

AQUARIUS REGULAR Troubleshooting Guide



Important machine keys:



mute key



clamp key







treatment key








blood pump key


The contents of this guide are not intended to replace the Instruction for Use document for this product. Please always refer to IFU in case of any doubt and prior to using the product.



Alarm	Cause	Resolution	Action
Low Access Pressure	- Access line may be kinked or clamped.	- Remove kink or unclamp the line.	 <p>Identify the issue, resolve, press blood pump key to restart therapy.</p> <p>Use 'Help' button for further information.</p> <p>Cross-check the troubleshoot with another trained person.</p>
	- Occluded or clotted access line.	- Assess vascular access blood flow and signs of clots.	
	- Access resting against vessel wall. - Impeded flow from patient to the access line.	- Check vascular access catheter for correct size, position and site. - Consider further vascular troubleshooting: - Consider reversal of lines. - Anticoagulant review. - Check vascular catheter orientation. - Rotate blood pump ¼ turn anti-clockwise.	
	- Hypovolaemic patient.	- Reposition patient and/or catheter. - Check patient fluid status.	
High Return Pressure	- Return line may be kinked or clamped.	- Check and remove any kinks or clamps on return the line. - Check vascular access catheter for correct size, position and site. - Review blood flow.	 <p>Identify the issue, resolve, press blood pump key to restart therapy.</p> <p>Use 'Help' button for further information.</p>
	- Clotting in the return/drip chamber.	- Review anticoagulation. - Ensure adequate blood level in drip chamber. - Decrease blood pump speed and consider a new circuit.	
	- Inadequate anticoagulation.	- Assess vascular access blood flow and signs of clots. - Review anticoagulation when starting a new circuit.	
Low Return Pressure	- Blood flow rate may be too low.	- Consider increasing the blood pump speed.	 <p>Identify the issue, resolve, press blood pump key to restart therapy.</p> <p>Use 'Help' button for further information.</p>
	- Return line may be disconnected	- Check, attach return line to the vascular catheter. - Verify at regular intervals that the return line remains attached.	
	- Intravascular volume may be too low.	- Review patient fluid status.	
High Pre-filter pressure	- Check filter for signs of clotting.	- Check TMP and PR Drop trend. - Continuous rise in pressures seen, consider utilising pre-dilution, if available. - Consider increasing blood pump speed. - Review treatment trends in History. - Review pressure reading in More screen. - Regular high pre-filter pressure alarms → consider ending the therapy.	 <p>Identify the issue, resolve, press blood pump key to restart therapy.</p> <p>Use 'Help' button for further information.</p>
	- Pre-filter line may be kinked.	- Check access line after the blood pump is not kinked.	

Alarm	Cause	Resolution	Action
Air detected	- Air or micro-foam visible in the drip chamber or return line.	- Remove air – please follow steps 1-5.	<p>Step 1: Attach a luer-lock syringe to the top of the return chamber and carefully release any pressure.</p> <p>Step 2: Press the clamp key to open the return line clamp.</p>  <p>Step 3: Aspirate visible air with the syringe, leaving the line clear.</p> <p>Step 4: Press the clamp key to close the return line clamp.</p> <p>Step 5: Press the blood pump key to restart.</p> 
	- The blood level is too low in the drip chamber.	- Raise the blood level in the drip chamber.	
	- The return line is not properly positioned in the air detector.	- Ensure return line is not "pinched" within the air detector.	
	- Air detector sensors are dirty.	- Clean the sensors.	
Balance alarm / Check substitution / dialysate line or Balance alarm / Check filtration / effluent line	- The patient's fluid balance deviates by more than 50g in standard treatment or 20g in low volume treatment. - Review UF variation in the More screen.	- Verify all substitution and filtrate lines are unclamped. - Check lines and manifold are not kinked, clamped or blocked. - Lines and bags not moving, are hanging freely, are not resting on the cart frame. - Substitution/dialysate bag/s are spiked, long and short seals are broken.	 <p>Identify the issue, resolve, press treatment key to restart therapy.</p> <p>Use 'Help' button for further information.</p> <p>Seek troubleshooting advice for multiple balance alarms!</p>
	- Review number of balance alarms in Treatment screen.	- Ensure all fluid connections are secure and verify no fluid is leaking. - Avoid touching the bags during treatment. - Avoid adding or removing bags during treatment. - Avoid moving Aquarius during treatment. - If using multiple bags, consider reducing the number of bags.	
Blood leak	- Dust on BLD mirror.	- Clean mirror and replace in the orientation as found. - Avoid using alcohol-based wipes.	 <p>Identify the issue, resolve, press treatment key to restart therapy.</p> <p>If blood pump stopped, press blood pump key to restart treatment.</p>  <p>Use 'Help' button for further information.</p>
	- BLD mirror is cracked/missing/infrared sensor is not flashing.	- Report to Technical Services.	
	- Filter membrane damaged/ruptured.	- Discontinue treatment and change circuit. - Review BLD% in More screen.	

Alarm	Cause	Resolution	Action
Heater cools down	- Balance system has stopped for more than 15 seconds, the heater plate temperature is above 43°C.	- Heater cool down program activates. - Treatment is paused until the heater cools. - Substitution and filtrate pumps run slowly to help cooling. - Heater cool down management may take up to 10 minutes.	Treatment will restart automatically.
Low TMP	- Filtrate line is closed between the filter and waste/effluent bag/s.	- Check filtrate line is not kinked, clamped or twisted. - Line is not "pinched" within the pump housing.	 Identify the issue, resolve, press treatment key to restart therapy. Use 'Help' button for further information.
	- Transducers not securely attached.	- Ensure all transducer pressure domes are secure.	
	- Blood flow may be too low.	- Consider increasing the blood pump speed.	
High TMP	- TMP has risen slowly – filter may be clogging.	- Consider increasing pre-dilution flow rate in next treatment. - Review anticoagulation.	 Identify the issue, resolve, press treatment key to restart therapy. Use 'Help' button for further information.
	- TMP has raised rapidly – filtrate line or bags clamped/kinked.	- Unclamp or remove kink from line.	
	- High TMP from the start.	- Check blood flow/exchange flow. - Check filtration fraction.	
Check transducer connections	- The pressure domes have not detected any pressure change for 15 seconds.	- Ensure the domes are secure. - IMPORTANT: do not remove any pressure domes during treatment.	 Identify the issue, resolve, press treatment key to restart therapy. Use 'Help' button for further information.
Change substitution / dialysate bag/s Note: Advisory alarm, blood pump continues during bag change.	- The substitution/dialysate bag/s are empty.	- Prepare new substitution/dialysate bags during 'Bag change soon' advisory at 10 minutes. - If changing the bags before the timer reaches zero, stop the treatment pumps. - Change the bag/s on the green scale.	 Identify the issue, resolve, press treatment key to restart therapy. If the blood pump stopped, start the treatment by pressing the blood pump key. Use 'Help' button for further information.

Alarm	Cause	Resolution	Action
<p>Change filtrate / effluent bag/s</p> <p>Note: Advisory alarm, blood pump continues during bag change.</p>	<ul style="list-style-type: none"> - The filtrate bag/s are full. 	<ul style="list-style-type: none"> - Prepare new filtrate bags during the 'Bag change soon' advisory at 10 minutes. - If changing the bags before the timer reaches zero, stop the treatment pumps. - Change the bag/s on the yellow scale. 	 <p>Identify the issue, resolve, press blood pump key to restart therapy.</p> <p>Use 'Help' button for further information.</p>