

## Malfunction /Hibajelenség >> FLO Error / Áramlás hiba

Issue root cause / hiba oka:

1. -incorrect fill-in
2. -not sufficient water level
3. -dirty filters
4. -stucked air bubble
5. -congestion
6. -biofilm on the temperature sensor/flo sensor –inside the heater tube
7. -calcium deposit on the temperature sensor/flo sensor –inside the heater tube
8. -faulty circulation pump
9. -faulty sensors
10. -PCB fault

issue recognition / hiba észlelés:  
Error message on the screen

1. -incorrect fill-in -

If the spa was not filled through the filter house, try to put a water hose again as deep as you can in the filters hole and release the water.



2. -not sufficient water level- Solution

In case if the water level is too low there is a chance that an air funnel will appear. To get the issue solved fill the spa till there is at least 2CM ABOVE THE HIGHER JET.



### 3. -dirty filters- Solution

Even if the filters looks clean it possible that the micro holes are dirty .  
Remove the filters and keep the spa running without it.  
(first restart the spa – power off and turn back on after 2-3 minutes)



#### 4. -air bubble in the circulation hosing system- Solution

If an air bubble stuck in the flow sensor can recognize this as a no-flo condition.  
As a solution you can release all the unions till the air bubble escape.



#### 4. -congestion

In some cases an unknown object is stuck in the pipe.  
It can be the foil from the filter, or a piece of cloths.

6. -biofilm on the temperature sensor/flo sensor – inside the heater tube

Biofilm can deposit on the heat sensor and the internal side of the heater pipe.



The position of the sensors please find on the picture on the left.

Unfortunately to get visual confirmation the heater must be removed.

To get the heater cleaned, put in vertical position, close the bottom end and fill the heater with spa cleaner.

If there is no any biofilm layer on the sensors the or the wall of the stainless steel hose the unit is cleaned.



7. -calcium deposit on the tempreature sensor/flo sensor  
–inside the heater tube

Calcium can deposit (scale) on the heat sensor and the internal side of the heater pipe, also on the heater coil.



The position of the sensors please find on the picture on the left.

Unfortunately to get visual confirmation the heater must be removed.

To remove scales from the heater and tempreature sensor, we recommend using limescale solver substance or even an acetic acid as the preferred cleaning product.

Its possible that the circulation pump can't generate sufficient pressure (flow rate), due to a fault.



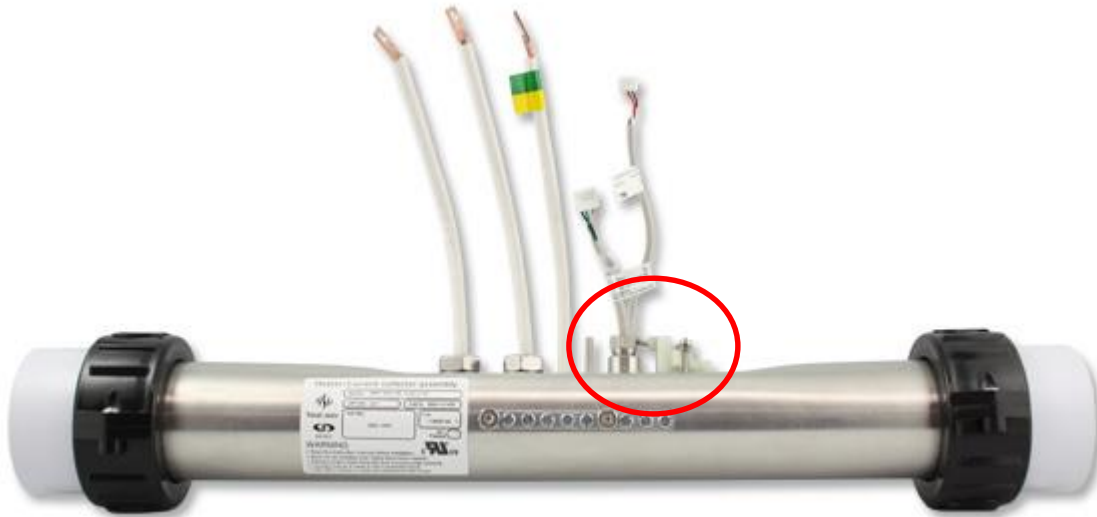
The issue can be related to the following reasons:

- hard water-scale
- coil damage
- rotor damage
- conductor fault

It is also possible that the pump not getting voltage but it also can be the control boxes fault.

## -faulty sensors- Solution

If the sensors are broken the control unit not receive appropriate signal, and flo error appears.





## -PCB fault - Solution

It is also possible that the pcb itself is faulty.  
Unfortunately the only solution is to get the complete control box replaced.

**IMPORTANT NOTE:**  
DO NOT PERFORM ANY MAINTENANCE  
WHILE THE SPA IS POWERED.  
ALWAYS TURN OFF/DISCONNECT YOUR  
SPA FROM POWER SOURCE.

DO NOT TOUCH THE BULBS GLASS PART  
WITHOUT GLOVES

