

Hallmark Gorman-Rupp Metering Pump Troubleshooting Document

<p>The pump has no power.</p>	<ul style="list-style-type: none"> • Check the power source. Is it plugged in? If not, plug it in or turn the rocker switch to the on position. • Is the fuse blown? Check the fuse. Replace it if necessary. • Check the float switch in the holding tank. Does the bottom one turn the pump on when it is lifted? If not, a new float switch may be needed. • Was it whining or humming when it stopped? If so, the motor may be burned out. Please call Hallmark Refining @ 1-800-255-1895 to order this part.
<p>The pump is running, but the solution is moving very slowly.</p>	<ul style="list-style-type: none"> • Is the filter clean? See instructions below. • Have a pump output test been done? Disconnect the tube from the in valve of the first column. Place the tube in a graduated cylinder. When the first drop of liquid enters the cylinder, start timing the output for 1 minute. Turn off the system after 1 minute. The output should be 100 milliliters for a 6 or 6X column. The output should be 200 milliliters or less for a 9 or 15 column. • If the pump output is less than recommended, do the following: Check and clean the pick-up screen in the holding tank. Inspect the poppet valves. Make certain they are properly seated in their gaskets and the O-rings are present and correctly placed. Inspect the bellows (accordion part). Is it stretched? Is it pumping straight up and down? Is the O-Ring at the top present?
<p>The pump is running, but the chemistry level in the holding tank is not dropping.</p>	<ul style="list-style-type: none"> • Is the filter in the holding tank clogged? Reach in the tank and slowly pull up the hose. The filter is attached to the end of the hose. Clean the filter with a toothbrush, soap and water. Make sure there is no debris in the tank. • Has the pump been primed? Unscrew the plastic nut and remove the top elbow. Remove the O-Ring and poppet valve. Using a squirt bottle, fill the bellows to the top with water. Replace the poppet valve. The point should face down into the pump. Place the O-Ring on the top of the poppet valve. Screw the plastic nut back on the elbow. Allow the solution to pass into the pump and out of the hose for two minutes. Perform a pump output test to check the pump performance. See instructions above. • Are the poppet valves in the right direction? See the diagram on the reverse side. Are the O-Rings in properly? • Is the bellows (plastic accordion part) warped or leaking? It may need to be replaced. The bellows tends to warp when pumping against a blockage. Make sure the blockage is removed before the new bellows is installed. Please call Hallmark Refining @ 1-800-255-1895 to order this part.
<p>The system is leaking.</p>	<ul style="list-style-type: none"> • Are the elbows on top of the columns wrapped with Teflon tape? • Is there a hole in the bellows (plastic accordion)? See section above. • Are all the O-Rings on the pump present? • Are the elbows on the top of the columns cracked? • Are the columns expired? • Is the 5/8" tube that goes to the drain blocked or clogged?
<p>The system won't stop beeping.</p>	<ul style="list-style-type: none"> • Was the holding tank over filled? Look inside of the holding tank and see if the liquid is above the top float switch. If it is, the tank is too full and the pump will continue to operate. The alarm can be turned off at the control box, but it <u>must be turned back on</u> as soon as the liquid level drops below the top float switch.
<p>The system runs 24 hours and never turns off.</p>	<ul style="list-style-type: none"> • There may be something under the bottom float switch that won't allow the system to shut off. • Check the float switches for sediment build up. Gently unhinge and clean the bottom float switch. • Were the rubberbands removed from the float switches when the unit was installed?

POPPET VALVES

Poppet valves open and close to allow liquid to flow in and stay in the hoses. For this reason, the point of the poppet valve must point into the flow of the liquid.

NOTE: If the gaskets of the poppet valves are not properly seated or the cone is twisted and not able to open and close freely, you will experience slow pumping or even no liquid movement. If this is a continuous problem, check the rest of your system for blockage.

