

Maintenance - Guide

For Water Furnace-Geothermal-Systems

Installed by Buffalo Geothermal

Changing the Filter

once every 3-6 Months

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Before you start any Maintenance PLEASE TURN OFF ALL BREAKERS FOR YOUR SYSTEM.

If you have only a forced air unit, there are 2 breakers.

If you have a forced air unit and dedicated hot water unit, there is a total of 3 breakers.

Changing the Filter once every 3-6 Months

1. Lift and pull out the panel by placing your hands as shown.

1. Take off the panel to expose the filter.



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3. Grip the filter and slowly slide it out.



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4. When placing the new filter, make sure that the air flow arrows on the filter points toward the Water Furnace.



Changing the Filter once every 3-6 Months

5. Once the new filter is in, place the panel back in the slot and push it back in place.
6. Turn all your breakers back on, once the service is completed. Please be advised it may take 5-10 min for the units to turn back on.



Changing the Filter once every 3-6 Months



Purchasing Filter Replacements:

Please check your existing Filter for the correct size

28x30x2:

- <https://filterbuy.com/air-filters/28x30x2/>
- https://www.amazon.com/Geothermal-28x30x2-MERV-11-Pack/dp/B008D1CGKK?ref=ast_bbp_dp
- <https://www.allfilters.com/furnacefilters/28x30x2/merv13>
- <https://www.allfilters.com/furnacefilters/28x30x2/merv11>

30x32x2:

- <https://filterbuy.com/air-filters/30x32x2/>
- <https://www.amazon.com/Geothermal-30x32x2-MERV-11-Pack/dp/B005I02WKL/qid=1581623187&s=hi&sr=1-4>
- <https://www.allfilters.com/furnacefilters/30x32x2/merv11>
- <https://www.allfilters.com/furnacefilters/30x32x2/merv13>

30x36x2:

- <https://filterbuy.com/air-filters/30x36x2/>
- <https://www.amazon.com/Geothermal-30x36x2-MERV-11-Pack/dp/B005I02WLW/qid=1579884470&s=hi&sr=1-4>
- <https://www.allfilters.com/furnacefilters/30x36x2/merv11>
- <https://www.allfilters.com/furnacefilters/30x36x2/merv13>



Cleaning the Condensate Pan and Drain

once every 12 Months, preferably right before the
cooling season begins in March/April

Cleaning the Condensate Pan and Drain

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If you have a forced air unit and dedicated hot water unit, there is a total of 3 breakers.

Cleaning the Condensate Pan and Drain once every 12 Months



1. Take out the screw at the top center of the front panel.



Cleaning the Condensate Pan and Drain

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2. **WARNING!** If the breaker isn't switched off, this is a high voltage connection

2. The condensate pan is located underneath your coil on either side of the unit.

2. In the center of the pan is the connection to the drain pipe.



Cleaning the Condensate Pan and Drain

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5. Add 1qt of 2% bleach solution (1qt of regular Water + 1 cap of the bottle of bleach) into the condensate pan.
6. Take your brush and insert it almost all the way into the drain pipe and clean it with 3-5 up and down movements. Due to the larger size of the brush, it might take a little bit of force and wiggling to get it back out.

We use either of these 2 brushes:

Blovess Flexible Tube Cleaning Brush

<https://www.amazon.com/Blovess-Flexible-Cleaning-Bendable-Aquarium/dp/B013SS2ZVW?th=1>

18" EZT-406 Standard Flexible Rod Cleaning Brush

<https://www.supplyhouse.com/EZ-Trap-83406-18-EZT-406-Standard-Flexible-Rod-Cleaning-Brush>



Cleaning the Condensate Pan and Drain

once every 12 Months



7. Close the panel by lifting it into place, pushing it in, and then lowering it.
8. Refasten the screw at the top of the panel.
9. Turn your thermostat back on when you are finished with maintenance. Make sure you turn it on for every zone.



Cleaning the Condensate Pan and Drain once every 12 Months

10. When the panel is closed, move to the side of the unit where you should find a white PVC pipe. This may be located on any side of your unit at the height of the bottom of the filter rack.



Cleaning the Condensate Pan and Drain once every 12 Months



11. Twist the white connector to separate the 2 pipes.
12. When the 2 pipes are disconnected use the brush to clean out both sides.



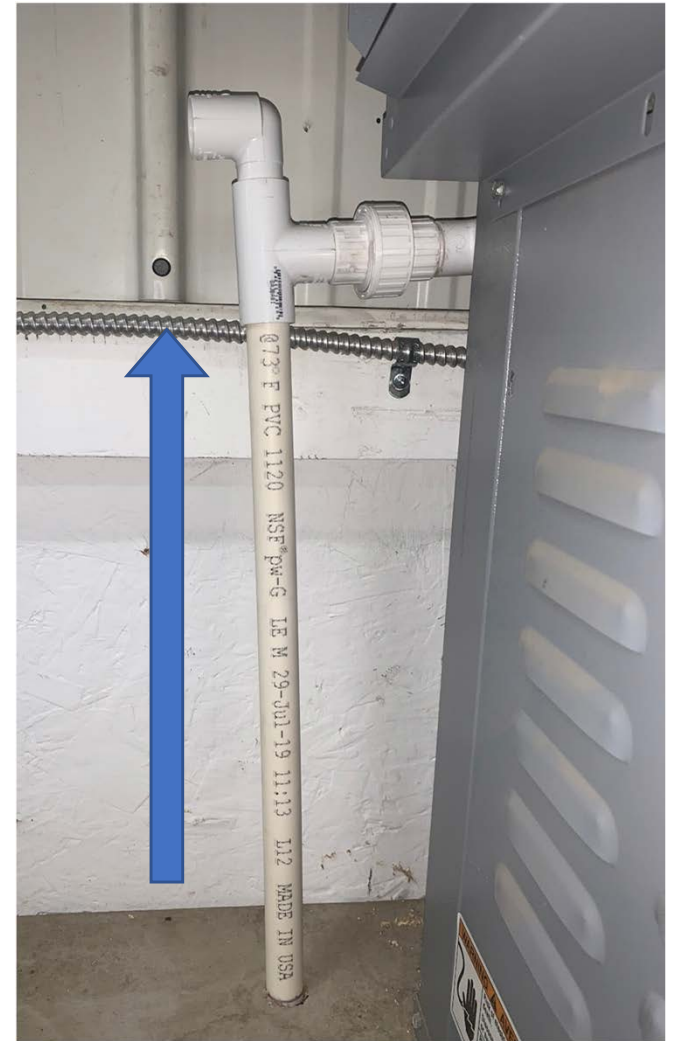
Cleaning the Condensate Pan and Drain once every 12 Months

13. Pull off the 90° connector (circled in red), it may be a little stiff but it is not glued in so it is removable.
14. When the connector is off, use your brush to clean out the vertical part of the pipe.



Cleaning the Condensate Pan and Drain once every 12 Months

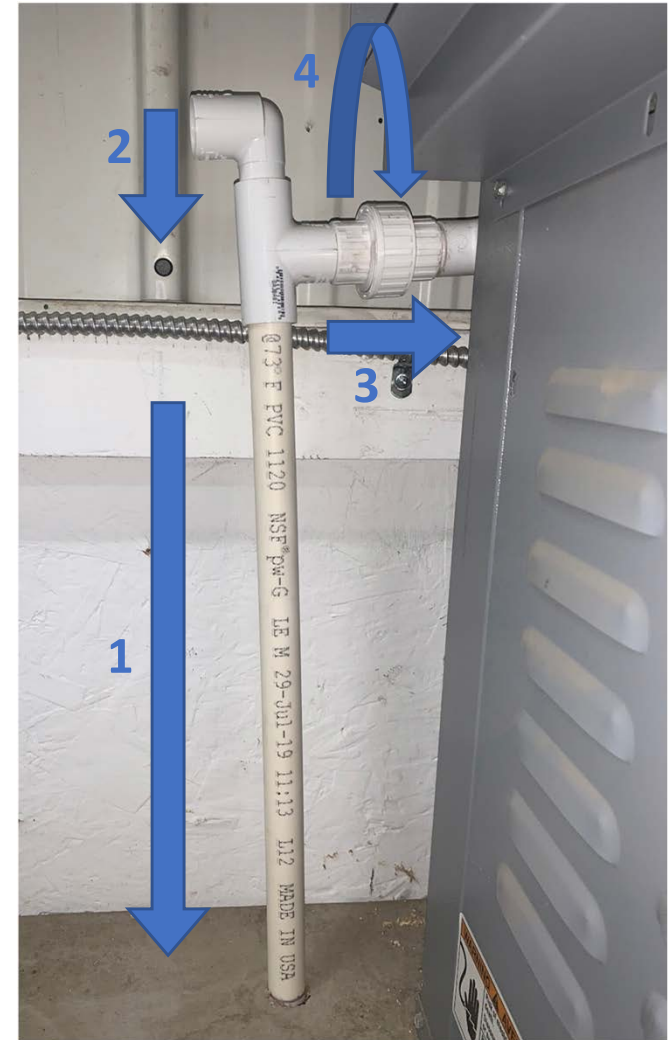
15. Take the vertical part of the pipe out of the floor, and insert your brush into the hole in the floor, to clean it.



Cleaning the Condensate Pan and Drain

once every 12 Months

16. When finished cleaning, return the pipes to their original places.
 - First push down the long vertical pipe back into the ground.
 - Then push down the small attachment back onto the vertical pipe.
 - Next push in the vertical and horizontal pipe.
 - Lastly twist the white connector tightly.
17. Turn all your breakers back on once the service is completed. Please be advised it may take 5-10 min for the unit to turn back on.



Checking the Water- Level in the Reservoir

once every 12 Months, preferably between beginning
of February and end of April

Checking the Water-Level in the Reservoir once every 12 Months

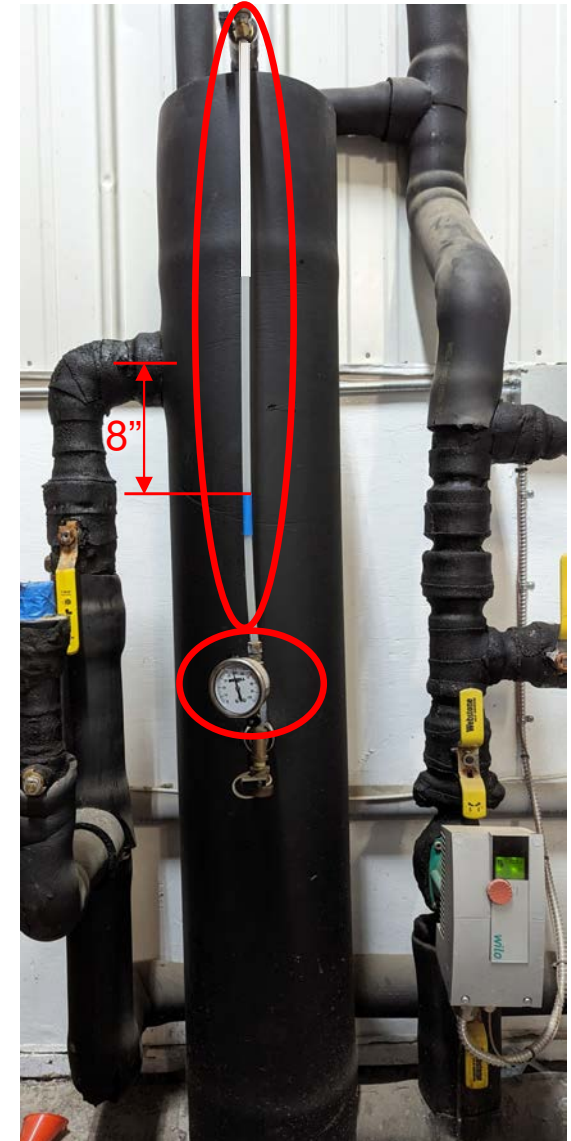


Before you start any Maintenance PLEASE TURN OFF ALL BREAKERS FOR YOUR SYSTEM.

If you have only a forced air unit, there are 2 breakers for each unit.

Checking the Water-Level in the Reservoir once every 12 Months

1. The Water Reservoir has a sightglass and pressure gauge at the front, the pressure gauge may be mounted towards the top of the sightglass.
2. The normal pressure range is 20-60 psi, should the pressure be lower than 10 psi please contact Buffalo Geothermal for repressurizing the system.
3. In addition the water level should not drop below 8" lower than the incoming pipe, should the water level be lower than 8" below the incoming pipe, please contact Buffalo Geothermal for refilling the system.



Changing the Ventilation Filter (ERV)

once every 3-6 Months

Typically only newer homes built after 2015 have a
Ventilation System

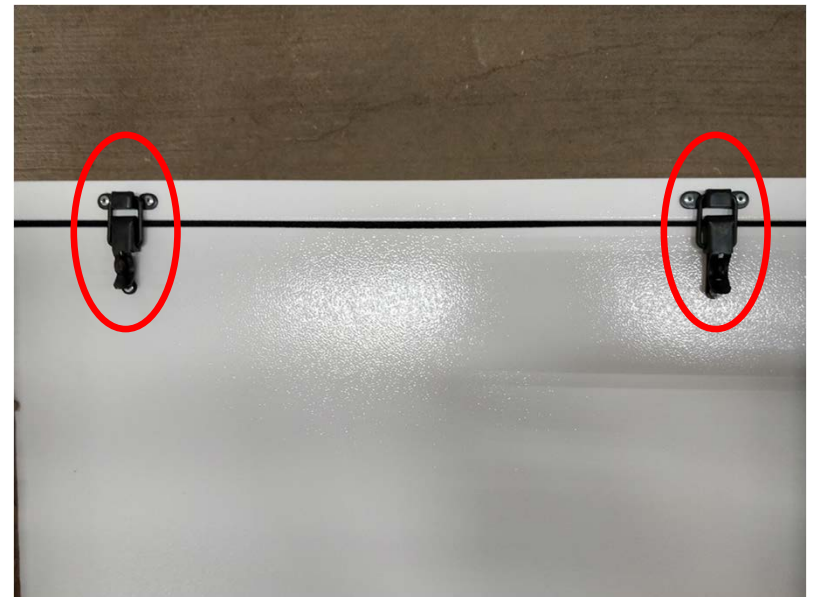
Changing the Ventilation Filter (ERV) once every 3-6 Months



1. Unplug your ERV from the wall/ceiling-outlet.



1. On the side of the unit you'll find 2 hinges. Open these to access the filters of the unit.



Changing the Ventilation Filter (ERV) once every 3-6 Months

3. Inside the unit are 2 filters which need to be replaced.



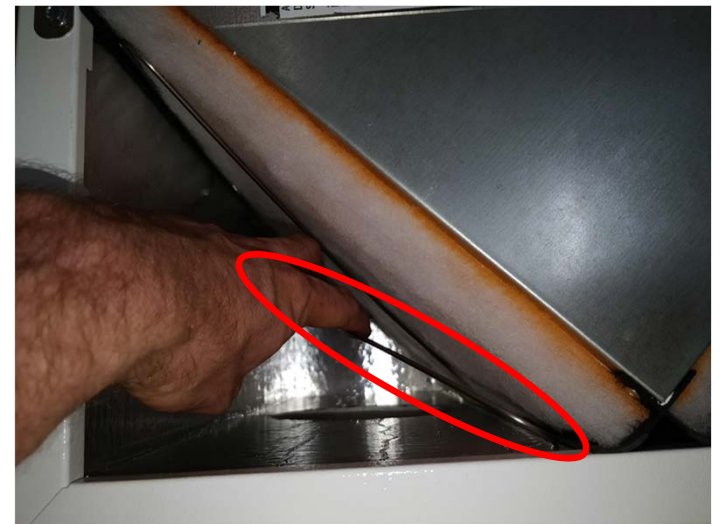
3. On the side of the unit you'll find 2 hinges. Open these to access the filters of the unit.

Changing the Ventilation Filter (ERV) once every 3-6 Months

5. Take the 2 filters out by carefully pulling on them.



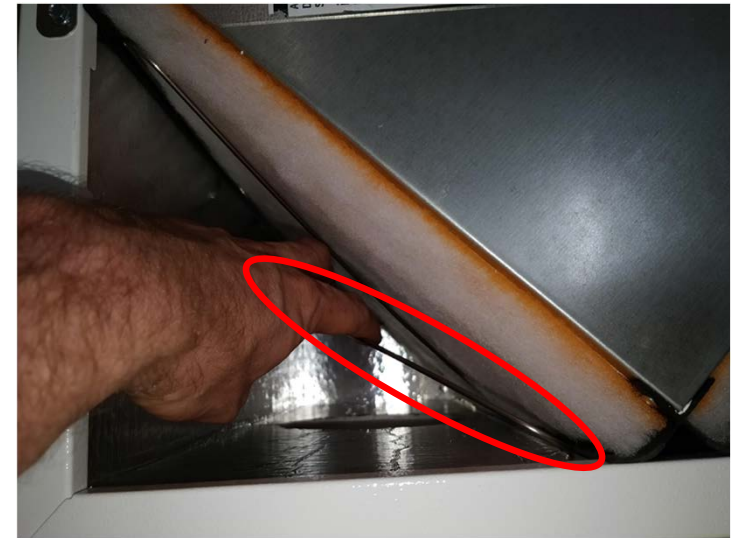
5. If the filters don't come out, it might be necessary to hold back the springs that hold the filter in place during normal operation.



Changing the Ventilation Filter (ERV) once every 3-6 Months



7. Replace both filters with the new filters. It might be necessary to hold back the springs that hold the filter in place during normal operation.



7. After the successful change of the filters, don't forget to plug your ERV back into the wall/ceiling-outlet.



Changing the Ventilation Filter (ERV) once every 3-6 Months



Purchasing Filter Replacements:

Please check the type of Ventilation System you have before purchasing the Filter-Replacements.

S&P TR90 or S&P TR130:

•<https://www.amazon.com/Replacement-Filter-Soler-Palau-TR130-2/dp/B07NQND3H>

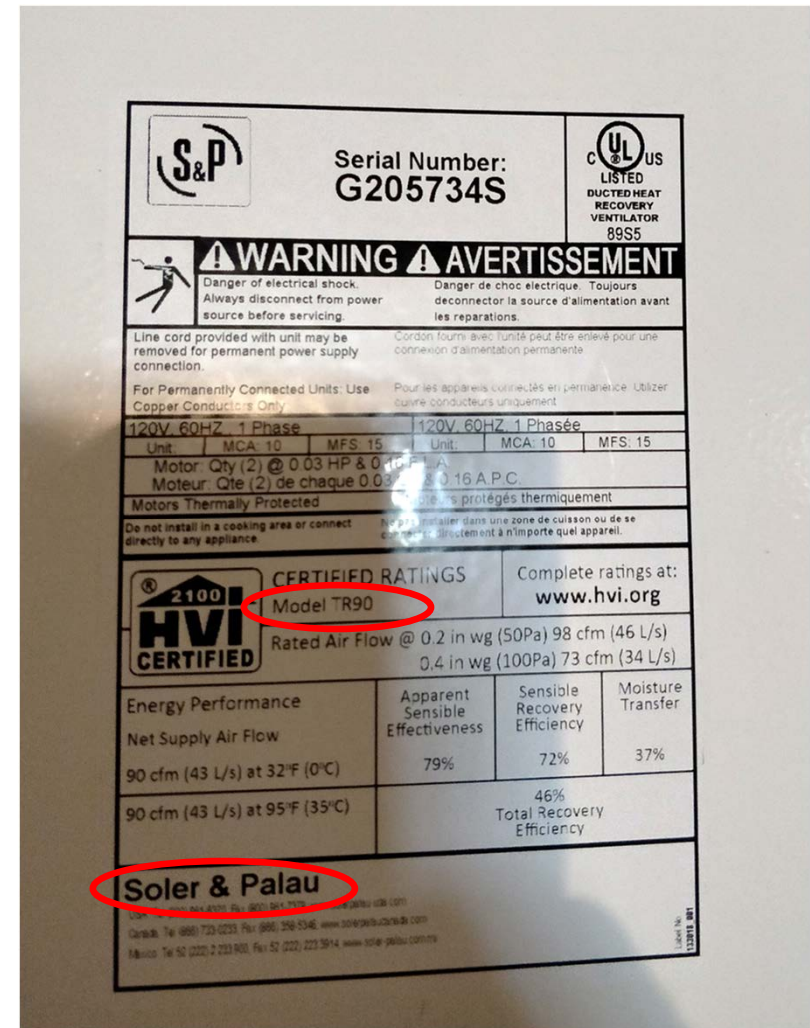
S&P TR200 or S&P TR300:

•<https://www.amazon.com/Replacement-Filter-Soler-Palau-TR300-4/dp/B07NQNJ5ZQ>

Panasonic ERV FV-10VEC1:

•<https://www.supplyhouse.com/Panasonic-FV-FL1310VE1-MERV-13-Filter>

•<https://www.supplyhouse.com/Panasonic-FV-FL0810VE1-MERV-8-Filter>



Maintenance Log

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