wellsys *

TROUBLESHOOTING INDEX

- 1. <u>No water</u>
- 2. <u>No ice</u>
- 3. Screeching/Whining Noise
- 4. Filtration

5. Hot Water Dispense produces water that is not hot

1. No water

Possible Reason (V1 Units)	Solution	
Check Water Feed	This unit will only dispense what you have available. If the water is turned off or is feeding the unit with slow flow, little to no water will dispense.	
Check the Leak Stop	If water gets into the bottom of the system, then the leak stop will shut off the water supply.	

*V2 units will quickly dispense the water that is inside the system (reservoir and ice melt area) but if the water feeding is below 20psi when this water is depleted, it will stop dispensing water.

Possible Reason (V2 Units w/RO)	Solution	
Supply Water Pressure	Check the water pressure into the filter bank and confirm adequate pressure, should be 60-70psi.	
Low Water Pressure	 If below 60psi: Water may not be producing fast enough to keep up with demand. Supply pressure may not allow the bladder tank to fill sufficiently. Change from an RO setup to a filtered setup or address issues with RO system. (Note: low water pressure will also cause the RO to waste more water as it attempts to fill the bladder tank, which will also reduce the life of the pre-filters.) 	

wellsys 🐝

2. <u>No ice</u>

Possible Reason (V1 Units)	Solution
Insufficient Water, Low-Level Water Sensor	If water falls below the low-level sensor in the water reservoir, the ice making will stop, and will not attempt to make ice for 5 minutes. If this occurs several times, the water dispense light will blink and the system will have to be reset to operate again. Insure there is adequate flow of water into the system.
Evaporator Sensor Error or Failure	If the sensor fails or detects a colder temperature out of normal operation, the system will stop making ice for 10 minutes. This sensor can and SHOULD be bypassed. Unplug the sensor from the circuit board. It is the blue plug on the right side of the board.
Ice Tank Temperature Sensor Error or Failure	If the sensor fails or malfunctions, it will cause ice production to stop. This sensor can be bypassed like the Evaporator Sensor. It is the second plug from the bottom on the right side of the board.
RPM Sensor Error or Failure	 Sensor is located on top of the gear motor. If it fails, or if the gear motor slows down due to hardness in the evaporator, it will shut down ice production. Hardness in the evaporator will cause ice to be physically harder and slow the evaporator. Ice dispense light will blink in this event. To remedy: Drain and measure TDS from the evaporator and ice melt. Share these values with Technical Support, Properly descale the unit. Check incoming water supply to the system. Add the drain kit available FOC. This kit will help avoid this from occurring.

Possible Reason (V2 Units)	Solution
Insufficient Water, Low-Level Water Sensor	If water falls below the low-level sensor in the water reservoir, the
	ice making will stop, and will not attempt to make ice for 5
	minutes. If this occurs several times, the water dispense light will
	blink and the system will have to be reset to operate again. Insure
	there is adequate flow of water into the system.
Evaporator Sensor Error or Failure	If the sensor fails or detects a colder temperature out of normal
	operation, the system will stop making ice for 10 minutes. This
	sensor can and SHOULD be bypassed. Unplug the sensor from the
	circuit board. It is the blue plug on the right side of the board.
Ice Tank Temperature Sensor Error or Failure	If the sensor fails or malfunctions, it will cause ice production to
	stop. This sensor can be bypassed like the Evaporator Sensor. It is
	the second plug from the bottom on the right side of the board.
RPM Sensor Error or Failure	Sensor is located on top of the gear motor. If it fails, or if the gear
	motor slows down due to hardness in the evaporator, it will shut
	down ice production. Hardness in the evaporator will cause ice to



be physically harder and slow the evaporator. Ice dispense light
will blink in this event.
To remedy:
• Drain and measure TDS from the evaporator and ice melt.
 Share these values with Technical Support,
Properly descale the unit.
 Check incoming water supply to the system.
• Add the drain kit available FOC. This kit will help avoid this
from occurring.
*If Ice Light blinks on a new install, that would represent this.

3. <u>Screeching/Whining Noise</u>

Possible Reason	Solution		
Hard Water	This normally occurs when water is not treated with RO and		
	hardness of water is high. Scale builds up in the gear motor as it is		
	separated during freezing, the heat exchange is not performed		
	properly, freon becomes much colder than intended, and ice		
	becomes harder. This results in stress on the gear motor and		
	causes screeching sounds.		
	 Cleaning and descaling are recommended. 		
	 Draining of auger water is recommended as well. 		
	 Adding the drain kit is highly advised. 		
	• Change to RO filtration is highly advised.		

4. Filtration

Ice systems are all very sensitive to hardness. For this reason, we recommend using RO where possible and almost always if TDS from the tap is greater than 150 PPM. For an RO to work properly it is very important that the following variables are addressed and performed properly.

- Incoming Water Pressure: RO's require 60-70psi to work properly.
- Lower PSI will cause the reduction in TDS to suffer greatly, as well as the recovery rate.
 - o 60psi results in (roughly) 7.3oz/min from 80GPD membrane
 - o 40psi results in (roughly) 2-3oz/min from 80GPD membrane
 - \circ $\,$ 60psi results in (roughly) 98% reduction of TDS from the RO $\,$
 - \circ 40psi results in (roughly) 80-85% reduction of TDS from the RO
 - Example:
 - 500 Tap TDS at 98% reduction = 10TDS product water
 - 500 Tap TDS at 85% reduction = 75TDS product water
 - 500 Tap TDS at 80% reduction = 100TDS product water
 - With the mineral add back filter a high concentration of calcium will negatively impact the amount of scale that will, as a result, negatively impact ice systems.

- When using a bladder, this is much more susceptible to manifesting itself as a problem.
 - As the bladder pressure pushes back on the filter, lower pressure will reduce recovery even beyond the above stated levels and will be unable to properly fill the bladder.

wellsy

- This will also result in burning through pre filters as it will take much more water to make little product water.
- Signs of this issue in gravity fed tanks will be manifested mostly through form of taste complaints, in this system it will manifest itself as no ice or running out of water prematurely.

Solutions for Low Water Pressure:

- Add a Booster Pump
- Use Carbon Filtration (be sure to remove the mineral add back filter)

Bladder Tanks:

- It is important that the right size bladder tank be used in conjunction with sufficient flow.
- It is ALSO important that the bladder tank be set to the correct pressure.



- Increasing air pressure will reduce the water capacity while also increasing water pressure
- Decreasing air pressure will increase the water capacity while also decreasing water pressure
- With no air the water tank will be full, but there will be no pressure to release water

Bladder Tank Water Pressure Changes

Bladder tanks have fluctuating water pressure as they empty. This may impact the flow rate going to the ice system as the tank is depleted.

- The amount of bladder tanks, filter banks feeding the bladder, pressure, and if a booster pump are needed must all be considered for install requirements. No two accounts are the same and usage will greatly impact the decision. If you have a large bladder tank installed and you have reports of no ice, please revert to the above section on how to check to see if water flow is an issue.
- For large usage account with larger bladders, it may be necessary to have additional filter banks to improve the recovery time.
 - Please note that when doing this a booster pump may become necessary even if there a tap pressure of 60psi.





- Failure to take this into consideration may cause the bladder to ineffectively fill due to pressure drop with multiple units in line which mainly manifests itself as the larger bladder tanks get closer to filling
- This will also result in burning through pre filters and using a lot of water that will ultimately be just sent down the drain

Please see below for recommended air pressure that should be in the bladder depending on size of the bladder.

Size	Part Number	Size	Recommended Air Pressure
4 Gallon	EQGENE-0004	11" (Diam.) x 14" (Height)	6-7 psi
14 Gallon	EQGENE-0014	15" (Diam.) x 23" (Height)	6-7 psi
20 Gallon	EQGENE-0020	16" (Diam.) x 29" (Height)	7-10 psi
32 Gallon	EQGENE-0032	21" (Diam.) x 28" (Height)	7-10 psi
44 Gallon	EQGENE-0044	21" (Diam.) x 37" (Height)	10-15 psi
85 Gallon	EQGENE-0085	26" (Diam.) x 45" (Height)	10-15 psi
120 Gallons	EQGENE-0120	26" (Diam.) x 60" (Height)	10-15 psi

5. Hot Water Dispense produces water that is not hot

Possible Reason	Solution	
Overload Thermostat Tripped	 Locate the Overload Thermostat mounted on the side of the hot tank. Press the red button to manually reset the thermostat and return the hot tank power circuit to normal operation. 	
Hot Tank Power Switch is off	Locate the Hot Tank Power Switch on the back of the machine and switch it on.	