



Part# 1002508 - 03
1/30/2007

0500 PUMP CONVERSION KIT

OWNERS MANUAL



This manual contains important information concerning the installation and operation of the product listed above.
Read manual thoroughly and keep for future reference

INSTRUCTIONS

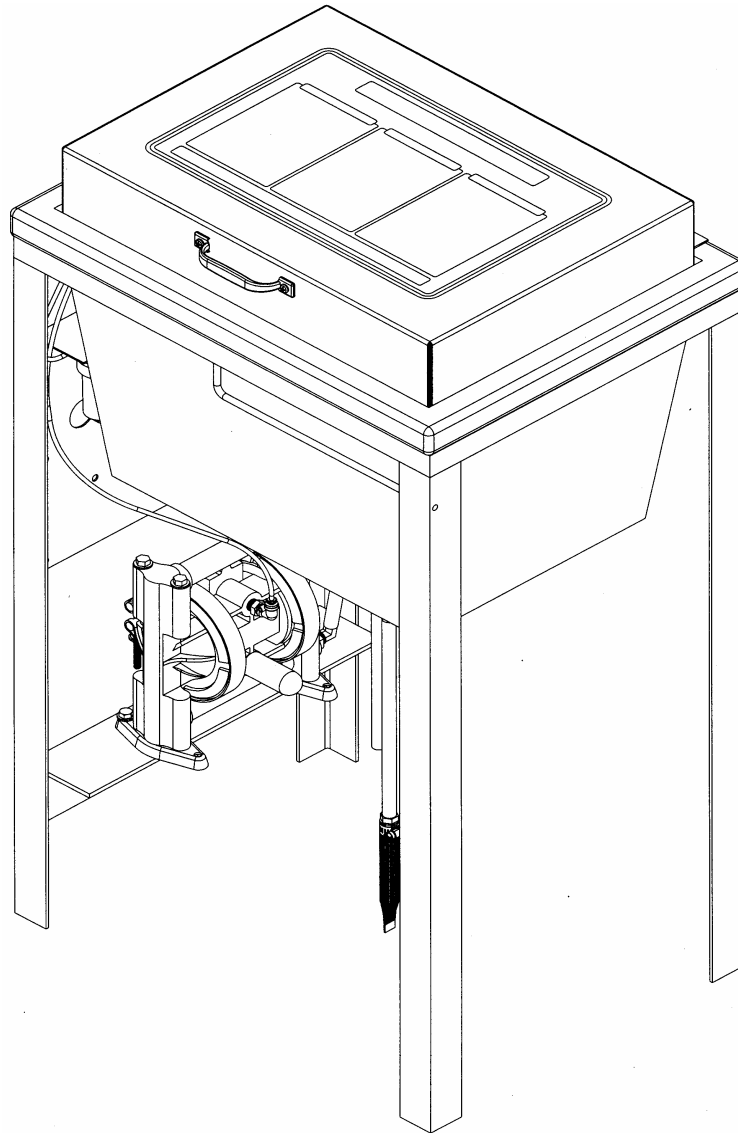


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Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

Serial Number _____

Model Number _____

Purchase Date _____

Distributor _____

herkulesTM PATENT NUMBERS

This product has patent protection under one or more of the following patent numbers:

7070167, 5485860, 5193561, 5174317
4960142, 4793369, 1299468
and Patents Pending

website: www.herkules.us

1002742



WARNING



EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended use.
- Do not alter or modify this equipment.
- Do not exceed the maximum working pressure of the lowest rated system component.
- Do not operate the gun washer at a pressure above the maximum working pressure rating of the gun(s) being cleaned.
- Route the hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use the hoses to pull the equipment.
- Do not move pressurized equipment.
- Use fluids or solvents that are compatible with the equipment wetted parts. Read the fluid and solvent manufacturer's warnings
- Comply with all applicable local, state and national fire, electrical and other safety regulation.



PRESSURIZED EQUIPMENT HAZARD

Spray from hose leaks, ruptured components, or from operating the gun washer with an open lid can splash fluid in the eyes or on the skin and cause serious injury.

- A safety device has been installed to shut off the pump when the gun washer lid is opened. Do not tamper with or alter this device.
- Open the gun washer lid slowly.
- Do not prop the gun washer lid open with an object or by any other means.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Tighten all fluid connections before operating the equipment.
- Replace worn, damaged, or loose parts immediately.



WARNING



FIRE AND EXPLOSION HAZARD



Improper grounding, poor air ventilation, open flames, or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

- Ground the equipment. See Installation for grounding procedure.
- Provide fresh air ventilation to avoid the build up of flammable fumes from the solvent.
- Extinguish all open flames or pilot lights in the gun washer area.
- Disconnect all electrical equipment in the gun washer area.
- Keep the gun washer area free of debris, including solvent, rags, and gasoline.
- Do not turn on any light switch in the gun washer area while operating or if fumes are present.
- Do not smoke in the gun washer area.
- Do not operate a gasoline engine in the gun washer area.
- Follow the gun manufacturer's solvent and other cleaning recommendations.
- Use solvent with the highest possible flash point.
- If there is any static sparking while using the equipment, **stop operation immediately**. Identify and correct the problem.
- Drain the solvent into a proper storage container when gun washer(s) is not in use.



TOXIC FLUID HAZARD

Hazardous fluids or toxic fumes can cause serious injury or death if splashed in eyes or on the skin, swallowed, or inhaled.

- Know the specific hazards of the fluid you are using. Read the fluid manufacturer's warnings.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Wear the appropriate protective clothing, gloves, eyewear and respirator.
- Pipe and dispose of the exhaust air safely. If diaphragm fails, the fluid may be exhausted along with the air.

Assembly

It is no longer necessary to use the strainer assembly shown in fig.1 or the ball cage assembly not shown. Not all units are originally equipped with the strainer assembly.

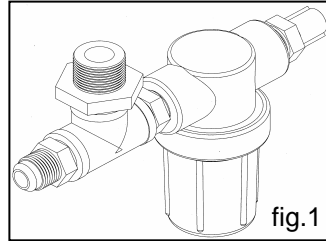


fig.1

Steps 1-5 see fig.2

STEP 1

Begin by removing the old bulkhead and cleaning the area around the 1" diameter hole in the tub.

STEP 2

Install the included 3/8 x 3/8 NPT flare connector to the included bulkhead opposite the hex end.

STEP 3

Slide the included nylon washer over the flare connector and install the assembly from the inside of the tub.

STEP 4

Install the 1-14 UNS nut to the bulkhead using an impact gun if possible. The nut and bulkhead must be properly sealed to avoid leaks.

STEP 5

Attach the drain hose assembly to flare connector and tighten hand tight.

Steps 6-8 see fig.3

STEP 6

Begin mounting the pump by positioning the bracket on the outside of the legs on the left side of the unit and mark locations for drilling through the leg.

Note: Drill size: .281". The holes should be positioned about 5.00" up from the bottom of the legs.

The legs can be flexed slightly in for mounting if there is not ample material to drill through.

STEP 7

Drill through the legs and clear any burrs. Put the pump bracket in place, inside the legs, and attach using (1) 1/4-20 x 1/2" bolt, (1) 1/4" lock washer, (1) #10 flat washer and (1) 1/4-20 acorn nut for each side.

STEP 8

Position the pump so that the grounding bar is facing away from the unit and attach with (1) 1/4-20 x 1 bolt, (1) 1/4" flat washer, (1) 1/4" lock washer and (1) 1/4-20 nut for each side.

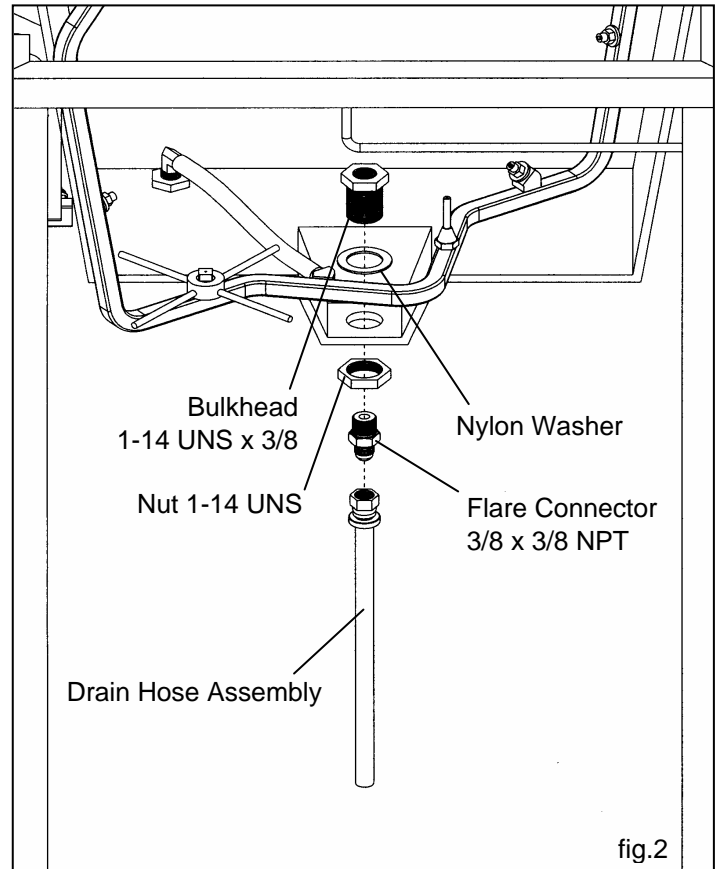


fig.2

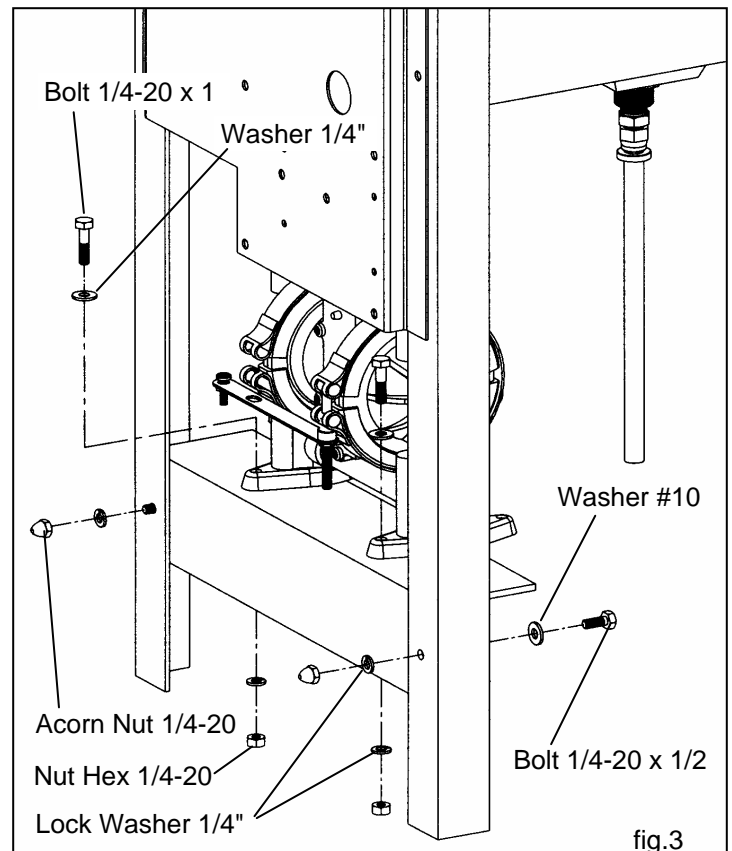


fig.3

Assembly

Steps 9-12 see fig.4

STEP 9

Take the 23" length of black hose and insert the filter assembly into one end.

STEP 10

Slide the other end of the 23" black hose through the white plug so that the threads are towards the filter. Attach the other end of the hose to the lower (IN) fitting on the pump.

STEP 11

Attach the 21" length of black hose to the upper (OUT) fitting on the pump and connect the other end to the fitting on the base of the tub.

Note: Not all units have a 90° hose barb on the tub as shown.

STEP 12

Screw the muffler into the open port on the back of the pump.

Note: Disconnect the drain hose assembly from the 3/8 x 3/8 npt flare connector.

The filter and drain hose can then be inserted into a 5 gallon solvent can and the plug secured in the opening of the can. The filter must be completely submerged in solvent for proper operation.

Reconnect the drain hose and tighten.

Steps 13-15 see fig.5

STEP 13

Remove the nut holding the filter/regulator to the shield assembly and disconnect the hose coming out of the back of the regulator.

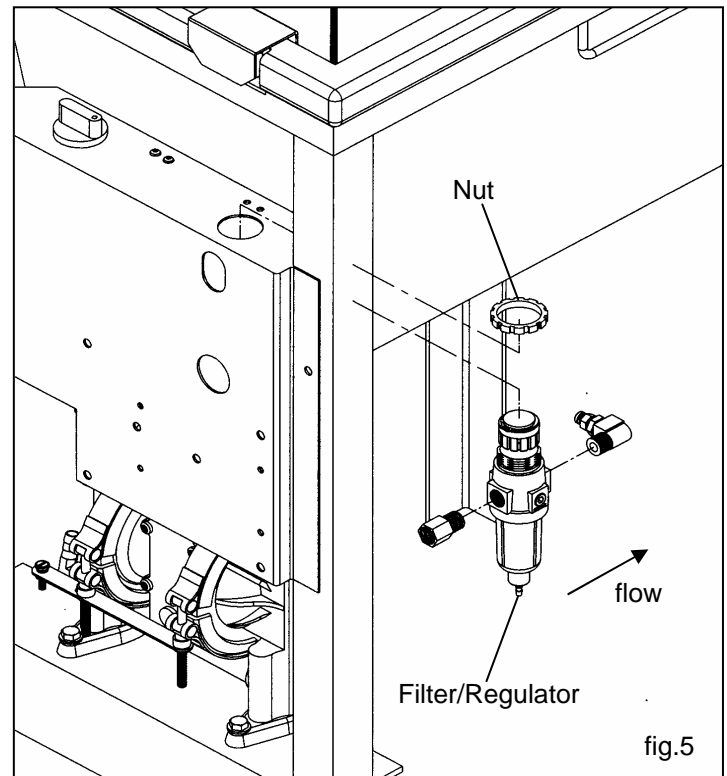
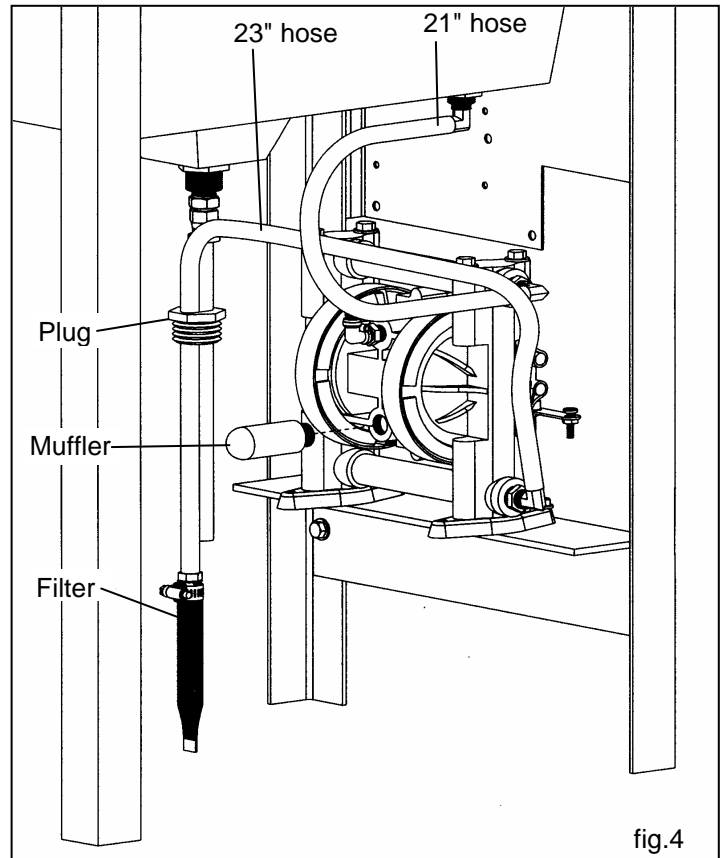
STEP 14

Remove the fittings from the filter/regulator and attach them to the new filter/regulator in the same configuration.

Note: Make sure that the air inlet fitting is at the tail end of the flow arrow and the outlet fittings are at the head end. Fittings may be different than shown in fig. 5.

STEP 15

Re-attach the filter/regulator to the shield assembly using the same nut that was removed in step 11. The inlet fittings should be facing outwards from the unit.



Assembly

STEP 16

Connect the hose from the IN port of the timer switch to the out from the Filter/Regulator. Ensure the hose from the OUT port of the timer switch runs to the IN port of the lid switch. If not, run the 15" length of blue hose from the OUT port of the timer switch to the IN port of the lid switch.

Note: The IN port of the switch is the port on the opposite side of the roller.

STEP 17

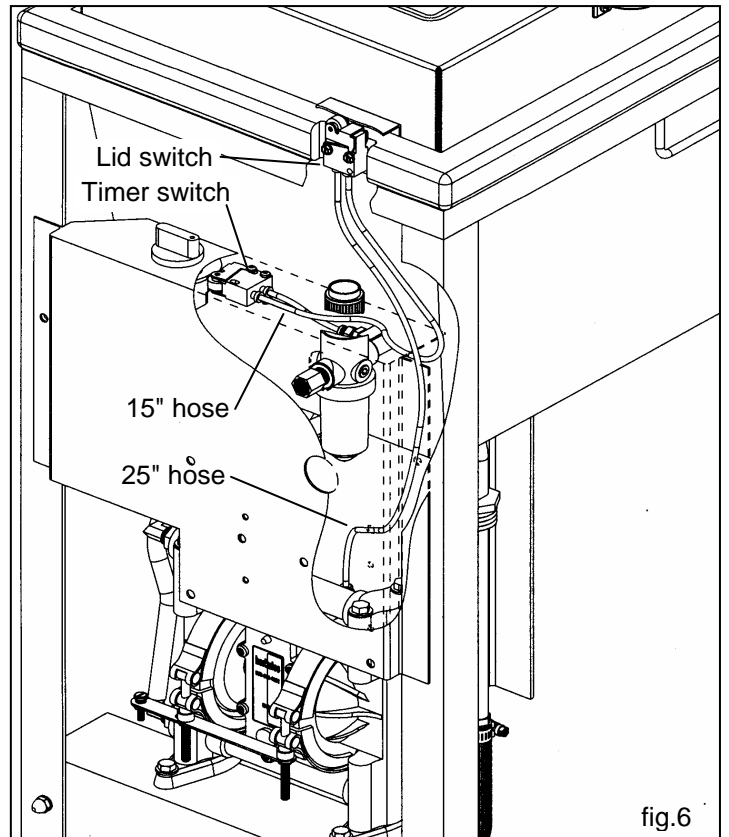
Run the 25" length of blue hose from the OUT port of the lid switch to the 90° swivel PTC fitting on the back of the pump.

Note: Connect air and turn on the unit and check for air leaks. If air is leaking, ensure all the blue hoses are completely inserted into the proper ports.

Steps 16-17 see fig.6

STEP 18

The pump has two ground wires attached. Run one to a true earth ground and the other to one of the lid hinges at the back of the unit.



Kit Information

Contents

001-702	Bolt hex 1/4-20 x 1/2"	2 ea.
001-705	Washer flat 1/4"	2 ea.
002-161	Washer flat #10 USS	2 ea.
008-244	Acorn nut 1/4-20	2 ea.
11130	Plug with slot - white	1 ea.
11243	Filter assembly	1 ea.
11958	Pump bracket	1 ea.
12018	338 Pump assembly	1 ea.
1002644	Bulkhead 1-14 UNS x 3/8 NPT - brass	1 ea.
1002971	Flare connector 3/8 x 3/8 NPT	1 ea.
64PE	Hose for filter - black	23 in.
64PE	Hose for manifold - black	21 in.
12865	Drain hose assembly	1 ea.
83	Bolt hex 1/4-20 x 1	2 ea.
84	Nut hex 1/4-20	2 ea.
85	Lock washer 1/4	4 ea.
85B	Washer 1-1/2 x 1 - nylon	1 ea.
M5	Hose - lid switch to pump - blue	25 in.
M5	Hose - timer to lid switch - blue	15 in.
T17M	Filter/Regulator 75 psi	1 ea.

Troubleshooting

Problem	Possible Solution
Gun washer will not turn on.	<ol style="list-style-type: none"><li data-bbox="561 226 1321 289">1 Make sure the air line is properly connected with at least 75 psi. Air pressure is regulated at 75 psi.<li data-bbox="561 327 1321 390">2 Make sure lid is fully closed. Make sure the lid bracket is making full contact with the limit valve on the tub.<li data-bbox="561 428 1269 449">3 Check all air connections to ensure that there are no leaks.<li data-bbox="561 487 1156 508">4 Make sure timer cam is engaging the limit valve.<li data-bbox="561 546 1146 567">5 Make sure timer is on and functioning correctly.
Gun washer turns on but pumps slowly or not at all.	<ol style="list-style-type: none"><li data-bbox="561 617 1240 638">1 Make sure intake filter is not clogged (Clean or replace).<li data-bbox="561 676 1321 739">2 Make sure the air line is properly connected with at least 75 psi. Air pressure is regulated at 75 psi.<li data-bbox="561 777 1269 798">3 Check all air connections to ensure that there are no leaks.<li data-bbox="561 835 1253 856">4 Make sure there is at least 4 gallons of solvent in the can.<li data-bbox="561 894 1383 915">5 Make sure the siphon hose is far enough into the can to draw solvent.<li data-bbox="561 953 1321 974">6 Make sure manifold nozzles and stem supports are not clogged.
Gun washer will not shut off	<ol style="list-style-type: none"><li data-bbox="561 1045 1383 1108">1 Make sure timer cam is moving. If it's not, slightly loosen the nuts holding the limit valve to the shield. Reposition valve and tighten nuts.<li data-bbox="561 1146 1221 1167">2 Make sure limit valves are not stuck in closed position.