
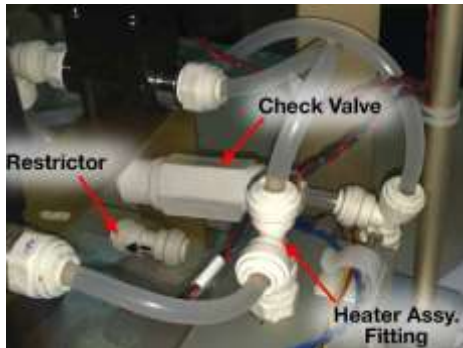
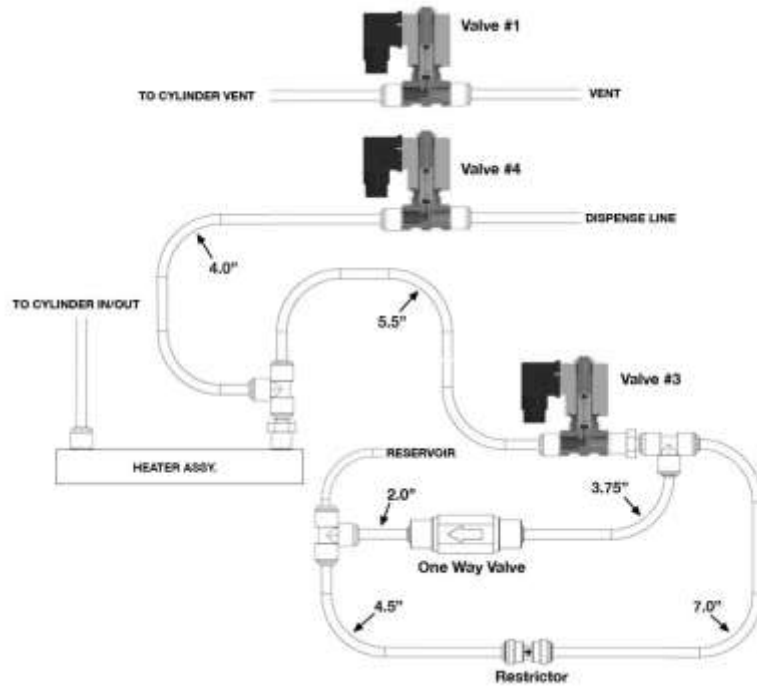


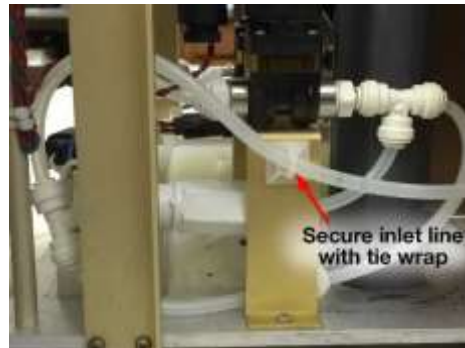
<b>Date</b>	14 Dec 2015		<b>Release Note #</b>	4500-2077	<b>ECO Ref #</b>	1341
<b>Product</b>	ezfill 4500		<b>Description</b>	Firmware Upgrade		
<b>Revision Change</b>	<b>From</b>	2.01	<b>To</b>	2.02	<b>Created By</b>	J. Yangco

<b>Release</b>	<input checked="" type="checkbox"/>	<b>Internal</b>	<input checked="" type="checkbox"/>	<b>Distributors</b>	<input checked="" type="checkbox"/>	<b>Customers</b>
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<b>Assembly / Part #</b>	9200-5139, 9201-5139
<b>Serial #</b>	All ezfill using 9200-5139 main board
<b>Description</b>	<p><b>Reasons:</b></p> <ol style="list-style-type: none"> <li>When instrument is set to deliver SLS, the volume at 250mL and 500mL were inaccurate.</li> <li>During continuous operation the main drive motor tends to increase its load output. This increase in output can cause the drive motor not to start correctly causing the instrument to hang up.</li> </ol> <p><b>Changes:</b></p> <hr/> <div style="display: flex; align-items: flex-start;">  <ul style="list-style-type: none"> <li>For 9200-5139 main board ONLY</li> <li>Modify routing of tubing</li> </ul> </div> <hr/> <ol style="list-style-type: none"> <li>Slowed down the cylinder motor speed when instrument starts the dispense cycle in SLS mode. This reduces the pressure and turbulence inside the heater assembly thus minimizing the bubbles from the SLS solution. For this to work consistently, the tubing routing needs to be modified as shown:</li> </ol>



Looking from the inside



Looking from the outside



Leave the tubing routing floating and ONLY secure the reservoir line on the valve bracket using a tie wrap.

2. Increased the drive motor PID output from 100ms to 200ms when starting the drive motor from a stand still.