



## Basic Poultry Farm Space Heating Troubleshooting Assessments for customers

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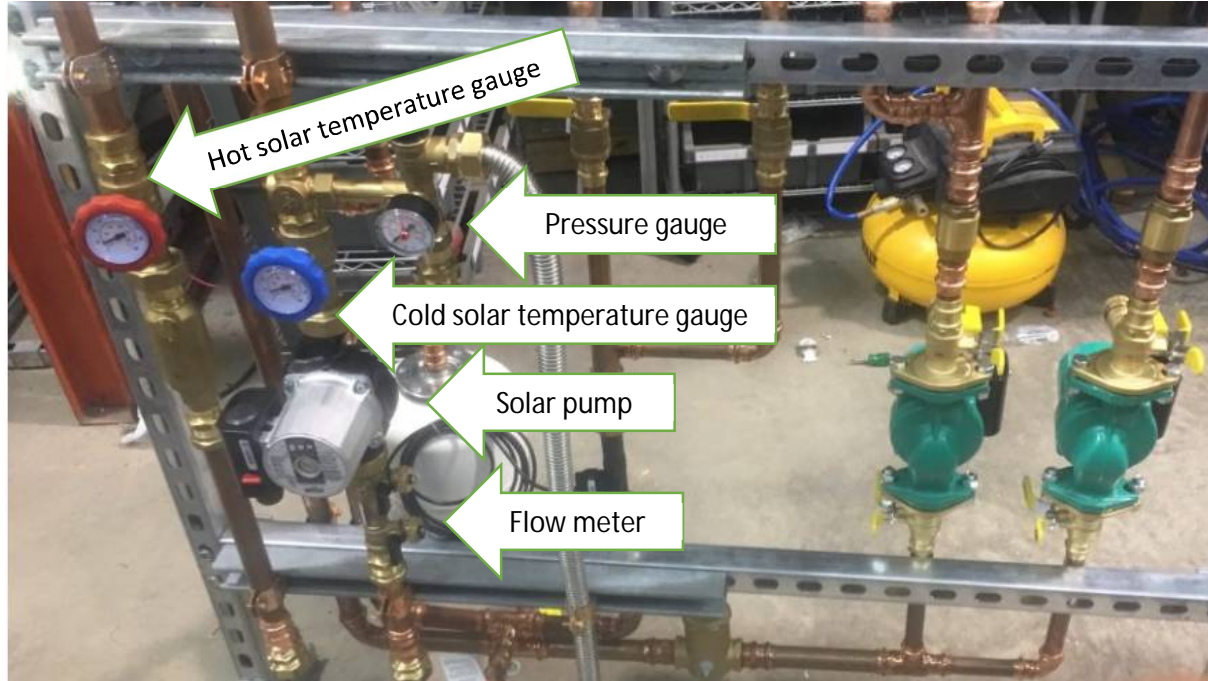
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Data type	Value
Solar controller	
S1 Temperature [°F]	
S2 Temperature [°F]	
S3 Temperature [°F]	
S4 Temperature [°F]	
S5 Temperature [°F]	
S6 Temperature [°F]	
Pressure gauge	
Black indicator [PSI]	
Flow meter	
Flow [l/min]	
Temperature gauges	
Hot solar temperature (red) [°F]	
Cold solar temperature (blue) [°F]	
Pressure gauges – load side (if applicable)	
Gauge #1 [PSI]	
Gauge #2 [PSI]	

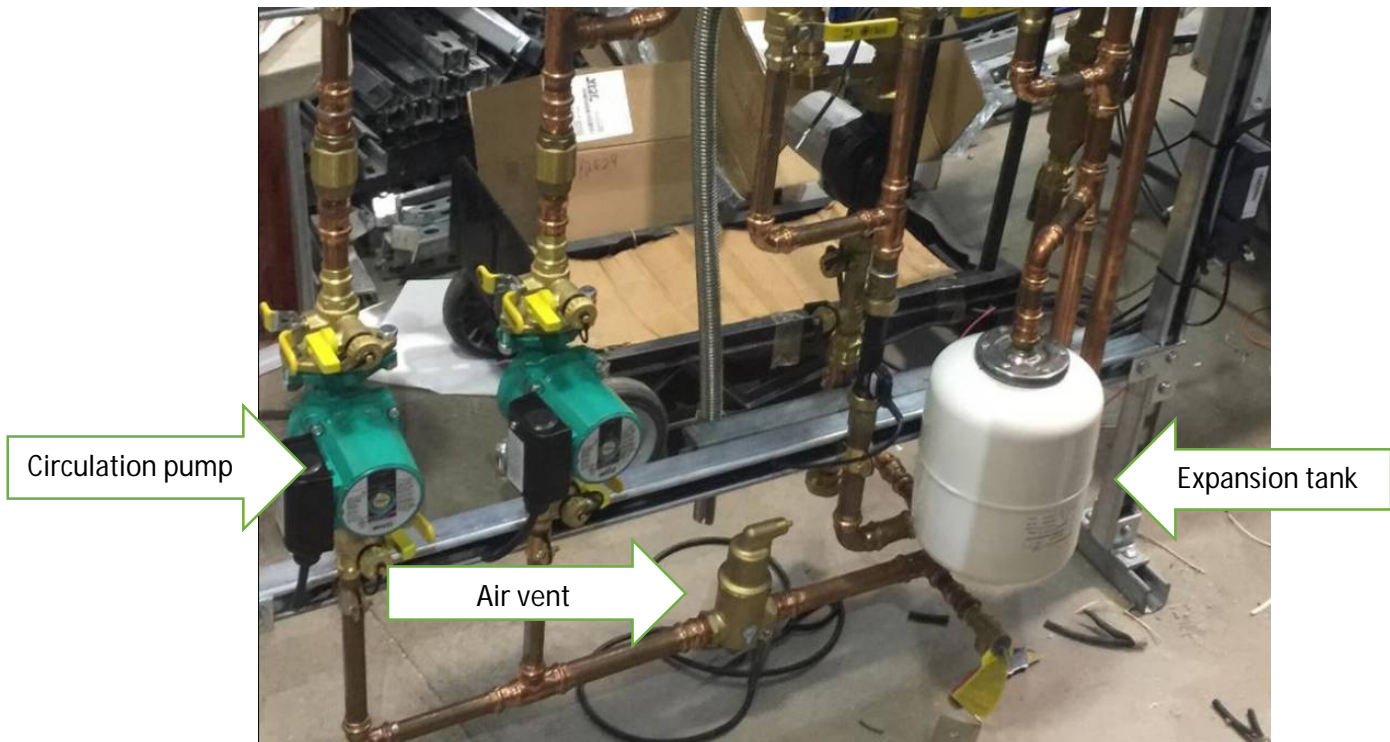
## Pump Skid Scheme

On this photo you can see solar side of your pump skid. You can find there items like:

Solar controller, Pressure gauge, Hot solar temperature gauge, Cold solar temperature gauge, Solar Pump, Flow meter, Expansion tank.

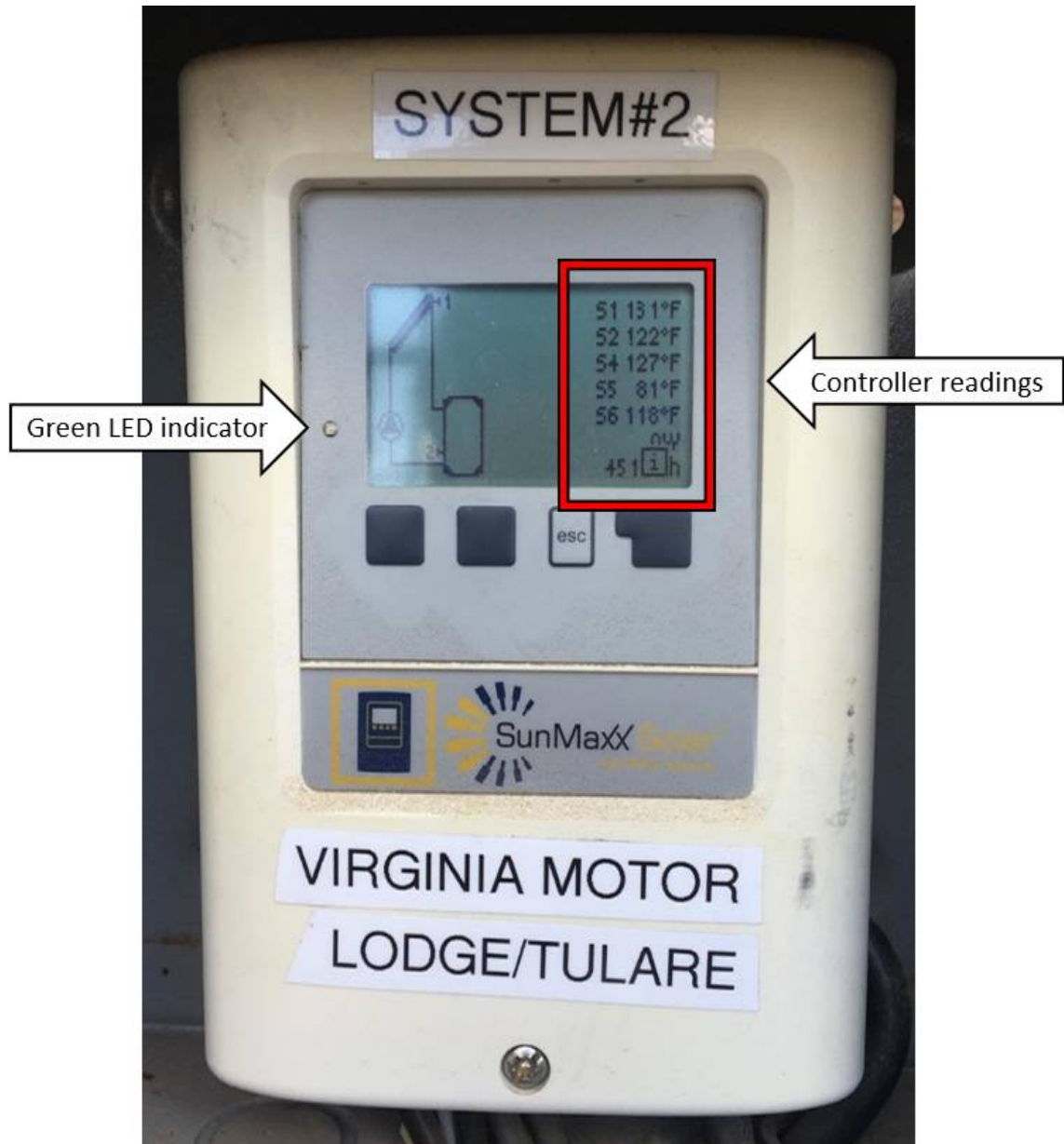


Since your system is responsible for space heating, load side of your pump skid looks like shown below:



## Diagnostic procedure

1. Look at the controller, if it is turned on, there should be green light. If it's turned on take a picture of the controller readings.



LED indicator red light means that there is an error. Take photo of the controller.

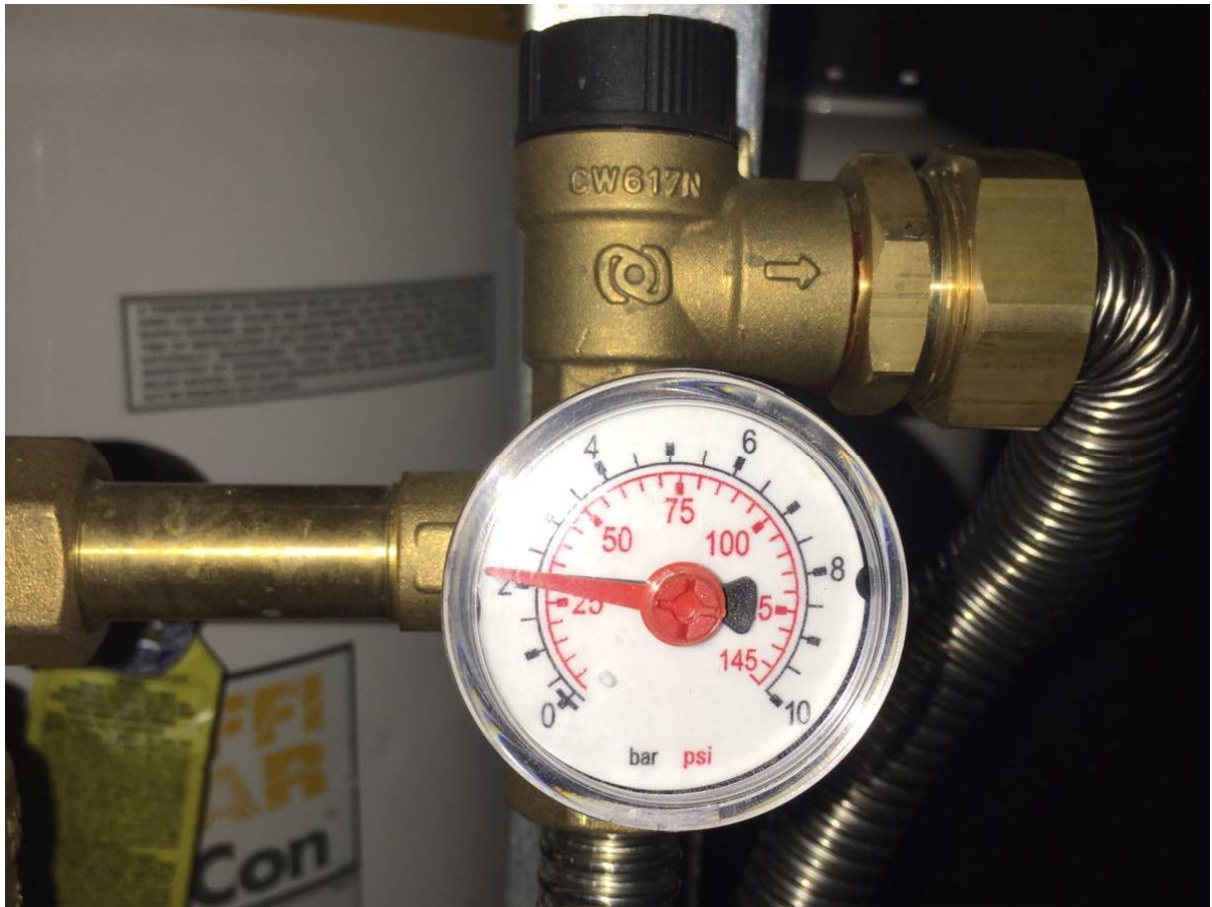
2. When there is no light or no readings check these points:
  - a. Check if the controller is plugged in



- b. Check breaker on the breaker panel (should be turned on)

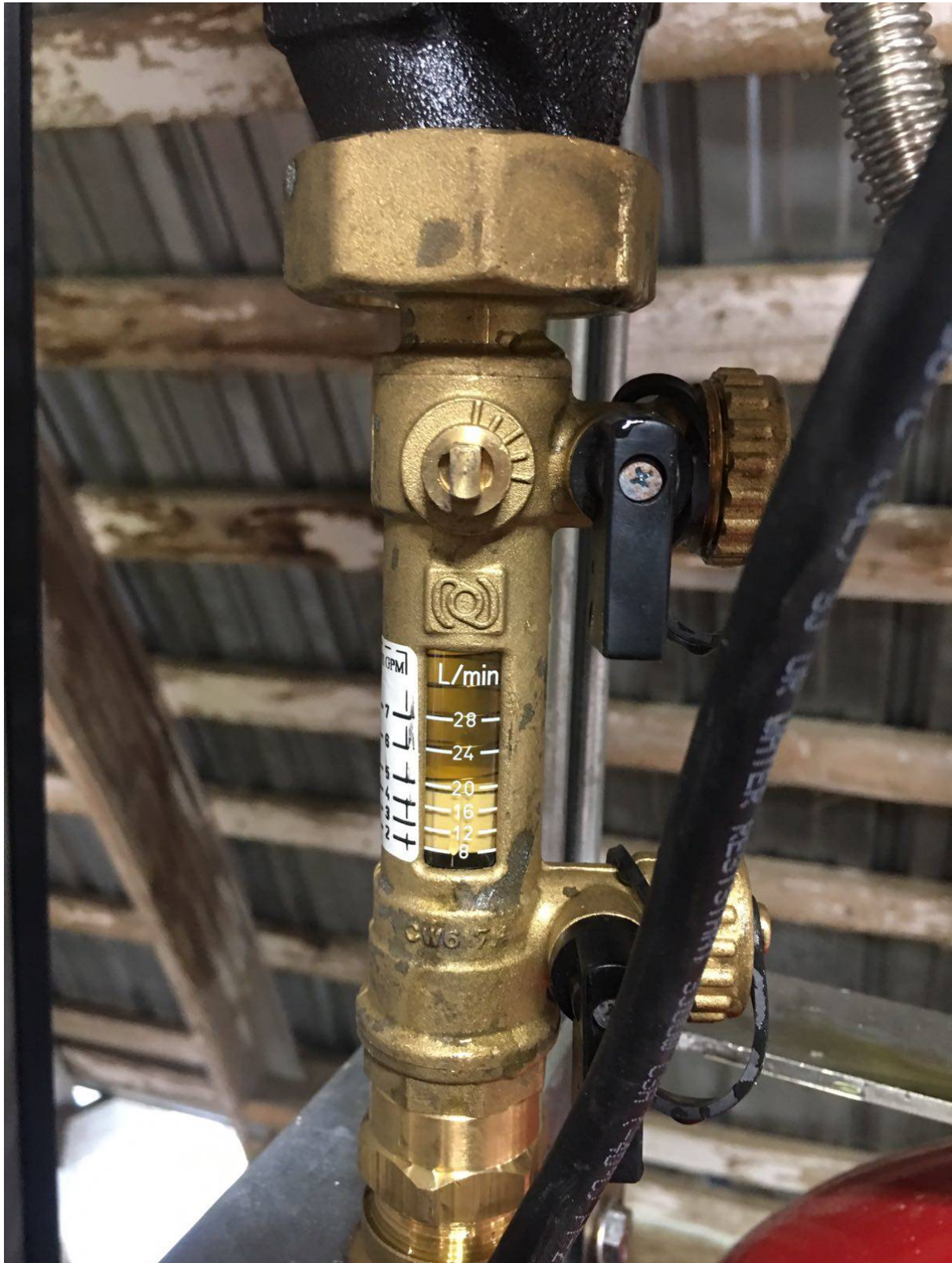


3. Check pressure on solar side pressure gauge. Write it down and take a photo (you can find its location on the first photo of this guide).

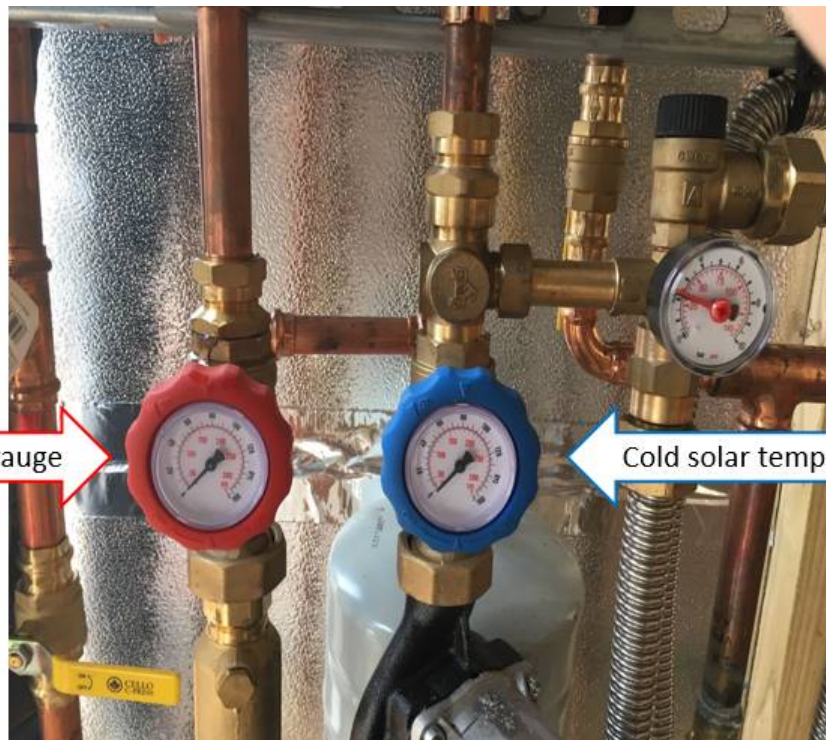


If pressure value is zero check if there are no leaks. If there are - take a photo of it.

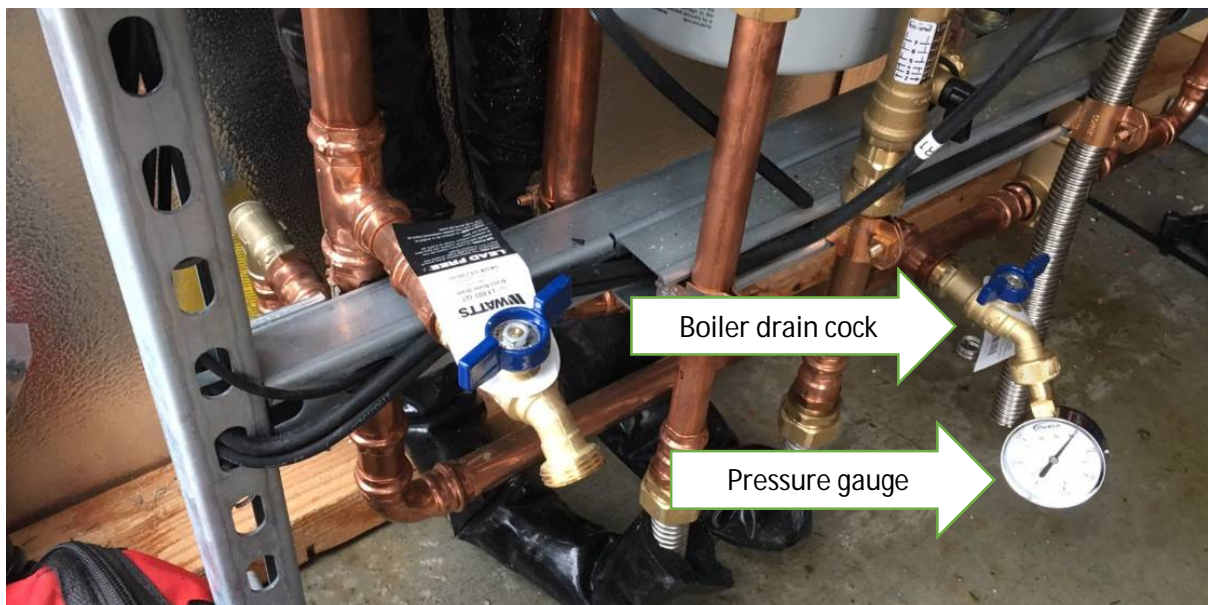
4. Is there a flow? Take a photo of a flow meter.



5. Check temperatures on the gauges on solar side of the pump skid. Write it down and take a photo of gauges (you can find their location on the first photo).



6. Check pressure on load side pressure gauges (if they're installed). Write it down and take a photo of the gauges.



If your system has pressure gauge installed on load side and it shows 0 PSI, verify if boiler drain is open (so pressure would be open to pressure gauge).

7.

### Parameters of the system

Temperature on sensor S1	Solar Controller	
Temperature on sensor S2	Solar Controller	
Temperature on sensor S3	Solar Controller	
Temperature on sensor S4	Solar Controller	
Temperature on sensor S5	Solar Controller	
Temperature on sensor S6	Solar Controller	
Outside temperature		
Solar hot temperature gauge	Pump Skid – Solar Side	
Solar cold temperature gauge	Pump Skid – Solar Side	
System pressure	Pressure gauge – Solar Side	
Flow	Flow meter	
System pressure #1 (if gauge installed)	Pressure gauge – Load Side	
System pressure #2 (if gauge installed)	Pressure gauge – Load Side	