



# UFS Corporation

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## Service Reference

### Topic: Troubleshooting - External Dialysis Systems (EDS)

Please read all the instructions listed below carefully to familiarize yourself with the project before attempting to perform any of the work or unpacking any further.

Problems can arise at anytime. Please use this listing by first focusing on the left hand column, then moving to the middle column to further define the possible problem. Consider each one of these causes carefully. At this point, its time to move to your EDS and investigate each of the causes. Testing is sometimes necessary. It is good practice to try to isolate the most likely causes in order to reduce your testing. Finally, move to the right hand column to see the appropriate remedy. Some of the items below are optional (\*) and may not of been included on your order.

Problem	Possible Cause	Remedies
Leaking DI solenoid valve*	<ul style="list-style-type: none"> <li>- High inlet pressure</li> <li>- Leaking from underneath solenoid</li> <li>- Manual control is open</li> <li>- Lose flange bolts</li> <li>- Cracked poly body</li> <li>- Air Bleed screw is not tight</li> </ul>	<ul style="list-style-type: none"> <li>- Reduce inlet pressure to below 80 psi</li> <li>- Make sure solenoid is properly seated &amp; secured</li> <li>- Manual over ride lever is not full counterclockwise as viewed from discharge</li> <li>- Tighten 4 bolts as required</li> <li>- Re-order PN 360035 (110 VAC)</li> <li>- Tighten air bleed thumb screw</li> </ul>
Low electrolyte flow or low electrolyte pressure	<ul style="list-style-type: none"> <li>- Pump has lost prime</li> <li>- Pump is rotating backwards</li> <li>- Strainer is full</li> </ul>	<ul style="list-style-type: none"> <li>- Re-prime pump and restart</li> <li>- Confirm pump motor rotation is correct</li> <li>- Clean off strainer</li> </ul>
Malfunctioning Conductivity Controller*	<ul style="list-style-type: none"> <li>- Conductivity sensor is dirty</li> <li>- Conductivity sensor is in air pocket</li> <li>- Fuse is blown</li> <li>- Set point has been changed</li> <li>- Other matters</li> </ul>	<ul style="list-style-type: none"> <li>- Inspect and clean as required</li> <li>- Relocate to avoid trapped air</li> <li>- Check fuse condition and replace if required.</li> <li>- Refer to Myron L manual paragraph 3.3.2</li> <li>- Refer to Myron L manual for more trouble shooting assistance</li> </ul>

Low electrolyte tank level	<ul style="list-style-type: none"> <li>- Low tank level sensor* malfunction</li> <li>- Piping break</li> <li>- Drain valve is open</li> </ul>	<ul style="list-style-type: none"> <li>- Confirm that contact are NC when float is up and NC when the float is down</li> <li>- Electrolyte is being lost due to a pipe break</li> <li>- Insure drain is closed</li> </ul>
Pressure gage* not working	<ul style="list-style-type: none"> <li>- Gage guard is missing</li> <li>- Gage is broken</li> </ul>	<ul style="list-style-type: none"> <li>- Replace with a new gage and gage guard (i.e. diaphragm) assembly. Do not try to assemble guage and guard yourself without help from qualified gage shop technician</li> <li>- Replace</li> </ul>
Electrolyte tank does not fill when DI Water switch* is depressed	<ul style="list-style-type: none"> <li>- Power not reaching solenoid valve*</li> <li>- Solenoid valve* is not working</li> </ul>	<ul style="list-style-type: none"> <li>- Check wiring &amp; fuses</li> <li>- Inspect solenoid valve</li> </ul>
Low electric current flow	<ul style="list-style-type: none"> <li>- Voltage is set too low</li> <li>- Opposing 316L stainless steel plate has too many paint solids on its face</li> <li>- Rectifier is set for constant current, at a low setting</li> <li>- Undefined rectifier problem</li> </ul>	<ul style="list-style-type: none"> <li>- Increase voltage, but do not exceed 10 amps/SF</li> <li>- Remove 316L stainless steel plate and replace with clean one. Adjust voltage not to exceed 10 amps/SF</li> <li>- Increase constant current level not to exceed 10 amps/SF</li> <li>- Consult rectifier manual for more assistance</li> </ul>
Low permeate input flow rate	<ul style="list-style-type: none"> <li>- Input valve is throttled too much</li> <li>- UF permeate flux rate from UF Element has fallen below the minimum</li> </ul>	<ul style="list-style-type: none"> <li>- Check valve handle position</li> <li>- Replace the UF Element</li> </ul>

**For more information** see the original manual that came with the equipment or call UFSc at the phone number shown above.