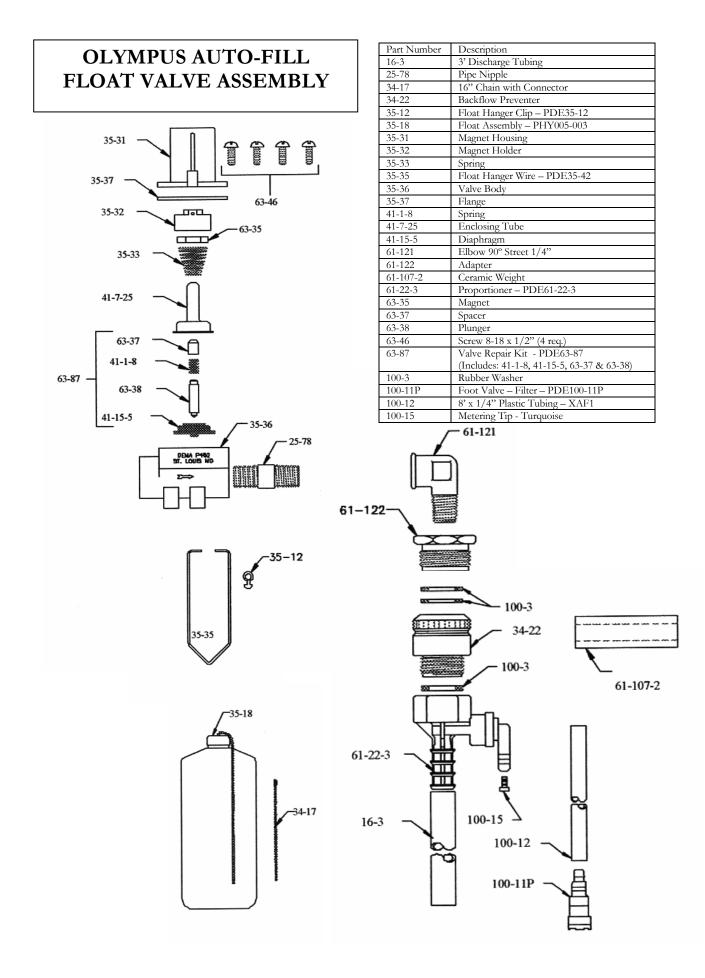
Parts

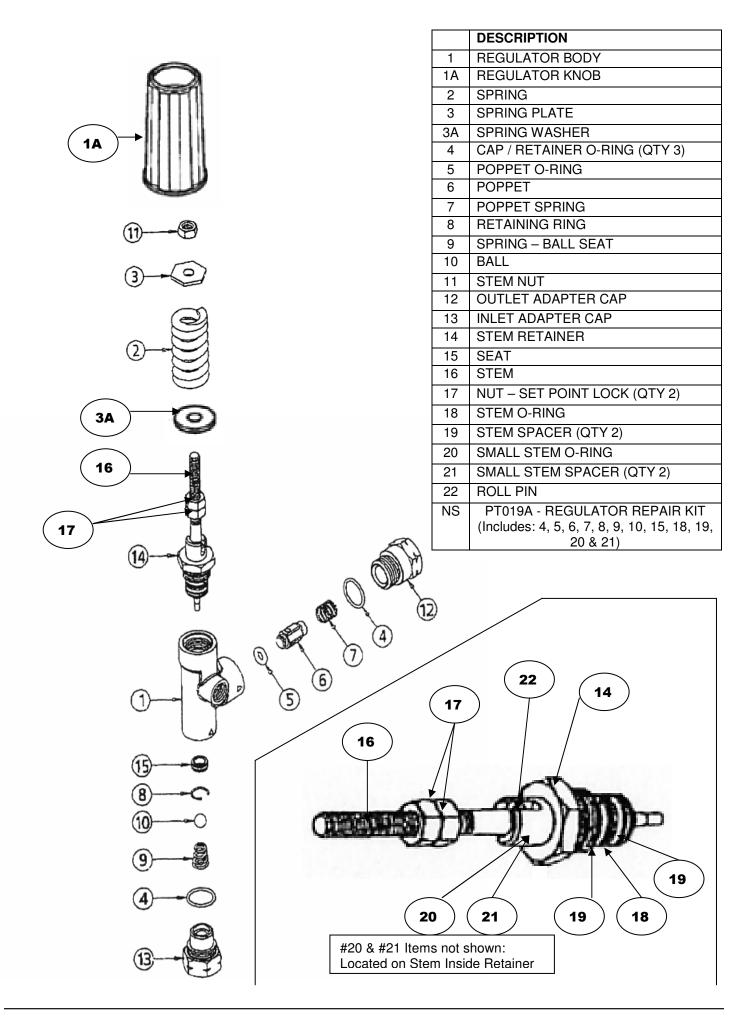
Replacement parts available for repair of your M1200.

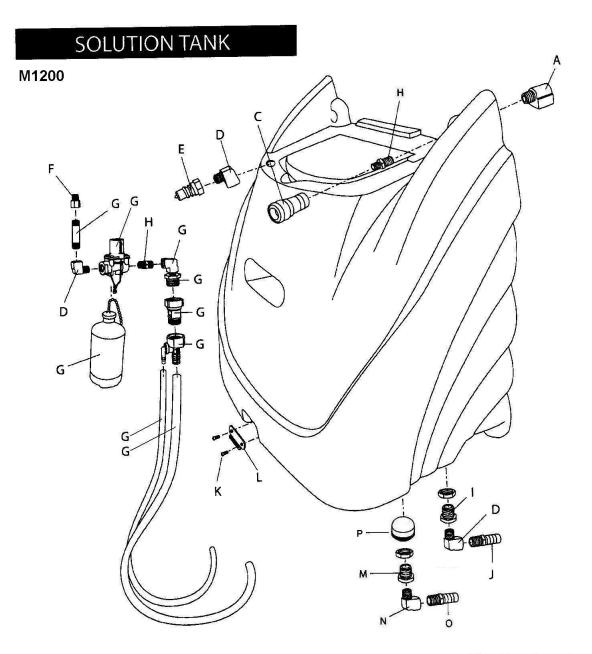


PUMPTEC #356 PUMP – AP48

ITEM	DESCRIPTION	QTY	PART NUMBER
1	PLUNGER	1	0311-0006-0002
2	PLUNGER GUIDE	2	0311-0009
3	O-RING FOR PLUNGER GUIDE	2	C0100-1124
4	U-CUP	2	C0220-1075
5	U-CUP BACKING RING	2	0311-0011
6	PUMP HEAD	2	0356-0002-0001
7	PUMP MANIFOLD	1	0356-0004-0001
8	VALVE ASSEMBLY	4	0205-0012
8A	VALVE SEAT (Part of #8 - Valve Assembly)	4	0205-0017
8B	VALVE POPPET (Part of #8 - Valve Assembly)	4	0205-0013
8C	VALVE SPRING (Part of #8 - Valve Assembly)	4	C1220-0001
8D	SPRING RETAINER (Part of #8 Valve Assembly)	4	0205-0014
9	O-RING FOR VALVE	4	C0100-1116
10	PLASTIC SPACER RING	8	0205-0016
11	GUIDE & VACUUM SEAL RETAINER	2	0311-0012
12	VACUUM SEAL	2	0311-0010
13	O-RING FOR VACUUM SEAL	2	C0100-1117
14	BEARING ASSEMBLY	1	0300-1000-0001
	ECCENTRIC INSERT (Part of #14 – Bearing Assembly)	1	0300-0001-0XXX
	BEARING 6205 (Part of #14 – Bearing Assembly)	1	C3000-0003
15	SOCKET HEAD CAP SCREW	2	C100-0504
16	WASHER AN TYPE	2	C1500-0004
KIT A	PLUNGER & SEALS – Includes 1, 2, 3, 4, 5, 12 & 13	1	PT042
KIT B	VALVES & O-RINGS – Includes 8, 9 & 10	1	PT044
KIT C	BEARING ASSEMBLY (#14)	1	PT046
	PUMP COMPLETE - WITHOUT MOTOR	1	PT058
	MOTOR	1	PT059
	MOUNTING BOLTS 3/8-16 X 2-3/4"	4	

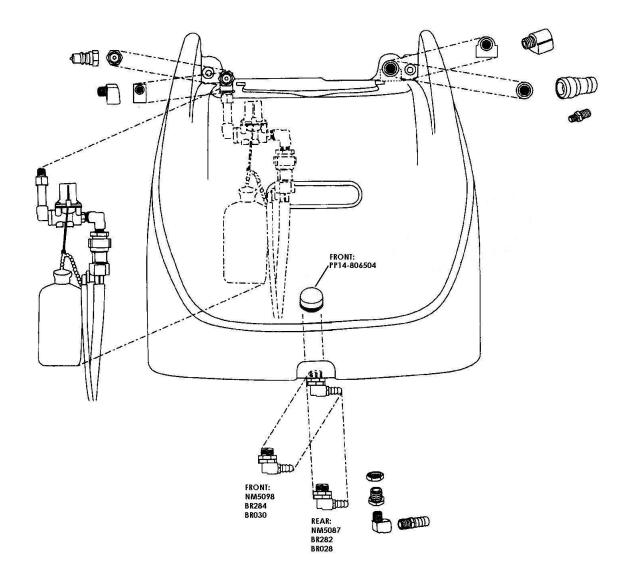


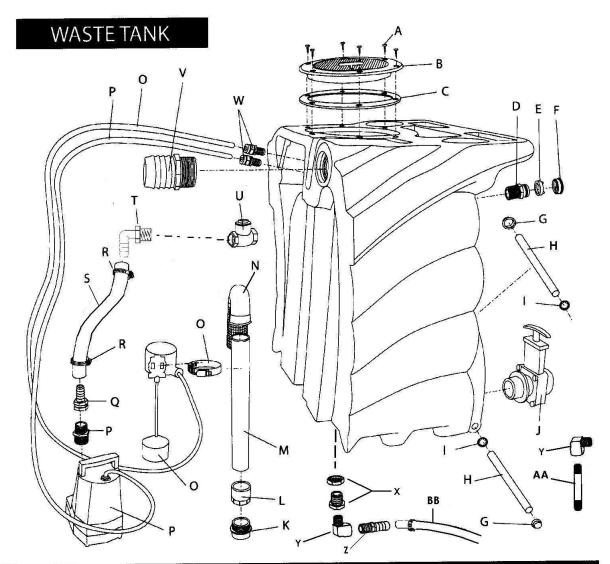




ITEM	PART #	DESCRIPTION	QTY	ITEM	PART #	DESCRIPTION	QTY
A	BR282	ELBOW 90 - 1/4" STREET	1	1	NM5087	BULKHEAD FITTING 1/4"	1
				J	BR028	BARB 1/2" x 1/4" MPT	1
6	AH101B	QUICK CONNECT FM	1	К	NM5023	SCREW 8-32 x 3/8" B	2
D	BR282	ELBOW 90 - 1/4" STREET	4	Ĺ	NS121	LATCH HOOK	1
F	AH102B	QUICK CONNECT 1/4" M	1	М	NM5098	BULKHEAD FITTING 3/8"	1
F	BR174	ADAPTER 1/4" MPT x 1/4" FPT BR	1	N	BR284	ELBOW 90 - 3/8" STREET	1
G	NM5055	FLOAT VALVE ASSY W/CHEM	1	0	BR030	BARB 1/2" x 3/8" MPT	1
н	BR072	NIPPLE 1/4" HEX BRASS	2	Р	PP14-806504	STRAINER ACORN 3/4"	1

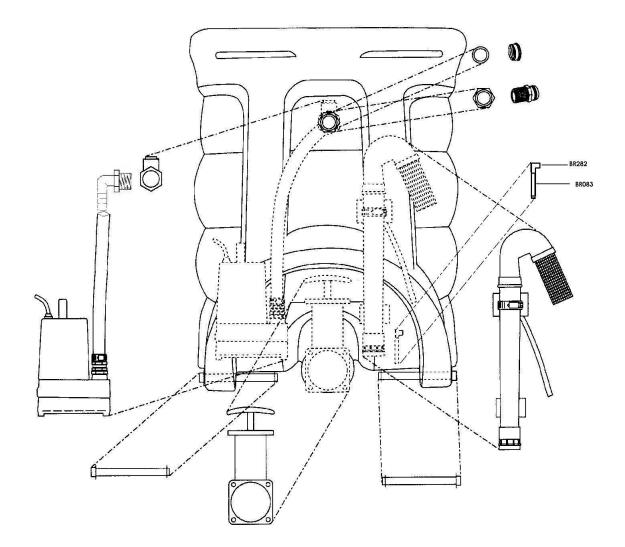
SOLUTION TANK INTERNAL

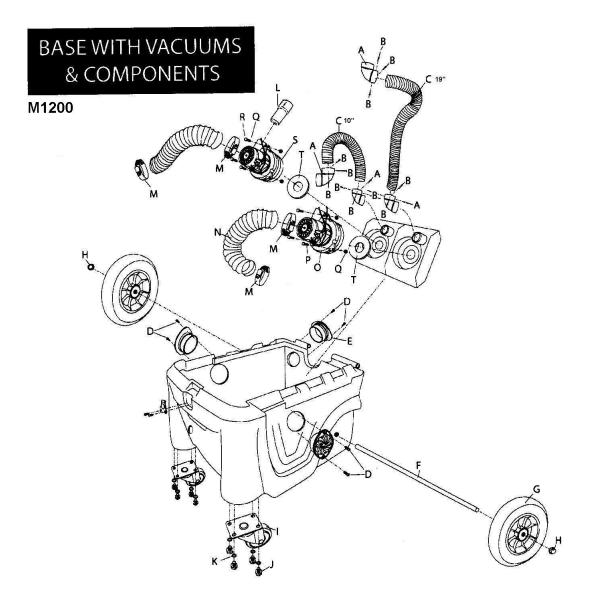




ITEM	PART #	DESCRIPTION	QTY	ITEM	PART #	DESCRIPTION	QTY
A	PA187	SCREW #10 x 5/8" SH	6	0	NM5054	SWITCH FLOAT STRAIGHT	1
В	NM5004	LID ASSEMBLY WASTER TANK	1	Р	NM5053	PUMP LITTLE GIANT	1
с	NM5059	GASKET WASTE TANK LID	1	Q	BR333	BARB 3/4" x 3/4" FGH	1
D	BR319	ADAPTER 3/4" MPT X MGH	1	R	PH09	CLAMP HOSE SCREW 9/16"	2
E	BR600	GASKET	1	5	NM5056	HOSE 3/4" WATER BLACK	12″
F	BR325	CAP CARDEN HOSE BRASS	1	Т	PA110	ELBOW 90 BARB 3/4" x 3/4" MP	1
G	NM5010	CAP AXLE OLYMPUS REAR	2	U	NM5052	CHECK VALVE 3/4" SWING	1
н	NM5013	HINGE POST	2	V	AH69	BARB 2" x 1-1/2" MPT	1
1	NM5026	HINGE RETAINING CLIP	2	W	NM5051	STRAIN RELIEF	2
J	PEA11	VALVE 1-1/2" MPT GATE	1	x	NM5087	BULKHEAD FITTING 1/4"	1
к	NM5042	ADAPTER 1-1/2" MPTX1-1/2" MS	1	Y	BR282	ELBOW 90 - 1/4" STREET	2
L	NM5081	ADAPTER 1-1/2" FPT X1-1/2" FS	1	Z	BR020	BARB 3/8" x 1/4" MPT	1
м	NM5036	PIPE 1-1/2" X 17" A B S	16″	AA	BR083.	NIPPLE 1/4" x 3"	1
N	NM5037	FLOAT & FILTER CAGE	1	BB	NM5082	HOSE 3/8" CLEAR COIL	28"

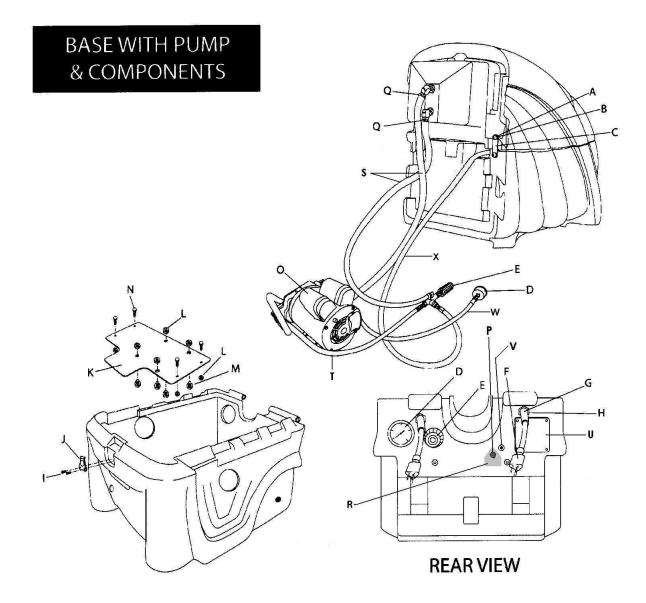
WASTE TANK SIDE INTERNAL VIEW





ITEM	PART #	DESCRIPTION	QTY	ITEM	PART #	DESCRIPTION	QTY
A	NM5041	ELBOW 90 - 1-1/2" ABS	4	К	NM5014	WASHER LOCK - CASTER	8
в	NM5025	RIVET HOSE ELBOW	12	L	AH42	CUFF 1-1/2" HOSE	1
с	NM5050	VAC HOSE 1-1/2" WIRE REINFORCE	29″	м	PHO14	CLAMP HOSE SCREW 3"	4
D	PA184	SCREW 8x3/8 SHEET METAL	12	N	NM5018	DUCT 3" x 18" VINYL BLACK	2
E	NM5015	GRATE VAC EXHAUST	3	0	AV010	VAC MOTOR 5.7 2 STAGE	1
F	NM5011	AXLE OLYMPUS REAR WHEEL	1	Р	NM5029	SCREW 10-32 x 5/8" SS	3
G	NM5002	REAR OLYMPUS WHEEL	2	Q	NM5033	WASHER MANIFOLD BOTLS	6
н	NM5010	REAR WHEEL AXLE CAP	2	R	NM5089	SCREW 10-32x101/2" SS	3
1	NM5003	FRONT CASTER	2	S	AV14	VAC MOTOR 5.7" 3 STAGE	1
	NM5012	SCREW 1/4-20 x 1" HX HD	8	Т	PA010	GASKET VAC MOTOR 5.7"	2

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ITEM	PART #	DESCRIPTION	QTY	ITEM	PART #	D
А	NM5028	SCREW 1/4-20x1/2"SS SOC HD	4	N	NM5034	SCRE
в	NM5030	WASHER 1/4" FLAT BLACK	4	0	AP48	PUMP
с	NM5027	BRACKET SOL/REC TANK	2	Р	NX201	BREAK
D	PT063	PRESSURE GUAGE 2000 PSI	1	Q	PH09	CLAM
E	PT019	PRESSURE REGULATOR 1200 PSI	1	R	NX202	DE
F	NM5009	CORD 12/3x2'W/MALE END	2	S	NM5086	HOS
G	NM5038	STRAIN RELIEF	2	Т	PT070	PUL
н	NM5039	NUT STRAIN RELIEF	2	U	NM5015	GR
1	NM5023	SCREW 8-32x3/8"BH SOC SS	2	V	PHY018-005	PUMP
J	NS121	LATCH HOOK	1	W	PH501	HP HOS
к	NM5064	PLASTIC INSERT M1200	1	х	PH509	HP HOS
L	NM4003	NUT 1/4-20 HEX SS	8	NOT SHOWN	NM5096	PUN
М	NM5012	SCREW 1/4-20x1/2" HX HD	4			.

ITEM	PART #	DESCRIPTION	QTY
N	NM5034	SCREW 1/4-20x1"HX HD	4
0	AP48	PUMP PUMPTEC #356 1200 PSI	1
P	NX201	BREAKER BUDDY LIGHT - GREEN	1
Q	PH09	CLAMP HOSE SCREW 9/16-1 1/4"	6
R	NX202	DECAL BREAKER BUDDY	1
S	NM5086	HOSE 1/2" CLEAR COIL	9' OR 108
T	PT070	PULSE HOSE M1200	1
U	NM5015	GRATE VAC EXHAUST	3
V	PHY018-005	PUMP CIRCUIT BREAKER 20AMP	1
W PH501		HP HOSE 26" 3/8" MS X 1/4" F	1
х	PH509	HP HOSE 45" 1/4" MS X 3/8" MS	1
NOT SHOWN	NM5096	PUMP PRIMING VALVE	1

Limited Warranty



Your Olympus M1200 is designed to give you years of reliable service. If a problem should arise use the troubleshooting section in the operation manual to diagnose and correct the problem if possible.

If you are unable to determine the cause or solution to the problem contact your distributor or Hydro-Force for assistance.

Hydro-Force warrants the roto-molded tanks and base of the Olympus M1200 to be free from defects in material or workmanship for five years from the date of purchase. All other components of the Olympus M1200 are warranted to be free of defects in material and workmanship for one year from the date of purchase.

During the warranty period, Hydro-Force will, at its option repair or replace components which prove to be defective. This warranty does not provide for replacement of complete units due to defective components. Any costs for transportation or related service labor are not covered in this warranty. Replacement parts are warranted only for the remainder of the original warranty period.

This warranty shall not apply to defects resulting from improper operation, lack of maintenance, unauthorized modification, chemical incompatibility, misuse, abuse or exposure to freezing temperature conditions. It does not cover normal wear items such as o-rings, valve seals, pump seals, hoses, jets, cords, batteries, or other items which require replacement as a result of ordinary usage.

To obtain warranty service for the Olympus M1200, contact your distributor or Hydro-Force. If the extractor must be returned to Hydro-Force or an authorized service center, the purchaser shall prepay shipping charges for products returned for warranty service. No returned items will be accepted by Hydro-Force without prior authorization. All returns must have a return authorization number, issued by Hydro-Force, clearly marked on the exterior of the package.

Hydro-Force makes no other warranty either expressed or implied with respect to this product.

The remedies provided herein are the purchaser's sole and exclusive remedies. In no event shall Hydro-Force be liable for any direct, indirect, special, incidental or consequential damages.

This warranty gives you specific legal rights. You may also have other rights which vary from jurisdiction to jurisdiction.