

# Chiller Troubleshooting Manual

Issue: Vacuum pump continuously running or error code "FL" displayed

## 1. Check Water Supply

Ensure the chiller is connected to a water source and that water is flowing adequately into the system.

If no water is detected upon startup, the vacuum pump will activate to remove air from the tubes.

## 2. Vacuum Pump Operation

Old OS (Shipped before August 2023):

If no water is detected, the vacuum pump will continue running until manually closed. This can strain the vacuum pump and should be monitored closely to avoid damage.

New OS (Shipped after August 2023):

Vacuum pump will automatically stop after 3 minutes if no water is present. The display will show error code "FL" to indicate this condition.

## 3. Inspect One-Way Valve (If Vacuum Pump Runs Excessively)

If the vacuum pump operates for an extended period, check the one-way valve.

Use a pen to stir the piston inside the outlet of the chiller to clear any clogs caused by water contamination.



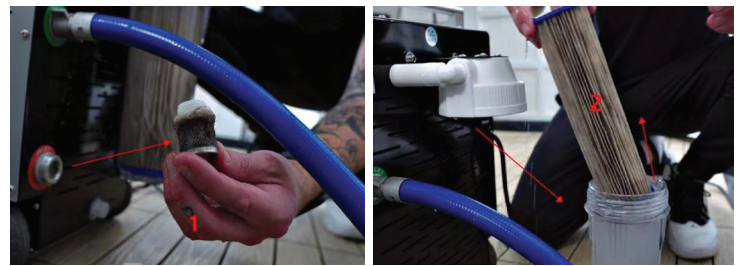
## 4. Water Flow Circulation

Allow 3 minutes for air evacuation by the vacuum pump before the compressor and vent fan start.

Water flow and circulation should be optimal within 3-5 minutes of system startup.

If water flow seems inadequate:

Clean the net or replace the filter cartridge (refer to pictures "1" and "2" for guidance).



## 5. Maintenance Tips

Regularly inspect and clean filters and nets to ensure optimal water flow.

Monitor vacuum pump operation to prevent excessive strain and potential damage.

## 6. Troubleshooting Steps

Excessive Vacuum Pump Operation:  
Check water supply and flow rate.

Inspect the one-way valve for clogs.  
Clear any blockages in the outlet using a pen.

## 7. Contact Support

If issues persist despite troubleshooting, contact customer support for further assistance or maintenance.

Note: Proper maintenance and timely troubleshooting can extend the lifespan of your chiller system and prevent costly repairs. If unsure about any procedures, consult the chiller's user manual or contact technical support for guidance.